

Gender Differences in Equity Crowdfunding Investment: A Study of Investors in Malaysia

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Abstract

The objective of this study is to examine the possibilities of gender differences in equity crowdfunding decision making and investment. Possible gender differences are investigate for the three sets of values - cognitive values (financial, functional and informational) and affective values (emotional, social, aesthetic and novelty). Descriptive analysis and mean differences between males and females on factors influencing investors' decision in equity crowdfunding are analyzed. The findings can provide better understanding of the choice of investing in equity crowdfunding between males and females.

Keywords: Equity crowdfunding, gender differences, Malaysia

1 Introduction

Gender differences in investing behavior are a common phenomenon in investing arena. Gender is playing an important role in determining equity participation. Past studies have found that gender differences affect the equity investment participation (Dwyer, 2002 & Arano et al., 2010). Lusardi and Mitchell (2011) also found that female is only willing to participate in less risky asset investment compared to male. This is because female has the lower financial literacy and more limited risk tolerance than male. There are many factors that affect the female and male investment decision making for example, wealth, education and financial literacy and the difference of environment of the particular individual.

Crowdfunding is a web-based platform which collects the initial fund from a group of investors in order to encourage early-stage entrepreneurs (Security Commission of Malaysia, 2014). Equity crowdfunding market is new in Malaysia and it is growing gradually in recent years. Securities Commission Malaysia has given six licensing to the equity crowdfunding platform (ECF) operator in Malaysia in year 2015 who are Ata Plus, Crowdplus, Crowdo, Eureeca, FundedByMe and PitchIN. These six equity crowdfunding providers have presented good progress in meeting the financing needs of small and medium enterprises (SMEs).

According to Securities Commission Malaysia (2017), equity crowdfunding in Malaysia has enjoyed relative success by organizing 35 successful campaigns with 84% of success rate and RM26.01 million raised in the year 2017. Equity crowdfunding is important to SMEs especially in the development of new types of business that are innovative, new growth areas or

high-growth SMEs. This is because the traditional forms of financing might not be sufficient for the early-stage entrepreneurs. As a result, the funding method for SMEs capital has been focused more on non-traditional financing avenues and platforms such as equity crowdfunding (ECF), peer-to-peer financing (P2P), Leading Entrepreneur Accelerator Programme (LEAP) market, Investment Account Platform (IAP), venture capital.

Equity crowdfunding investment is relatively new in Malaysia and very less investors are aware of this non-traditional financing avenues and platforms. The responses of investors on equity crowdfunding are playing an essential role to make the funding campaign to be successful and benefit the early-stage entrepreneurs. In Malaysia, women comprise only a small percentage of active investors with the percentage being around 29% in the recent year (Sidhu, 2018) but the number is growing. A number of studies report that women are better in investing than men and they are more patient and less overconfident (The Star Online, 2019). Therefore, it is crucial to study the gender disparity on investing decision in equity crowdfunding.

2 Literature review

Crowdfunding is a platform that provides financial help to SMEs. Past studies have found that female investors are less likely to invest in equity of firms which are new in market and have high level of technology (Mohammadi & Shafi, 2018). The findings also suggest that females are not willing to invest a higher percentage of equity offerings. Males often go for riskier investment compared to females (Ohland, 2006). Lin and Pursiainen (2018) also report that gender differences occur in crowdfunding whereby male investors usually have overconfidence about the projects. They overestimate the potential return on investment by setting higher goals which leads to frequent failures. Female are under controlled and more likely to pick the proper and potential projects, thus making return in successive campaigns.

In equity crowdfunding, female entrepreneurs benefit from higher success rates in fundraising from rewards-based crowdfunding platforms (Deb & Chavali, 2009). Female investors mostly success in their investment when comes to equity crowdfunding projects (Gorbaty & Nelson 2015). However, Kovacs (2018) found out that female investors have a habit of choosing campaigns that have lower success rates. In this study, the behavior of male and female investors has been tested using cognitive values (financial, functional, informational) and affective values (social, emotional, aesthetic and novelty). The values are used to identify the reasons behind investors' investing decision in this new financing choice.

Cognitive decision is taken from the mind-set of an individual based on their expectation, experience and excellent (Deci & Ryan, 1985). Cognitive value includes financial value, functional value and information values which are viewed as subjective evaluation, as the evaluations are made by brain. Financial value satisfies investors when investors get an individual profit for their investment (Sweeney & Soutar, 2001). Functional value discusses about the capability of the investment to achieve specific achievement according to its attributes such as physical appearances and marketing structures (Fournier, 1991). Subsequently, functional value measures the degree of crowdfunding business outcomes that can be produced. Information value influences the investor by providing a brief and detail information about the particular investment. Informational value affects investor's willingness to support crowdfunding projects (Lin et al., 2009).

Besides, affective value is identified as choice about a reward or punisher in any case that involve feeling that might be shaped and trailed by a decision-making procedure (Rolls & Grabenhorst, 2008). Emotional value shows an essential part in crowdfunding especially from the investors. Emotional value is utility observed from the sentiments and emotions that a goods or service creates (Sweeney & Soutar, 2001). As optimistic feelings of an investor lead to direct attitude which makes emotional value a major role to drive interest in crowdfunding venture (Bagozzi et al., 1999). Social value helps the investors to estimate whether to

invest in the future investment in crowdfunding. According to Glazer and Konrad (1996), online social networks promote socialization among individuals and encourage human welfare. Aesthetic value is the new experiences encountered by individual (Sheth et al., 1991). Crowdfunding is a platform that provide financial help for creation of something new. The novelty seeking personality makes an individual to try something in trending (Obermayer et al., 2013).

Crowdfunding helps entrepreneurs to get funds and provides incentives to investors. It is important to encourage investors to participate in crowdfunding activities for the success of entrepreneurial ventures in Malaysia, thus leading to the growth of the country. By understanding the gender disparity in investing decision, steps can be taken to support the growth in the industry.

3 Methodology

3.1 Research Design

In this study, two major equity crowdfunding platforms providers (Pitchin and Crowdplus) in Malaysia were approached in carrying out the survey to individual investors. The questionnaire survey has been distributed in two ways. First, the investors received the questionnaire survey in their personal emails through the assistance from the two platform providers and second, the questionnaire is distributed to investors during the face to face previews event. During the face-to-face previews, investors are invited to join a sharing session in which the fundraisers present their business ideas. The face-to face sessions are common in Malaysia as investors feel more secure to know more about the projects before investing.

This study is a quantitative research and the sample unit is an individual. The individuals are the male and female who attend the face-to-face previews or the registered investors under the equity crowdfunding platforms. Most of the previews are held at Kuala Lumpur, Penang and Melaka. Past studies showed that most responses are gathered from equity crowdfunding platforms, respective websites and investors interview but not from questionnaire survey on individual investors (Moysidou and Spaeth, 2016). Therefore, it is important to focus on individual investors rather than the equity crowdfunding platforms and respective websites.

3.2 Statistical Analyses

The used sample size for this study is 140 individual respondents. The data has been collected from August 2018 until January 2019 by emailing the investors and during face-to-face previews. The data analysis process involves applying the reasoning method for comprehending and interpreting the data collected. The choice of analytical techniques depends on the characteristics of research design and nature of the collected data. The analysis of the survey data was conducted by applying statistical techniques. All data were coded and categorised into the Statistical Package for Social Sciences (SPSS) for interpretation and the SPSS is used to measure the frequencies, average mean score and standard deviation between male and female investors. Descriptive analysis is also performed to find the number of male and female who have had investment experience before, the percentage of current investment in crowdfunding and future invetsment in planned.

4 Results

4.1 Respondents' profile

There are 167 survey responses were collected during the survey but only 140 usable questionnaires for data analysis. The questionnaire of this research is developed based on previous research literature. A five-point Likert scale is used in the questions to enable quantitative analysis to be carried out from the given responses. Table 1 shows the frequency and percentage break down of each demographic variable. The variables for the demographic profile are the individual age, gender, occupation, the sector they are working, their education background, their investment experience, and their knowledge and awareness about equity crowdfunding. Table 1 presents the frequency and percentage of the individual who has invested and the potential investors of equity crowdfunding.

Table 1
Demographic profile of respondents

<u>Age</u>	<u>Freq</u>	<u>%</u>	<u>Gender</u>	<u>Freq</u>	<u>%</u>
20 or younger	1	0.7	Female	54	38.6
21 to 40	90	64.3	Male	86	61.4
41 to 60	45	32.1			
61 to older	4	2.9			
<u>Occupation</u>	<u>Freq</u>	<u>%</u>	<u>Sector</u>	<u>Freq</u>	<u>%</u>
Employee	61	43.6	Agriculture	2	1.4
Retiree	1	0.7	Infrastructure	4	2.9
Self-Employment	72	51.4	Manufacturing	5	3.6
Student	6	4.3	Media	3	2.1
			Service	126	90.0
<u>Education</u>	<u>Freq</u>	<u>%</u>	<u>Investment experience</u>	<u>Freq</u>	<u>%</u>
Bachelor	83	59.3	Below 10 years	126	90
Diploma	32	22.9	Above 10 years	14	10
Masters	17	12.1			
PHD	5	3.6			
STPM	3	2.1			
<u>Any Investment Before</u>	<u>Freq</u>	<u>%</u>	<u>Invested in ECF</u>	<u>Freq</u>	<u>%</u>
No	4	3.2	No	56	40.0
Yes	136	96.8	Yes	84	60.0
<u>Will invest in future?</u>	<u>Freq</u>	<u>%</u>			
No	4	2.9			
Yes	136	97.1			

Note: ECF=equity crowdfunding

Out of the 140 completed questionnaires, there are 61.4% were male and 38.6% were female. The respondents were mostly from the age group of 20 to 40 years old (64.3%) and who are self-employed (51.4%) and mostly from service sector (90.0%). Many of them are having a Bachelor's degree as their highest educational qualification (59.3%). Almost all of the respondents have investment experience below 10 years (90%). There are more than half of them who have invested in equity crowdfunding (60%) and for those do not invest in equity crowdfunding, most of them have the idea of investing in the future (97.1%).

The correlation between the variables has been checked via multicollinearity test. The multicollinearity was tested using Variance Inflation Factor (VIF) as recommended by Tabachnick and Fidell (2007). Diamantopoulos and Siguaw (2006) report that VIF values below 3.3 are considered as valid and acceptable. In this study, the results show that all the variables

have VIF values below 3.3 and are considered acceptable. Thus, it can be concluded that no multicollinearity found in the data. Table 2 shows the VIF values for each variable tested.

Table 2
VIF values

Items	VIF	Items	VIF
Aesthetic	2.151	Informational	1.918
Emotional	2.203	Novelty	2.1
Financial	1.426	Social	1.96
Functional	1.275		

4.2 Gender differences in equity crowdfunding

Table 3 below shows differences in the previous investment experience between male and female in Malaysia. More males are found to have previous investment experience compared to females.

Table 3
Investment experience

Gender	Investment Experience Before	
	Yes	No
Female	51 (36.43%)	3 (2.143%)
Male	85(60.71%)	1 (0.714%)

For the individual who has not invested in crowdfunding before, they are asked whether they will invest in the future. Out of the 140 respondents, 136 of them indicated their interest to invest. Most of them, males or females, have indicated that they would invest more than 10% of their portfolio in equity crowdfunding. 47.15% of the respondents who plan to invest more than 10% of their portfolio in equity crowdfunding in the future are male while 30.15% are female. This indicates that potential investors of equity crowdfunding in Malaysia are generally willing to take more risk and males are still the group that are willing to assume higher risks as presented in Table 4.

Table 4
Percentage of future investment

Gender	Number of respondents who plan to do future investment in equity crowdfunding from portfolio value	
	<10%	>10%
Female	13 (9.55%)	41 (30.15%)
Male	18 (13.24%)	64 (47.06%)

Next, the cognitive and affective values that promote investors' decision making in equity crowdfunding are measured. The cognitive and affective values which comprise of financial, functional, information and social, emotional, aesthetic and novelty values respectively are analyzed by comparing the mean values for each value for both males and females. The

mean difference is also evaluated. Table 5 below shows the average mean score and mean difference between males and females for the values measured.

Table 5

The average mean score and mean difference for cognitive and affective values

Values	Average mean score		Mean Difference		P-value
	Male	Rank	Female	Rank	
Financial	3.77	1	4.05	1	0.05* *
Functional	3.25	6	3.52	7	0.04* *
Informational	3.62	2	3.96	2	0.008 **
Social	3.21	7	3.60	6	0.003 **
Emotional	3.48	5	3.66	4	0.137
Aesthetic	3.61	3	3.81	3	0.109
Novelty	3.57	4	3.66	4	0.433

Note: ** significance at 55 level.

Overall, the mean scores for all the variables considered are higher for females than males, and the mean difference is in negative value. Among the seven variables examined, only four of them have significant results which are financial, functional, informational and social values. Differences in gender based on emotional, aesthetic and novelty values are insignificant. The results also show consistent findings for the importance of each variable to the investors, whereby financial value is ranked as the most influential factor considered by both female and male investors, followed by informational value, aesthetic value, novelty value and emotional value.

Table 5 shows that females have higher mean score in financial value than males. This indicates that females are more concerned about the return on their investment when considering investment in equity crowdfunding. A higher mean score for functional value is also observed for females compared to males. This indicates that females are more particular about the functional benefit such as utility satisfaction gained from the products produced as a result of the crowdfunding activities. The findings also suggest that females do evaluate the information provided for the equity crowdfunding projects compared to their male counterparts. The finding of social values' average mean score shows that females have higher mean score than males. This indicate that females exhibit greater attention to social and community well-being and want to socialize when planning to invest in equity crowdfunding investment.

5 Conclusion

The findings show that females make their investing decisions more diligently compared to their male counterparts, from the perspective of cognitive and affective values. The females make their decision by more logical ways with the need to have more information and they also think that social value is important to them. Financial, informational and aesthetic value affect the investor decision stronger compare to other values in equity crowdfunding. It is advisable for the entrepreneurs and crowdfunding platform to focus on strengthening on creative ideas, new exposure business and maintain good profit margin towards the business goal.

The results from this study shows that the number of male investors is more than female investors although the average mean score is less. Male participate more into investing in equity crowdfunding compare to female. Results from this research are expected to benefit the crowdfunding community as well. It will provide insight into the decision-making process of the project investors providing project creators the knowledge to allow them to redesign their projects to successfully attract funding for their projects. Moreover, crowdfunding operators can redesign and refine their platforms to progress user interface and to enhance recruit and sustain involvement in the crowdfunding community. Therefore, the increase in successful projects will result in a spur in entrepreneurial efforts and increased employment opportunity.

In summary, it is important to encourage the investors to participate in this new financing method. Both genders need to be encouraged more to start investing in equity crowdfunding. Female might improve their contribution to the society and learn many new things, improve social standing, following friends to invest, care to improve society and many more. It is critical to study the factors that influence investor investing decision on equity crowdfunding from an efficient funding method and sustainable platform and obtain sufficient fund to begin a business.

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