

Success factors in equity crowdfunding: The case of Japan

عوامل النجاح في التمويل الجماعي بالأسهم: حالة اليابان

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Abstract

Equity Crowdfunding, as a recent entrant in the entrepreneurial finance, has become an appropriate alternative for projects promoters. This financial solution was newly introduced in Japan, making the question: What influences the investment decision of Japanese Equity crowd investors? highly relevant.

To answer this question, and draw lessons from the Japanese experience, our study applies a quantitative approach to data collected from Japan's first Equity Crowdfunding platform "FUNDINNO". The results show that factors related to the presence of professional investors, the company's size, the patent, the expected sales at the exit time and the technological nature of the project have a significant positive impact on attracting equity crowd investors.

Keywords: Equity Crowdfunding, Entrepreneurial Finance, Success Factors, Fundinno.

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ملخص

أصبح التمويل الجماعي بالأسهم، كنمط حديث في تمويل الأعمال الريادية، بديلا ملائم للحاملي المشاريع. التبنى الحديث لهذا البديل التمويلي في اليابان، جعل من السؤال: ما الذي يؤثر على قرار الإستثمار للممولين الجماعيين بالأسهم في اليابان؟ ذو أهمية كبيرة.

للإجابة على هذا السؤال واستخلاص الدروس من التجربة اليابانية، تطبق هاته الدراسة نمودجا كميا على بيانات جمعت من أول منصة للتمويل الجماعي بالأسهم في اليابان "Fundinno". تظهر نتائج الدراسة أن العوامل المتعلقة بوجود مستثمرين محترفين، حجم الشركة، براءة الاختراع، المبيعات المتوقعة وقت الخروج والطبيعة التكنولوجية للمشروع، كلها لها تأثير إيجابي على جذب الممولين الجماعيين بالأسهم.

الكلمات المفتاحية: التمويل الجماعي بالأسهم، تمويل الأعمال الريادية، عوامل النجاح، Fundinno.

1. INTRODUCTION

Since the financial crisis of 2008, institutional investors have become more cautious in funding ventures in their early stages. This challenging situation combines with the arrival of the Web 2.0 technology has resulted in the emergence of crowdfunding as an innovative financial alternative.

Despite its association with a highly uncertain investment decision, Equity Crowdfunding, which is the most complex branch of the Crowdfunding, continues to expand worldwide, reaching \$ 1.5 billion in 2020, with a growth rate of 39% (Cambridge Center for Alternative Finance 2021).

The Japanese market has not deviated from this trend, although it was only legalized in 2015, the adoption of the Equity Crowdfunding by Japanese entrepreneurs has grown rapidly. According to the Japan Crowdfunding Council, Equity Crowdfunding accounts for over ¥ 1.84 billion in a cumulative transaction during the period 2017-2019. The Equity Crowdfunding growing importance leads to questions about its performance and its success factors.

Primarily, traditional equity financing of unlisted businesses involves sophisticated investors (e.g., Venture Capitalists VCs or Angel Investors AIs), who rely on direct interactions and professional due diligence. While, the Equity Crowdfunding mobilizes investors, who are heterogeneous, and generally inexperienced. Thus, understanding what influences the preferences of these non-sophisticated investors is key to increasing the likelihood of successful Equity Crowdfunding campaign.

To draw lessons from the Japanese experience and to provide practical implications for practitioners, especially entrepreneurs seeking funds, our study aims to determine factors that significantly impact equity-crowd investors' willingness to invest. From this perspective, we propose a multi regression analysis on data from Japan's first Equity Crowdfunding platform, "FUNDINNO" to identify what project attributes lead to attracting more Japanese equity crowd funders.

2. Literature review

The crowdfunding (CF), which implies a collective effort by individuals who pool their money together via the internet to invest in and support efforts initiated by other people (Ordanini et al. 2011), provides an alternative to support new ventures across industries. Previous research divided CF into four models: .1) Donation-based model: supporters receive no reward in return for their financial support. It is primarily non-profit and non-governmental organizations that use this original form of CF (Hörisch 2015). 2) Reward-based model: supporters receive material or immaterial returns on their investments, commonly in the form of product to be funded (Mollick 2014). 3) Lending-based model: similar to bank loans, supporters act like lenders and receive a previously defined interest rate within a certain period (Bruton et al., 2015). 4) Equity-based model: investors receive financial returns on their investment if the venture is profitable (Mochkabadi and Volkmann 2018).

Several academic papers highlighted the growing use of CF in recent years (Belleflamme et al. 2014). Which could be attributed to its low entry barriers (Hoegen et al. 2018), compared to the traditional financing sources such as Banks, and Ventures Capitalists (Khavul et al., 2013). As this mechanism becomes a popular alternative, understanding its success and failure drivers is increasingly attracting researchers' attention.

Studied donation-based CF in the medical field, (Zhichao et al., 2021) found out that projects targeting non-major diseases with low mortality rates and/or high frequency are more likely to draw significant attention and be more successful. Interested in donation-based CF in China, US, and Philippines (Yali, 2020) identified the importance of technology, interaction, and collaboration as keys to success. For the reward-based model, (Mollick 2014) analyzed projects hosted on the US-based platform Kickstarter; he noticed the positive influence of the founder's social networks, provision of videos, and campaign updates on the funding of projects. (Xiao et al.,2014) found out that a project creator can raise more money in the CF market, if he/she sets a slightly higher maximum backing price; and communicates with crowds as much as possible during the campaign. Concerning the

equity-based model (De Crescenzo et al., 2020) examined projects posted on an UK EQUITY CF platform, they found out that start-ups with a large number of founders and numerous pictures are more likely to have a successful campaign. Also, in a UK-based study (Vismara, 2016) empirically demonstrate the positive relationship between the campaign's success and both the amount of equity retained and the company's extensive social network. While (Nitani and Riding 2017) stressed the relevance of social networks, entrepreneur's management experience, and education as well as the financial information for the campaign's success. Interested in Chinese EQUITY CF, (Li et al. 2016) empirically proved that the ratio of full-time staff, staff number and enterprise business age, significantly improve fundraising performance.

Although the above studies have had a critical contribution in identifying factors that influence Equity CF performance, they only focus on current project attributes while ignoring expected attributes of projects. In an effort to fill this gap, our study will provide a more comprehensive view of Equity CF success factors by analyzing a combination of current and expected project attributes. Moreover, most of the previous studies of CF success factors have been conducted on the United States, Europe or China. While in other countries like Japan, the CF and particularly the Equity CF, is still under-researched. To my knowledge, no research has focused on Equity CF success factors in Japan. Thus, we would also contribute to tackling this shortcoming and draw lessons from the Japanese experience.

3. Methodology

Given the quantifiable nature of the research problem, this study adopts a quantitative approach using multi regression analysis to identify which project attributes that have the most impact on the Japanese equity crowd fundraising campaign. Given the data availability, we defined the fundraising success by the total number of equity crowd investors attracted by project.

3.1 Sample and Data collection: We extracted the publicly available data from Fundinno.com, Japan's first EQUITY CF platform, by September 2022 more than ¥ 8.82 billion has been raised through the platform. In total, we hand-collected information of 63 projects hosted between August 2020 and

May 2021. To determine what factors significantly impact the investment decision of Japanese Equity CFs, we focused on relevant information relative to both current and expected attributes of projects.

3.2 Model: Fundinno has a high success rate, based on publicly available data for campaigns hosted between August 2020 and May 2021, which made up our sample, only 1 out of the 63 sample projects failed to reach its funding target while 61 projects were over-funded. In such case, using logistic regression (successful=1, unsuccessful=0) will be obsolete. Therefore, based on previous researches (Signori and Vismara 2016, Barbi and Mattioli 2019, Cumming et al. 2019, Ahlers et al., 2015) and relying on the strong positive correlation ($r=0.74$), in our sample, between the goal achievement rate and the number of investors, we use the latter to measure fundraising success. With this respect, to address the research problem and test our hypothesis we propose the following regression model:

$$\text{Total Number of Investors (Y)} = \alpha + \alpha_1 \text{PI} + \alpha_2 \text{CC} + \alpha_3 \text{CS} + \alpha_4 \text{GD} + \alpha_5 \text{TP} + \alpha_6 \text{P} + \alpha_7 \text{ES} + \alpha_8 \text{ET} + \varepsilon$$

Table1 : Variables' description

Variables	Descriptions	Relevant references
<i>Total number of investors</i>	continuous variable measures number of crowd investors by project.	(Signori & Vismara, 2016) (Barbi and Mattioli 2019) (Cumming et al. 2019) (Ahlers et al., 2015)
<i>Current Capital (Mil ¥) (CC)</i>	continuous variable measures company's capital (Million ¥) before the EQUITY CF campaign.	
<i>Current Sales (Mil ¥) (CS)</i>	continuous variable measures sales (Million ¥) generated before the EQUITY CF campaign	(Signori & Vismara, 2016) (Cumming et al. 2019)
<i>Gender Diversity (GD)</i>	continuous variable measures the number of women in the team	(Barbi and Mattioli 2019) (Cumming et al. 2019)
<i>Expected Sales (Mil ¥) (ES)</i>	continuous variable measures sales expected at the time of exit.	
<i>Professional Investors (PI)</i>	dummy variable (=1) if the project has investment from an AI and/or VC and/or an operating company, otherwise (=0)	(Ralcheva & Roosenboom 2016)
<i>Technological Project (TP)</i>	dummy variable to whether (=1) or not (=0) the project belongs to the technology sector.	(Ralcheva, Roosenboom 2016) (Koch and Cheng, 2016)
<i>Patent (P)</i>	dummy variable corresponding to whether (=1) or not (=0) the company owes a patent.	(Signori & Vismara,2016) (Ralcheva&Roosenboom2016) (Cumming et al. 2019) (Ahlers et al., 2015)
<i>Exit Type - IPO- (ET)</i>	dummy variable (= 1) if the exit strategy is planned via an IPO or (= 0) in case of acquisition.	(Ahlers et al., 2015) (Nitani et al., 2019)

3.3 Development of testable hypotheses: Several studies have highlighted

the role of sophisticated investors in mitigating the risk. Ventures with AIs investments have higher survival and growth rates (Kerr et al., 2011). The benefits brought by the presence of professional investors extends beyond the financial aspect. AIs and VCs are expected to provide portfolio companies with bundles of value-added activities (Signori and Vismara, 2016). Unlike professional investors, individuals are less likely to possess the financial expertise or the necessary time to perform the due diligence (Schwienbacher and Larralde 2012). From this perspective, we hypothesize: **Hypothesis 1:** Project supported by professional investors tends to attract more equity crowd investors.

Various studies have linked the firm riskiness with its size. Smaller firms are less likely to take advantage of economies of scale (Audretsch et al., 1999) and usually have less diversified business operations (Esteve-Perez et al., 2008). Crowd investors are more likely to invest in investment opportunities that send low-risk signals, i.e., larger companies (Nitani et al., 2019). The same also applies to the firm's current performance, such as sales. Studying the return on investment in UK EQUITY CF (Signori and Vismara 2016) found out that firms with positive sales at the times of the initial offering are less likely to fail. Firms with sales already generated prove the marketability of the firm's goods or services, and thus it is an important milestone when assessing investment proposals (Nitani et al., 2019). To test the size effect on the investment decision of Japanese equity crowd investors, we will use the company's current capital and sales as a proxy for company size and propose:

Hypothesis 2: the larger the company, the more equity crowd investors are willing to invest.

Democratize access to capital is the goal of Equity CF, so a more diverse range of entrepreneurs could start-up firms (Oranburg, 2016). Studying the potential of CF for scientific research (Sauermann et al., 2019) found out that compared to other traditional funding mechanisms, women in CF have higher odds of reaching their funding goal than men. (Okoyeuzu and., al 2019) found that the cultural barrier faced by women in getting credit from traditional lenders will be solved by the CF. Along the same line, (Vismara et., al 2016) found out that gender diversity is higher in Equity CF than in other entrepreneurial finance markets. Consistent with this line, we propose:

Hypothesis 3: Projects that include women in their team will attract more Japanese equity investors.

Related to democratizing access to capital, CF plays a crucial role in filling the funding gap typically faced by small technology ventures. The crowd contributions to innovation may not be limited only to funds. It can also help testing and developing innovative products by providing precious feedback and ideas (Hervé and Schwienbacher 2018). As we focused on the Japanese context, one of the most technology-savvy nations globally (6th in 2019) and one of the world's top innovators, we will try to identify the impact of having a project in the technology sector on the odds of succeeding an Equity CF fundraising, by proposing:

Hypothesis 4: Japanese equity crowd investors will be more attracted to projects in the technology sector.

In connection with the technological aspect, the finance literature highlighted the positive role of patents in the fundraising process (Baum and Silverma, 2004; Hsuand and Ziedonis, 2013). Technology patents held by companies positively affect a firm's performance after an IPO and a firm's growth prior to an IPO (Kim and Heshmati 2006; Stuart et al. 1999). Patents are the major driver for corporate growth (Heo et al. 2012).

However, (Meoli et al. 2019) found out a negative signaling of patents in the reward-based CF model. Also, (Liu et al., 2021) stated that unprofessional investors could not fully process the innovative value of patent information. Therefore, to highlight the specificity of the equity model of CF and its appropriateness for innovative projects, we set:

Hypothesis 5: Holding a patent enhances the company's chances of attracting more equity crowd investors.

The CF literature has paid less attention to the success factors linked to the expected attributes of the project, perhaps because it is well-known that entrepreneurs' expectations are overly optimistic (Sahlman 1997; Mollick 2014). However, as CF typically deals with early-stage projects with few or no achievements, the entrepreneur's forecast could be a critical element in the crowd's investment decision. Given the absence of observable achievement, such as sales, during the early stages of firm development, valuations tend to be based on growth expectations or entrepreneurial vision (Mohammadi and Shafi 2018), while high sales growth expectations and high anticipated margins signal higher potential

returns to investors (Nitani, 2019). (Angerer et al., 2017) pointed out that a promising growth potential impacts the return rate for the investors, which is the main incentive for them to fund a start-up. In view of the foregoing points, we conjecture:

Hypothesis 6: Projects with “high” sales expectations should be more attractive to CF investors.

In any equity investment type, investors invest to exit; they are typically attracted by the capital gain generated at the time of the exit. Analyzing signaling in Equity CF (Ahlers et al, 2015) found out that IPO exit strategy attracts significantly more investors than the Acquisition. Interested in crowd investors' ability to interpret signals in the European Equity CF context (Nitani et al., 2019) found out that crowd investors attempt to maximize the return by choosing projects with greater growth opportunities, including a plan for IPO exit among other attributes. Therefore, we assume that the exit strategy planned by entrepreneurs would influence Japanese crowd investors' investment decisions and propose:

Hypothesis 7: Projects expecting an exit through an IPO attract more crowd equity investors.

4. RESULTS AND DISCUSSION

4.1 Descriptive statistics: Table 2 presents the descriptive statistics of our sample. Regarding professional investors, 46 projects or 73% of our sample have at least one professional investor, whether it is a venture capitalist, an operating company, or an angel investor. This high proportion indicates, (1) the importance given by the platform to the selection process and the quality of the projects, (2) the platform reputation which helps to attract such trustworthy projects. The same applies for patents where 41% of the projects have a patent, which also indicates the quality of the projects proposed by the platform.

In respect to the current capital, our sample ranged from ¥ 1 Mil to ¥ 166.30 Mil with an average of ¥ 30.30 Mil, while current sales ranged from ¥ 0.03 Mil to ¥ 339.55 Mil with an average of 45.07 Mil. It should be noted that 12 out of the 63 projects had not yet generated sales at the time of the fundraising, instead, short-term expected sales are used as a proxy for current sales. In addition to covering a wide range of relatively small businesses, these statics highlights the democratizing effect of CF, which

allows access to capital even for projects that have not yet deployed their services or products.

As we will discuss in the results section, gender inequality is a deeply rooted reality in Japanese society. From our dataset, we got an average of less than one woman (0.41) in each team's project and 42 out of the 63 sample projects don't include any women on their team.

Regarding expected sales, our sample ranges from projects with sales expectations of ¥ 416.51 Mil to ¥ 14,727.28 Mil, averaging ¥ 2,327.24 Mil. As for the projects sector, 27 projects were in the technology sector, including robotics, IoT, AI, IT... etc, the remaining 36 projects are in various fields such as entertainment, agriculture, medical ... etc. Therefore, FUNDINNO is a generalist platform offering opportunities in various sectors, unlike specialized platforms which focus on projects from one specific sector. Finally, projects of our sample plan two exit strategies, 86% of projects expect an IPO, while 14% expect an exit through an acquisition

Table 2. Descriptive statistics for the independent variables

<i>Numerical variables</i>	N	Mean	Max	Min	SD
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<i>Current capital (Mil ¥)</i>	63	30.03	166.30	1	31.52
<i>Current sales size (Mil ¥)</i>	63	45.07	339.55	0.03435	68.22
<i>Gender diversity</i>	63	0.41	4	0	0.71
<i>Expected sales size (Mil ¥)</i>	63	2,327.24	14,727.28	416,510224	2,260.03
<i>Categorical variables</i>	N	Yes = 1	N/A	No = 0	N/A
<i>Professional investors</i>	63	46	N/A	17	N/A
<i>Technological project</i>	63	27	N/A	36	N/A
<i>Patent</i>	63	26	N/A	37	N/A
<i>Exit Type (IPO)</i>	63	54	N/A	9	N/A

1. Multi regression :

Table 3: Multiple regression results explaining the funding success by number of investors

Regression statistics

<i>Multiple R</i>	0.7163222
<i>R Square</i>	0.5131175
<i>Adjusted R square</i>	0.4409867
<i>Standard Error</i>	88.536583
<i>Observations</i>	63

<i>ANOVA</i>	<i>DF</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Signif F</i>
<i>Regression</i>	8	446,099.74	55,762.46	7.1137	2.21E-06
<i>Residual</i>	54	423,291.23	7,838.72		
<i>Total</i>	62	869,390.98			

	Coefficients	P-value	Hypothesis
<i>Intercept</i>	63.19281961	0.1183305	
<i>Professional investors</i>	57.24010 ^(**)	0.0481824	H1
<i>Current capital (Mil ¥)</i>	0.893189 ^(***)	0.0346656	H2
<i>Current sales (Mil ¥)</i>	0.477619 ^(***)	0.0071517	H2
<i>Gender diversity</i>	-24.33000	0.1394499	H3
<i>Technological project</i>	46.78423 ^(*)	0.0514342	H4
<i>Patent</i>	76.93900 ^(***)	0.0024562	H5
<i>Expected sales (Mil ¥)</i>	0.012721 ^(***)	0.0175906	H6
<i>Exit Type (IPO)</i>	-5.342784	0.8754227	H7

Note: (*), (**) and (***) denote significance at the 10%, 5% and 1% levels, respectively.

The table 3 shows the regression model results, the model was statistically significant (significance F= 0.00000), with reasonable R-square value (R2 =0.51).

We found evidence (p-value= 0.04 and $\beta_1= 57.24$) that support Hypothesis 1, inferring that Japanese equity crowd investors positively evaluate opportunities offered by companies, already backed by sophisticated investors. The model of CF does not ensure an active involvement post-funding to every investor due to their large number, even with a possible right to vote, they have limited ability to monitor, given their lack of expertise and their small equity stake. Furthermore, crowd investors have no incentives to spend resources evaluating projects in which they will have a small contribution. Therefore, the signal sent by the presence of professional investors is received by the crowd as a guarantee of the project's reliability, also as a source of valuable leverages such as expertise, networking and certification to third parties, which are an important asset for future performance.

Concerning hypothesis 2, the regression model demonstrates a positive impact of the company's size on the numbers of crowd investors, this impact is statistically significant for the two aspects: capital, and current sales, with P-values of 0.034 and 0.007, respectively. This finding indicates that Japanese crowd equity investors perceive higher capital and higher sales as a positive signal. Companies listed on CF platforms are usually new

and send signals mainly based on expectations that might be volatile or unreliable. Instinctively, any milestones reached such as capital invested or sales generated would be positively perceived by the crowd.

Our hypothesis 3 was contradicted, the model did not identify any statistically significant relationship (p -value = 0.13) between the gender diversity within the project team and the investment willingness of the Japanese equity-crowd investors. It should be noted that out of the 63 projects, only 02 have a female CEO, while 42 have no female in the team. It is pertinent to mention that Japanese society is well known for its patriarchal status, especially in the business area. One out of twenty women believed they were capable of starting a business, and only 2% of adult women engage in entrepreneurial activity in Japan (Kelly, 2013). Despite its status as the third biggest economy in the world, societal norms make the gender inequality in the Japan much higher than in many developing countries, in the Female Participation Index of the World Economic Forum's 2019 Global Competitiveness Report, Japan ranks 62nd in the world, with only 76 female workers for every 100 male workers. All these points provide insight on to what extent equity CF is still far from the utopian goal of democratizing access to capital.

At a 90% confidence level, the model confirmed our hypothesis 4, suggesting that Japanese equity CF investors are more attracted to the technology sector's projects, a straightforward finding in a country that was considered for decades as one of the most technology-savvy globally, and one of the world's top innovators. The appropriateness of the Equity CF to support innovative projects compared to other CF models could also explain this result. For instance, models such as reward-based or debt-based are based on expectations of returns that are too short-term to be adapted to the durations needed for innovative projects to become profitable and meet investors' expectations, in contrast, Equity CF offers more long-term investments.

Also, hypothesis 5 was supported by the model's results, having a P -value = 0.002 and a coefficient of 76.93 means holding a patent has a statistically significant positive impact at a 99% confidence level, which illustrates the role of patent in persuading Equity CF investors. Bearing a high risk compared with other types of investment, Japanese Equity CF investors suppose that owning a patent could mitigate this risk, especially

risk associated with new competition. This result is consistent with the finding mentioned above, underlining the preference of Japanese Equity CF investors towards technology projects, where holding a patent would provide an intellectual competitive advantage.

In addition to the importance of the current project attributes, the results obtained for the expected sales at the exit time (P-value=0.01 and coefficient =0.012) also denote the importance of this forecasting factor, which has a significant positive impact on the investment decision of Japanese equity crowd investors. Expected sales could help the crowd get an idea of the company's valuation in terms of future cash flow. It should be noted that the reputation of the platform for performing due diligences and the presence of professional investors will give credibility to the proposals, that is, increase the confidence of the crowd in the projects' expectations.

No statistical significance was found out to support our hypothesis 7, (P-value=0.87). Contrary to expected sales, the expected existing strategy does not influence Japanese Equity CF investors, implying less importance for this factor while evaluating investment opportunities. Meaning that, the crowd does not focus on exit strategies in the early stages of the project due to the uncertainty of these stages, considering it too late as the exit way will become clearer as the project matures.

4. CONCLUSION

As the CF grows as an alternative for small ventures, the question of which project attributes will increase the fundraising performance is fundamentally essential. Although previous research has focused on this subject, a more comprehensive view that analysis both current and expected project attributes is lacking. To fill this gap, we applied a data-driven

quantitative approach to examine what drives the success of Equity CF campaigns. Our study contributes to extending the previous knowledge by demonstrating the fact that both current and expected attributes influence the crowd investment decision.

The study results are relevant for stakeholders in the CF industry, particularly for entrepreneurs, as they provide practical guidelines to signal the intrinsic quality of their projects to the crowd. Correspondingly, by allowing them to understand the crowd's preferences, the findings are also informative for platforms to improve their selection process, and strengthen their reputation. Furthermore, as the Algerian authorities have begun to understand the critical role of this financial solution, the 2020 complementary finance law, have defined the legal status of CF platforms (conseiller en financement participatif), it is relevant for the concerned parties in Algeria to draw lessons from the Japanese experience.

However, our study limits the success of the Equity CF to the single act of fundraising, which is, only the starting point of the entrepreneurial journey. In contrast, the true success of the Equity CF as an optimal alternative should also include long-term success after fundraising. Thus, we anticipate further research to analyze factors influencing post-funding success.

5. Bibliography List:

- Ahlers Gerrit K.C., Cumming Douglas, Günther Christina, Schweizer Denis (2015), Signaling in Equity Crowdfunding, Virtual Special Issue: Crowd-Funded Entrepreneurial Opportunities, Volume: 39 issue: 4, page(s): 955-980, <https://doi.org/10.1111/etap.12157>
- Angerer Martin, Brem Alexander, Kraus Sascha, Peter Andreas (2017) : Start-up funding via equity crowdfunding in Germany: A qualitative

- analysis of success factors, *The Journal of Entrepreneurial Finance (JEF)*, ISSN 1551-9570, The Academy of Entrepreneurial Finance (AEF), Montrose, CA, Vol. 19, Iss. 1, pp. 1-34
- Audretsch D. B., Santarelli E., Vivarelli M. (1999), Start-up Size and Industrial Dynamics: Some Evidence from Italian Manufacturing, *International Journal of Industrial Organization* 17 (1999): 965–983.
 - Barbi Massimiliano, Sara Mattioli(2019) Human capital, investor trust, and equity crowdfunding, *Research in International Business and Finance*, Volume 49, 2019, Pages 1-12.
 - Baum J. A, Silverman B. S (2004), Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology startups, *Journal of Business Venturing*, vol. 19, no. 3, pp. 411–436
 - Belleflamme, P., T. Lambert and A. Schwienbacher (2014) Crowdfunding: Tapping the right crowd. *Journal of Business Venturing*, 29, 585-609.
 - Bruton G, Khavul S, Siegel D, Wright M (2015) New financial alternatives in seeding entrepreneurship: microfinance, crowdfunding, and peer-to-peer innovations, *Journal of Entrepreneurship Theory and Practice* 39(1):9–26.
 - CCAF Cambridge Center of Alternative Finance (2021), *The 2nd Global Alternative Finance Market Benchmarking Report*
 - Cumming Douglas, Meoli Michele, Vismara Silvio (2019), Does equity crowdfunding democratize entrepreneurial finance?, *Small Bus Econ* (2021) 56:533–552 <https://doi.org/10.1007/s11187-019-00188-z>
 - De Crescenzo Veronica, Domingo Enrique Ribeiro-Soriano, Jeffrey G. Covin,(2020) Exploring the viability of equity crowdfunding as a fundraising instrument: A configurational analysis of contingency factors that lead to crowdfunding success and failure, *Journal of Business Research*, Volume 115.
 - Esteve-Perez S, Manez-Castillejo J. A, Sanchis-Llopis J. A (2008), Does a ‘Survival-by-Exporting’ Effect for SMEs Exist, *Empirica* 35 (1): 81–104.
 - Heo In Seok, Sohn So Young, Jeong Ji Eun (2012) Effects of the matching fund program on IPO and bankruptcy of SMEs in Korea, *Small Bus Econ* 42:117–129, DOI 10.1007/s11187-012-9467-3
 - Hervé Fabrice, Schwienbacher Armin (2018), crowdfunding and innovation, *journal for economic surveys*, Volume32, Issue5 Special Issue: contemporary topics in finance: a collection of literature surveys December

2018 Pages 1514-1530 <https://doi.org/10.1111/joes.12274>

- Hoegen, A., D. M. Steininger and D. Veit (2018) How do investors decide? An interdisciplinary review of decision- making in crowdfunding. *Electronic Markets*, 28, 339-365.
- Hörisch J (2015) Crowdfunding for environmental ventures: an empirical analysis of the influence of environmental orientation on the success of crowdfunding initiatives. *J Clean Prod* 107:636–645
- Hsuand D.H, Ziedonis R.H (2013), Resources as dual sources of advantage: Implications for valuing entrepreneurial-firm patents, *Strategic Manage. J.*, vol. 34, no. 7, pp. 761–781.
- Kelly, D. J., Brush C. G., Greene P. G., Litovsky Y(2013), *The Global Entrepreneurship Monitor 2012 Report on Women Entrepreneurs*, download from: <https://www.empowerwomen.org/en/resources/documents/2013/8/global-entrepreneurship-monitor-2012-womens-report?lang=en> (accessed June 5th ,2021).
- Kerr W.R., Lerner J, Schoar A (2011), The consequences of entrepreneurial finance: evidence from angel financings. *Rev. Financ. Stud.* 27 (1), 20–55.
- Khavul, S., H. Chavez and G. D. Bruton (2013) When institutional change outruns the change agent: The contested terrain of entrepreneurial microfinance for those in poverty. *Journal of Business Venturing*, 28, 30-50
- Kim, Y. H., & Heshmati, A. (2006). Analysis of Korean IT start- up’s initial public offering and their post-IPO performance, *Journal of Productivity Analysis*, 34(2), 133–149
- Koch Jascha-Alexander, Cheng Qian, *The Role of Qualitative Success Factors in the Analysis of Crowdfunding Success: Evidence from Kickstarter* (2016). Proceedings of the 20th Pacific Asia Conference on Information Systems (PACIS 2016); Chiayi, Taiwan 2016, Available at SSRN: <https://ssrn.com/abstract=2808428>
- Li, X., Li, X., Tang, Y., Tang, Y., Yang, N., Yang, N., & Zhou, H. (2016). The value of information disclosure and lead investor in equity-based crowdfunding: an exploratory empirical study, *Nankai Business Review International*, 7(3), 301–321.
- Liu T, Gong X, Liu Z, Ma C. (2021), Direct and Configurational Paths of Capital Signals to Technology Crowdfunding Fundraising, in *IEEE*

Transactions on Engineering Management, doi:

10.1109/TEM.2021.3068524.

- Meoli Azzurra, Munari Federico, Bort James (2019), The patent paradox in crowdfunding: an empirical analysis of Kickstarter data, *Industrial and Corporate Change*, Volume 28, Issue 5, October 2019, Pages 1321–1341, <https://doi.org/10.1093/icc/dtz004>.
- Mochkabadi K, Volkmann CK (2018) Equity crowdfunding: a systematic review of the literature, *Journal of Small Business Economics* 18(S1):223
- Mohammadi A, Shafi K. (2018). Gender differences in the contribution patterns of equity-crowdfunding investors. *Small Business Economics*, 50(2), 275–287
- Mollick E (2014), The dynamics of crowdfunding: an exploratory study, *Journal Business Venturing* 29:1–16.
- Nitani Miwako, Riding Allan, Beichuan He (2019) On equity crowdfunding: investor rationality and success factors, *Venture Capital*, 21:2-3, 243-272, DOI: 10.1080/13691066.2018.1468542
- Nitani, M., & Riding, A. (2017). On Crowdfunding success: firm and owner attributes and social networking. SSRN working paper, available at <https://ssrn.com/abstract=2945081>.
- Okoyeuzu Chinwe, Ifeoma Nwakoby, Obinna Onwujekwe (2019) Crowdfunding: An Alternative to Funding Women Entrepreneurs, *South Asian Journal of Social Studies and Economics*, Page 1-10 DOI: 10.9734/sajsse/2019/v5i230140
- Oranburg S.C. (2016), Democratizing Startup, *Rutgers University Law Review* , pp. 1013-1066
- Ordanini, A., Miceli, L., Pizzetti, M., & Parasuraman, A. (2011) Crowdfunding: Transforming customers into investors through innovative service platforms, *Journal of Service Management*, 22(4): 443-47
- Ralcheva Aleksandrina, Roosenboom Peter (2016), On the Road to Success in Equity Crowdfunding. Available at SSRN: <https://ssrn.com/abstract=2727742> or <http://dx.doi.org/10.2139/ssrn.2727742>
- Sahlman, W. A. (1997) “How to Write a Great Business Plan.” *Harvard Business Review* 75 (4): 98–108.
- Sauermann H, Franzoni C, Shafi K (2019) Crowdfunding scientific research: Descriptive insights and correlates of funding success, *PLoS*

- ONE 14(1): e0208384. <https://doi.org/10.1371/journal.pone.0208384>. P.15.
- Schwienbacher A, Larralde B (2012) Crowdfunding of small entrepreneurial ventures. In D. Cumming (Ed.), *The Oxford Handbook of Entrepreneurial Finance* (pp. 369–392). Oxford: Oxford University Press.
 - Signori Andrea and Vismara Silvio (2016), Returns on Investments in Equity Crowdfunding. Available at SSRN: <https://ssrn.com/abstract=2765488> or <http://dx.doi.org/10.2139/ssrn.2765488>
 - Stuart, T. E., Hoang, H., Hybels, R. C. (1999). Interorganizational endorsements and the performance of entrepreneurial ventures, *Administrative Science Quarterly*, 44, 315–349.
 - Vismara Silvio, Benarolio Davide, Carne Federica (2016) Gender in Entrepreneurial Finance: Matching Investors and Entrepreneurs in Equity Crowdfunding. Forthcoming in Albert Link, eds., "Gender and Entrepreneurial Activity", Cheltenham, UK: Edward Elgar, Available at SSRN: <https://ssrn.com/abstract=2833946>
 - Vismara, S. (2016). Equity retention and social network theory in equity crowdfunding, *Small Business Economics*, 46(4), 579–590.
 - Xiao, S., Tan, X., Dong, M. and J. Qi. (2014). "How to Design Your Project in the Online Crowdfund- ing Market? Evidence from Kickstarter." In: *Proceedings of the Thirty Fifth International Conference on Information Systems*. Auckland: Australia.
 - Yali Zhang, Chrissie Diane Tan, Jun Sun, Zhaojun Yang,(2020) why do people patronize donation-based crowdfunding platforms? An activity perspective of critical success factors, *Computers in Human Behavior*, Volume 112.
 - Zhichao Ba, Yuxiang (Chris) Zhao, Shijie Song, Qinghua Zhu (2021), Understanding the determinants of online medical crowdfunding project success in China, *Information Processing & Management*, Volume 58, Issue 2.