# Female entrepreneurs and equity crowdfunding in the US: Receiving less when asking for more

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**ABSTRACT** 

In this paper, we explore the relationship between gender and funding raised

through equity crowdfunding. Using data collected from the population of US

equity crowdfunding campaigns, we find that campaigns receive significantly less

funding when the primary signatory is female. Furthermore, we explore interactions

between gender and a campaign's funding target. The results suggest that

campaigns raise significantly less funding, as the target amount increases, when the

primary signatory is female. These results are the first to suggest a relationship

between gender and funding among the population of US equity crowdfunding

campaigns. Implications and future directions are discussed.

*Keywords*: gender; crowdfunding; equity crowdfunding.

#### INTRODUCTION

On April 5, 2012, the Jumpstart Our Business Startups (JOBS) Act was signed into law, mandating that the Securities and Exchange Commission (SEC) create rules to allow equity crowdfunding in the United States (US). When these rules became effective on May 16, 2016, equity crowdfunding in the US became a legitimate source of funding for startups. While startups have raised money via rewards-based crowdfunding on platforms like Kickstarter for over a decade, equity crowdfunding is different in that entrepreneurs raise money in exchange for a profit interest in their company. While research has begun to examine equity crowdfunding in Europe (Vulkan, Astebro, & Sierra, 2016) and Australia (Ahlers, Cumming, Günther, & Schweizer, 2015), we still know very little about this phenomenon in the US.

Equity crowdfunding in the US has generated excitement about its potential to make capital available to more entrepreneurs. Some scholars believe that equity crowdfunding provides a platform for underrepresented groups to raise funding for their companies. For example, crowdfunding supporters argue that crowdfunding *of all kinds* provides more accessible funding for women entrepreneurs (Mollick & Robb, 2016). In fact, research suggests that rewards-based crowdfunding (e.g., Kickstarter) may be democratizing access to capital for women entrepreneurs (Marom, Robb, & Sade, 2016; Mollick & Robb, 2016). However, equity crowdfunding is a different phenomenon, creating a big unknown concerning the democratizing issue.

In this study, our goal is to examine the relationship between women entrepreneurs and funding by exploring this relationship among the population of US equity crowdfunding campaigns. In the forthcoming sections, we briefly review key concepts of the study, provide an

exploratory examination of gender and funding raised, and conclude with a discussion of the results.

## LITERATURE AND CONCEPTS

Research suggests there is a strong interest in the relationship between gender and funding (Greenberg & Mollick, 2017; Kanze, Huang, Conley, & Higgins, 2018; Mollick & Robb, 2016). In fact, a paper by Mollick and Robb (2016) discussed the results of working papers concerning gender bias and rewards-based crowdfunding. For example, a working paper by Marom et al. (2016) examined Kickstarter campaigns and found that women entrepreneurs had higher success rates in meeting funding targets, which was significant regardless of the funding target. A working paper by Meek and Sullivan (c.f. Mollick & Robb, 2016), however, examined Kickstarter campaigns and displayed no difference in funding targets or funding raised between women and men. Given these limited, preliminary, and contrary results, there seems to be a need for more research on gender and crowdfunding. Moreover, prior studies' results stem from the context of rewards-based crowdfunding, a context that differs from that of equity crowdfunding.

## Crowdfunding

Crowdfunding is a process whereby entrepreneurs seek funding from a *crowd* of contributors, often through platforms on the Internet (e.g., Kickstarter). Unlike traditional venture finance, where an entrepreneur solicits large contributions from a few contributors, in crowdfunding, the entrepreneur requests a large number of relatively small contributions.

Crowdfunding can take different forms, such as donations, rewards, pre-purchases, loans, or equity investments (Oranburg, 2016a).

Rewards-based crowdfunding. The most familiar form of crowdfunding is rewards-based, where a fundraiser offers something in return for a contribution to a project. For example, filmmaker Matt Porterfield rewards funders who contribute \$1000 by tattooing their initials in his arm; but the law prohibits such fundraisers from offering financial returns such as a percent of profits from sales of the film. Relatively speaking, rewards-based platforms like Kickstarter offer a donative-type of crowdfunding, whereby the funder may also receive something tangible in return for the contribution (e.g., a sample of the entrepreneur's product). Evidence suggests that donors of rewards-based crowdfunding are primarily motived by intrinsic factors. For example, Gerber (2012) found that even when a reward is provided, funders contribute to crowdfunding campaigns to satisfy intrinsic motivations. Additionally, research by Ordanini, Miceli, Pizzetti, and Parasuraman (2001) suggests that crowdfunding donors value their role as co-creators, and they are primarily driven by intrinsic motivation.

Equity crowdfunding. Equity crowdfunding is the process whereby entrepreneurs seek funding from a *crowd* for an equity stake in their business. In contrast to rewards-based crowdfunding, funders of equity crowdfunding are investors. As such, raising capital through equity crowdfunding may differ from rewards-based crowdfunding in substantive ways. For example, whereas donors of rewards-based campaigns are mostly driven by intrinsic factors, investors of equity crowdfunding campaigns may be primarily motivated by profits. In fact, research by Cholakova and Clarlysse (2015: 147) showed that "the decision to invest in equity [crowdfunding] was positively predicted only by financial return motivations." If the motivations of investors for equity crowdfunding campaigns are mostly driven by profits, the patterns of funding with respect to gender may be similar to those of more traditional forms of venture finance.

#### **Gender and Venture Finance**

When seeking venture funding that involves elements of profit and risk, discrimination against female entrepreneurs is well documented. Indeed, a paper was dedicated to address the question: "Why does the gender gap persist in obtaining new venture finance?" (Leitch, 2018: 103). Research consistently shows that female entrepreneurs face greater challenges than their male counterparts do with respect to venture funding. For example, studies indicate that female entrepreneurs receive less venture capital (Lins & Lutz, 2016), receive less funding from banks (Stefani & Vacca, 2013), pay more for credit (Alesina, 2013), and are charged higher interest rates on microfinance loans (Dorfleitner, 2013). All of these challenges women experience when trying to raise venture capital from traditional sources has led some scholars to inquire, "Is crowdfunding different?" (Barasinska & Shafer, 2014)<sup>1</sup>.

Gender and crowdfunding. While female entrepreneurs are known to raise less than their male counterparts from traditional investors, research examining Kickstarter has shown preliminary evidence that female entrepreneurs may be more successful than males when using rewards-based crowdfunding (Kanze et al., 2018). However, research suggests that the motives of funders may be different for equity crowdfunding. As such, the ability of female entrepreneurs to raise funds via equity crowdfunding may be quite different. In this research, using the population of equity crowdfunding campaigns in the US, we explored whether a relationship exists between gender and funding raised.

To examine the relationship between gender and equity crowdfunding, we focused on the gender of the *primary signatory* of the campaign. The primary signatory is the individual who is most responsible for the company that filed the equity crowdfunding campaign with the SEC.

<sup>&</sup>lt;sup>1</sup> Barasinkska and Shafer (2014) examined loan-based crowdfunding in Germany and found no gender effect on a borrower's chance to raise funds. They noted that lenders are protected from losses, which likely affects lender behavior.

This individual is usually the key founder, president, or CEO of the company. The primary signatory is liable for legalities (e.g., fraud or misconduct) and is generally the face of the equity crowdfunding campaign. As such, we provide the following research question:

**Research Question**: In the context of equity crowdfunding campaigns, is the gender of the primary signatory related to the amount of funding raised?

#### **METHODS**

### **Sample and Procedure**

To examine the relationship between gender and the amount of funding raised through equity crowdfunding campaigns, we used the population of US equity crowdfunding campaigns through mid-March 2018. Using custom software, we scraped publicly available information available on the SEC's Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system. Based on this data, 773 startups filed an offering statement for an equity crowdfunding campaign with the SEC. Of those that filed an offering statement, 276 filed a progress update. Of those that filed a progress update, 243 reported a funding amount raised.

For gender coding, we followed established procedures in crowdfunding research and used the *genderize.io* tool to code primary signatories of equity crowdfunding campaigns as female or male (Greenberg & Mollick, 2017; Marom et al., 2016). When the automated gender tool returned an *unknown* for a primary signatory's gender, we manually searched the respective equity crowdfunding campaign for gender identifiers (he/she). Moreover, we collected the funding targets of the campaigns and information on firm characteristics that are reported to the SEC (e.g., assets, revenue, debt, number of employees, etc.). Funding targets and firm characteristics are relatively objective factors that may influence a startup's ability to raise funding. In all, we collected data on a sample of 243 equity crowdfunding campaigns (N = 243) for our analyses.

Sample bias checks. To assess the extent to which the sample is representative of the population we conducted sample bias checks. First, we used the raw genderize io coding to examine the gender ratio of signatories of the population and the sample. For the population of 773, results returned 108 female (~14%), 648 male (~84%), and 17 unknown (~2%). For the sample of 243, results returned 40 female (~16%), 198 male (~81%), and 5 unknown (~2%). Based on this observation, the gender representation of the sample was similar to that of the population. Second, we conducted a logistic regression to compare the 530 campaigns not reporting funding amount raised (coded 0) with the 243 campaigns reporting funding amount raised (coded 1). We conducted this analysis for the funding targets and firm characteristics. Neither funding targets nor firm characteristics were significant in predicting campaigns reporting versus not reporting funding amount raised.

Project category (supplemental data and analysis). In addition to firm characteristics, the type of business or product for which a startup is seeking funding may influence a campaign's ability to raise funds. As such, in a supplemental fashion, we reviewed the 243 campaigns to assess the extent to which the campaigns could be organized into categories. After reviewing the campaigns, we identified some consistencies with respect to the markets in which the startups were operating. Based on our review, we developed seven categories, which we labeled: (a) Apps/eCommerce/Platform, (b) Restaurant/Food/Beverage, (c) Entertainment/ Recreation, (d) Exercise/Health, (e) Clothing/Fashion/Cosmetic, (f) Hardware/Electronics, and (g) Other. The number of project categories by gender are reported at the bottom of Table 1.

First, we conducted a preliminary examination comparing the means of funding amount raised, funding targets of the campaign, and firm characteristics by gender. We conducted a one-

**Analyses and Results** 

way ANOVA to compare the means of these variables between female and male signatories. As displayed in Table 1, female signatories received significantly less funding from their equity crowdfunding campaigns (\$152,918 vs. \$258,098, p < .05). However, no significant differences between female and male signatories were found for funding targets or firm characteristics.

Insert Table 1 about here.

Second, we examined the correlations. As displayed in Table 2, there was a significant negative relationship between female signatories and funding raised (r = -.14, p < .05). There were also significant correlations between female signatories and project categories: Clothing/Fashion/Cosmetic (r = .28, p < .01); Entertainment/Recreation (r = -.15, p < .05); Hardware/Electronics (r = -.13, p < .05). However, these categories showed no significant correlations with funding raised. With respect to funding targets, as expected, both the target offering amount and maximum offering amount had a positive correlation with funding raised (r = .23, p < .01; r = .41, p < .01, respectively). Moreover, firm characteristics, such as a firm's assets (r = .38, p < .01) and revenues (r = .29, p < .01), among others, had strong correlations with funding raised.

Insert Table 2 about here.

To examine our research question, "In the context of equity crowdfunding campaigns, is the gender of the primary signatory related to the amount of funding raised?," we conducted OLS regression analyses. We examined the extent to which gender of the primary signatory predicts funding raised, beyond all other variables. Additionally, we explored how gender moderates the relationship between a campaign's funding targets and the amount of funding raised. As displayed in Model 1 of Table 3, we first ran a regression with firm characteristics and project

categories predicting funding raised. This model accounted for 32% of the total variance of funding raised ( $R^2 = .32$ ). In Model 2, we added the funding targets, which accounted for an additional 12% of the total variance of funding raised ( $R^2 = .44$ ).

To test the direct relationship between female signatory and the amount of funding raised, we added the female variable to Model 3. The results showed a significant negative relationship between female signatory and the amount of funding raised (B = -.11, p < .05). Moreover, the female signatory variable alone accounted for an additional 1% of the total variance of funding raised ( $R^2 = .45$ ). In Model 4, we entered the interaction between funding targets and female signatory predicting the amount of funding raised. The results showed a significant negative relationship with funding raised for the interaction between target offering amount and female signatory (B = -.31, p < .01) and for the interaction between maximum offering amount and female signatory (B = -.20, p < .01). These interactions accounted for an additional 5% of the total variance of funding raised ( $R^2 = .50$ ).

Insert Table 3 about here.

To examine the significant interactions, we first explored the magnitude of the effect of target offering amount on funding raised as a function of gender by plotting a two-way interaction. By exploring the significant interaction in this manner, we improved our ability to interpret the effects (Preacher, Curran, & Bauer, 2006). As displayed in Figure 1, campaigns with a low target offering had little difference in funding raised when the primary signatory was female versus male. However, as the target offering increased, campaigns raised significantly less funding when the primary signatory was female. We also explored the interaction for the effect of maximum offering amount on funding raised as a function of gender. As displayed in

Figure 1, funding raised was relatively stable for male signatories regardless of maximum offering amount. In contrast, campaigns received increasingly less as the maximum offering amount increased when the primary signatory was female.

Insert Figure 1 about here.

#### **DISCUSSION**

In this research, we explored the relationship between gender (female) of primary signatories of equity crowdfunding campaigns and the amount of funding raised. Prior research suggests that crowdfunding of all types might benefit women (Mollick & Robb, 2016). Yet, we found significant evidence that crowdfunding campaigns that have a female primary signatory receive less funding. This relationship exists even when controlling for other factors related to the amount raised including the target amounts of the campaign, firm characteristics, and project categories.

Moreover, we found a significant interaction between a campaign's offering amount and gender (female) of the primary signatory in predicting funding raised. Treating gender as a moderator of the relationship between offering amount and funding raised, we found that female signatories received increasingly less funding than male signatories as the offering amount increased. Furthermore, we found that maximum offering had little influence on funding raised for male signatories, whereas, as maximum offering increased for female signatories, the amount of funding raised decreased substantially. These findings may have important implications for research and practice.

### **Implications for Research**

The results of this study may have several implications for research. First, to the best of our knowledge, this research is the first to provide evidence of a relationship between gender and funding raised through US equity crowdfunding. These findings support previous research that suggests female entrepreneurs raise significantly less funding than their male counterparts (Kanze et al., 2018). This is contradictory to the findings of research on the relationship between gender and funding in the context of rewards-based crowdfunding (Marom et al., 2016; cf. Mollick & Robb, 2016).

One explanation for the mixed results between those of rewards-based crowdfunding and this study may reside in a donation versus investment distinction. For example, women entrepreneurs may receive support from other women when using a donative approach to raising funds for their venture. This argument is supported by research that used Kickstarter data to show that campaigns founded by women had significantly greater odds at successfully raising funds via rewards-based campaigns and theorized that this effect is due to "activist choice homophily" (Greenberg & Mollick, 2017). Additionally, a study by PwC (2017) found that women are 32% more likely than men to raise money on Kickstarter, while a Pew Research Center survey (Smith, 2016) found that women are 5% more likely than men to contribute to a crowdsourced fundraising project. Thus, data and theory suggest that women are more likely than men to succeed in donative crowdfunding.

Conversely, when it comes to investment funding, women entrepreneurs may be disadvantaged at raising funds compared to men. For example, while 17% of startups are women-led, and 7% of venture capital partners are women, less than 3% of venture capital funding goes to women-led startups (First Round Capital, 2015). Additionally, a study using a

sample of startups raising capital through a venture capital funding competition found that female entrepreneurs received significantly less funding (Kanze et al., 2018). As such, consistent with investment research and the results presented in our study, activist choice homophily may not explain equity crowdfunding behavior as well as it explains other forms of crowdfunding.

In general, our results suggest that equity crowdfunding is more similar to venture capital funding than to rewards-based crowdfunding concerning funding raised as a function of gender. This perspective would support our argument that the context of equity crowdfunding may differ drastically from that of rewards-based crowdfunding. As such, findings stemming from research on Kickstarter, and similar platforms, should not be generalized to the context of equity crowdfunding.

## **Implications for Policy and Practice**

Equity crowdfunding was signed into law in order to democratize access to capital so a more diverse range of entrepreneurs could start up firms (Oranburg, 2016b). However, our data show that it is not having this democratizing effect, at least with respect to gender. These findings raise critical policy questions about whether Congress needs to fix the JOBS Act so it fulfills its intended purpose. Indeed, the Fix Crowdfunding Act (114th Congress H.R. 4855) was introduced soon after the SEC promulgated its complex final rules to make it simpler for a wider range of entrepreneurs to use equity crowdfunding, but its form and passage has been the source of much debate.

Our data suggest that the crowdfunding regulations may indeed need to change if equity crowdfunding is to provide more equal access to capital, although some proposed changes such as raising the total contribution limit from \$1 million to \$5 million may not primarily have a democratizing impact (Oranburg, 2016c). Indeed, adjacent studies on gender and campaign

finance show that the average size of donations to female candidates is smaller than to male candidates; thus, "By simply increasing the individual contribution limit from \$1,000 to \$2,000, [the Bipartisan Campaign Reform Act of 2002], in effect, exacerbated the female candidates' disadvantage in each of the three aforementioned facets of gender specific fundraising" (Baker, 2006: 20). Our data likewise suggest that, in equity crowdfunding, women might raise more when asking for less. Therefore, to make equity crowdfunding more equitable, policymakers should consider making it easier to solicit smaller individual donations from a larger number of people.

For practitioners who are seeking funding, our findings might help an entrepreneur decide whether to pursue that funding via rewards-based or equity crowdfunding or by seeking venture capital investment. Based on preliminary data, women experience a higher likelihood of raising funds via a rewards campaign, a significantly lower chance of raising funds via equity crowdfunding, and a substantially lower likelihood of raising funds via venture capital than men do. Meanwhile, our data also show that company characteristics such as higher assets and revenue also increased the likelihood of a successful campaign, regardless of gender. Therefore, a women entrepreneur might choose to maximize fundraising potential by engaging in a rewards-based campaign first to generate revenue and assets; then, second, leveraging that success to increase the likelihood of success in a follow-on equity crowdfunding campaign. Theoretically, completing a successful equity crowdfunding campaign would also improve the likelihood of success in venture-capital fundraising as a third step (Oranburg, 2016c).

#### **Limitations and Future Directions**

While the present research provides evidence of a relationship between gender and funding raised through equity crowdfunding, limitations and future directions should be

discussed. For example, this is an exploratory study on a sample of 243 equity crowdfunding campaigns in the US. Over time, the number of equity crowdfunding campaigns in the US will increase, and the relationships found in our research may change. As such, our findings should be considered preliminary evidence. Follow-up studies will be needed concerning the relationships examined in this study.

Furthermore, research may need to explore the underlying reasons for why campaigns with female primary signatories receive less funding. One avenue of research may need to examine the quality of the campaigns. For example, using data collected from Kickstarter, Mollick and Robb (2016) found that signals of quality, such as, outside endorsements, evidence of prototypes, and past success influence funding decisions. On the other hand, there is evidence that men and women raise money differently in campaign finance (Baker, 2006), public finance (Palmer, 1995), and personal finance (Shin, 2015), so it is important to determine whether crowdfunding and other venture finance laws create or maintain any structural bias against the ways that women raise venture capital.

Another avenue may be to explore the characteristics of those who are investing in the campaigns. For example, research by Greenberg and Mollick (2017) showed that women are likely to support other women when making decisions. They argued that "activist choice homophily, which entails support for fellow members of disadvantaged groups," (364) may explain differences in funding based on demographics such as gender. That is, female-run campaigns may seek and receive less funding due to a limited pool of female investors. On the other hand, activist choice homophily may not apply when funding decisions are an investment.

# Conclusion

This paper provides empirical evidence that gender has an effect on the amount of funding raised through US equity crowdfunding. There is much to learn about equity crowdfunding in the US and we hope this paper is helpful for future research.

#### REFERENCES

- Ahlers, G. K., Cumming, D., Günther, C., & Schweizer, D. 2015. Signaling in equity crowdfunding. *Entrepreneurship Theory and Practice*, 39(4): 955-980.
- Baker, A. 2006. Reexamining the gender implications of campaign finance reform: How higher ceilings on individual donations disproportionately impact female candidates, *The Modern American*, 2: 18-23.
- Barasinski, N., Schafer, D., 2014. Is crowdfunding different? Evidence on the relation between gender and funding success from a german peer-to-peer lending platform, *German Economic Review*. 15(4): 436-452.
- Cholakova, M., Clarysse, B. 2014. Does the possibility to make equity investments in crowdfunding projects crowd out reward-based investments?, *Entrepreneurship Theory* and *Practice*, 39(1): 145-172.
- Dorfleitner, G., Leidl, M., Priberny, C., von Mosch, J. 2013. What Determines Micro-Credit Interest Rates?, *Applied Financial Economics*, 23: 1579-1597.
- First Round Capital. 2015. 10 year project. <a href="http://10years.firstround.com/">http://10years.firstround.com/</a>
- Gerber, E., Hui, J., Kuo, P. 2012. Crowdfunding: Why people are motivated to post and fund projects on crowdfunding platforms, *Proceedings of the International Workshop on Design, Influence, and Social Technologies: Techniques, Impacts and Ethics*.
- Greenberg, J., & Mollick, E. 2017. Activist choice homophily and the crowdfunding of female founders. *Administrative Science Quarterly*, 62(2): 341-374.
- Kanze, D., Huang, L., Conley, M. A., & Higgins, E. T. 2018. We ask men to win and women not to lose: Closing the gender gap in startup funding. *Academy of Management Journal*, 61(2): 586-614.

- Leitch, C. 2018. Women entrepreneurs' financing revisited: taking stock and looking forward, *Venture Capital*, 20(2): 103-114.
- Lins, E., Lutz, E. 2016. Bridging the gender funding gap: do female entrepreneurs have equal access to venture capital? *International Journal of Entrepreneurship and Small Business*, 27(2-3): 347-365.
- Marom, D., Robb, A., Sade, O. 2016. Gender dynamics in crowdfunding (Kickstarter): Evidence on entrepreneurs, investors, deals and taste based discrimination. SSRN Working Paper.

  Available at: http://dx.doi.org/10.2139/ssrn.2442954
- Meek, W. R., & Sullivan, D. M. Kickstarting new businesses: exploring the dynamics of gender and crowdfunding. In *Diana International Research Conference*, Wellesley, Massachusetts. Working paper.
- Mollick, E., & Robb, A. 2016. Democratizing innovation and capital access: The role of crowdfunding. *California Management Review*, 58(2): 72-87.
- Ordanini, A., Miceli, L., Pizzetti, M., Parasuraman, A. 2011. Crowd-funding: transforming customers into investors through innovative service. Journal of Service Management, 22(4): 443-470.
- Oranburg, S. C. 2016a. *Start-up financing*. In F. Pacheco-Torgal, E. Rasmussen, C-G. Graqvist, V. Ivanov, A. Kaklauskas, & S. Makonin (eds.), Startup creation: The smart eco-efficient built environment: 57-70. Woodhead Publishing: Cambridge, United Kingdom.
- Oranburg, S. C. 2016b. Democratizing startup. Rutgers University Law Review, 68: 1013-1066.
- Oranburg, S. C. 2016c. Bridgefunding: Crowdfunding and the market for entrepreneurial finance. *Cornell Journal of Law & Public Policy*, 25(2): 397-452.

- Palmer, I. 1995. Public finance from a gender perspective, *World Development*, 23(11): 1981-1986.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. 2006. Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, 31(4): 437-448.
- PwC. 2017. *Women unbound, unleashing female entrepreneurial potential*, <a href="https://www.pwc.com/gx/en/diversity-inclusion/assets/women-unbound.pdf">https://www.pwc.com/gx/en/diversity-inclusion/assets/women-unbound.pdf</a>
- Shin, L. 2015. New survey reveals how men and women bank differently, *Forbes*, <a href="https://www.forbes.com/sites/laurashin/2015/03/25/new-survey-reveals-how-men-and-women-bank-differently/#e7c77b613fc3">https://www.forbes.com/sites/laurashin/2015/03/25/new-survey-reveals-how-men-and-women-bank-differently/#e7c77b613fc3>
- Smith, A. 2016. *Shared, collaborate, and on demand: The new digital economy*. Pew Research Center, <a href="http://assets.pewresearch.org/wp-content/uploads/sites/14/2016/05/">http://assets.pewresearch.org/wp-content/uploads/sites/14/2016/05/</a>
  PI\_2016.05.19\_Sharing-Economy\_FINAL.pdf>
- Vulkan, N., Åstebro, T., & Sierra, M. F. 2016. Equity crowdfunding: A new phenomena. *Journal of Business Venturing Insights*, 5: 37-49.

TABLE 1 Firm and Funding Characteristics by Gender<sup>a</sup>

Variable	Female (41) <sup>c</sup>	Male (202) <sup>c</sup>	F-statistic <sup>b</sup>
Funding Outcome	•		
1. Funding Raised (\$)	152,918	258,098	5.07*
Funding Targets			
2. Target Offering (\$)	78,415	71,373	$0.27^{ns}$
3. Maximum Offering (\$)	578,823	639,909	$0.82^{ns}$
Firm Characteristics			
4. Firm Age (days)	1,308	1,326	$0.00^{ns}$
5. Number of Employees	4	7	1.50 ns
6. Assets (\$)	269,595	382,882	$0.39^{ns}$
7. Cash & Cash Equivalents (\$)	70,775	92,670	$0.18^{ns}$
8. Accounts Receivable (\$)	10,270	22,986	$0.60^{ns}$
9. Short-term Debt (\$)	118,747	142,821	$0.17^{ns}$
10. Long-term Debt (\$)	266,084	224,076	$0.33^{ns}$
11. Revenue/Sales (\$)	338,230	410,236	$0.04^{ns}$
12. Cost of Goods Sold (\$)	154,345	208,582	$0.04^{ns}$
13. Taxes Paid (\$)	5,719	2,249	1.53 ns
14. Net Income (\$)	-169,249	-256,864	$0.46^{ns}$
Project Category			
15. Apps/eCommerce/Platform	18	64	-
16. Restaurant/Food/Beverage	5	47	-
17. Entertainment/Recreation	1	34	-
18. Exercise/Health	4	11	-
19. Clothing/Fashion/Cosmetic	8	5	-
20. Hardware/Electronics	0	19	-
21. Other	5	22	<u> </u>

<sup>&</sup>lt;sup>a</sup> Gender of the primary signatory of the equity crowdfunding campaign.

<sup>b</sup> *F*-statistic of one-way ANOVA test for significant difference between Female and Male.

<sup>&</sup>lt;sup>c</sup> Means for each variable are reported; total number of campaigns are reported in parentheses.

 $<sup>^{</sup>ns} p > .10$ 

<sup>\*</sup> p < .05

TABLE 2 Correlations

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Female																					
2	Funding Raised	14																				
3	Target Offering	.02	.23																			
4	Maximum Offering	06	.41	.13																		
5	Firm Age	01	.04	10	.12																	
6	Number of Employees	08	.33	02	.16	.36																
7	Assets	05	.38	.00	.19	.33	.48															
8	Cash & Cash Equivalents	04	.32	.03	.20	.20	.32	.55														
9	Accounts Receivable	06	.15	01	.18	.32	.26	.51	.48													
10	Short-term Debt	02	.19	01	.24	.43	.43	.38	.22	.40												
11	Long-term Debt	.03	.20	.00	.14	.25	.35	.49	.19	.18	.30											
12	Revenue/Sales	02	.29	.01	.22	.44	.67	.61	.48	.68	.66	.29										
13	Cost of Goods Sold	02	.14	02	.16	.39	.52	.48	.38	.62	.75	.19	.87									
14	Taxes Paid	.07	.21	.02	.04	.20	.42	.24	.12	.12	.15	.16	.40	.22								
15	Net Income	.05	32	01	24	17	35	38	35	17	45	54	26	29	05							
16	Apps/eCommerce/Platform	.10	04	19	.07	09	07	13	02	02	.04	03	06	.01	10	.01						
17	Restaurant/Food/Beverage	10	.03	.10	16	05	01	.00	04	.04	10	05	03	03	.11	.14	37					
18	Entertainment/Recreation	15	.12	01	.17	.05	.16	.08	.08	.05	01	02	.06	.04	05	05	29	21				
19	Exercise/Health	.07	04	.10	15	.03	03	.05	03	06	04	06	05	04	03	.04	18	13	11			
20	Clothing/Fashion/Cosmetic	.28	.03	.02	.05	.04	.02	.11	.06	.04	.11	.04	.16	.08	.18	05	17	12	10	06		
21	Hardware/Electronics	13	05	02	.01	.01	06	06	02	07	02	01	07	04	05	05	21	15	12	08	07	
22	Other	.02	06	.09	01	.09	01	.04	02	.00	.06	.16	.04	01	01	10	25	18	15	09	08	10

N = 241-243. Pairwise deletion. Correlations  $\geq .13$  significant at p < .05 level; Correlations  $\geq .17$  significant at p < .01 level.

TABLE 3 Regression Analyses: Dependent Variable = Funding Raised

£ ; i	8			
	Model 1	Model 2	Model 3	Model 4
Firm Characteristics				
Firm Age	13*	11	10	09
Number of Employees	.01	.05	.04	.01
Assets	.24**	.24**	.24**	.23**
Cash & Cash Equivalents	.10	.06	.06	.04
Accounts Receivable	12	11	12	12
Short-term Debt	.15	.07	.06	.03
Long-term Debt	13	13	11	11
Revenue/Sales	.65**	.49**	.48**	.48**
Cost of Goods Sold	64**	48**	47**	43**
Taxes Paid	.05	.06	.07	.10
Net Income	27**	23**	23**	22**
Project Category <sup>a</sup>				
Apps/eCommerce/Platform	.16	.14	.14	.17*
Restaurant/Food/Beverage	.17	.14	.13	.10
Entertainment/Recreation	.17*	.11	.09	.09
Exercise/Health	.05	.03	.03	.06
Clothing/Fashion/Cosmetic	01	02	.01	.00
Hardware/Electronics	.05	.03	.01	.01
Funding Targets				
Target Offering		.22**	.23**	.42**
Maximum Offering		.27**	.26**	.31**
Primary Signatory Gender		,	0	.61
Female			11*	.13
Interactions				
Target Offering X Female				31**
Maximum Offering X Female				20*
Model R <sup>2</sup>	.32	.44	.45	.50
$\Delta R^2$ for step		.12**	.01*	.05**

N = 241-243. Listwise deletion. Standardized coefficients are reported.  $\Delta R^2$  for step indicates change from preceding model.

a Other is the excluded category.

p < .05

<sup>\*\*</sup> p < .01

FIGURE 1 Effect of Target Offering and Maximum Offering on Funding Raised as a function of Gender

