GENDER DIFFERENCES IN INDIVIDUAL SHAREHOLDERS' SOCIODEMOGRAPHY IN MALAYSIAN PUBLIC LISTED COMPANIES

Arifha Mohamad
Faculty of Administrative Science and Policy Studies
Universiti Teknologi MARA, Shah Alam, Selangor, MALAYSIA
Email: arifhamohamad@gmail.com

Dr. Nor Suziwana Tahir
Faculty of Administrative Science and Policy Studies
Universiti Teknologi MARA, Shah Alam, Selangor, MALAYSIA
Email: suziwana@salam.uitm.edu.my

Associate Professor Dr. Yarina Ahmad
Faculty of Administrative Science and Policy Studies
Universiti Teknologi MARA, Shah Alam, Selangor, MALAYSIA
Email: yarina@salam.uitm.edu.my

ABSTRACT

Decisions that we make today will shape the form of tomorrow. Indeed, today's investment decision making is affected by many factors that determine future profit or loss. Many have reported that female investors prefer to invest in a conservative portfolio and are unwilling to take the risk. Thus, it is a must for financial markets to understand gender differences in investment behaviours of individuals. The primary purpose of this study is to investigate gender differences among investors with different socio-demographic profiles, comprising of age, years of investment experience, as well as to whether the size of the company influences investment decision making and the size of the invested company. There are only limited researches that explore in the aspect of gender differences in investment behaviours among investors in Malaysia. This paper adopted a quantitative approach by distributing a survey to 680 individual shareholders during the invested companies' annual general meetings. A personally administered survey by using questionnaires was conducted and was then analysed by using SPSS software. The findings of this study revealed that out of the different socio-demographic profiles, only the age of the investors has a significant relationship with gender differences. The effect of such a relationship between the two variables is nonetheless small. The remaining socio-demographic profiles, in contrast, appear not to assert any association between socio-demographic profiles and gender differences. Based on the findings, it can be concluded that engagement in investment activity has attracted the interest of young female investors. It is suggested for future research to explore gender differences in different socio-demographic profiles of investors and shall not be limited in the Klang Valley area

Keywords: gender differences; socio-demographic profile; investment decision making

Introduction

Investors' behavioural investment decision making today is the result of the future profit or losses from their investment. Investors will be able to make a sound investment decision if they have a better understanding and control of behavioural finance. People are prone to get involved in investment activities to secure their life and have a bright future. There are many different investment choices that are available to the investors, with different level of risk and return, but it depends on the gender differences' behaviours. Many studies reported that female investors are reluctant to partake in investment activities that have a high risk. They prefer in a conservative investment portfolio in securing the money for a long term.

In the current economic scenario, there are wide ranges of investment portfolios available for the male and female investors in the financial markets. Hence, it is believed that the preference for financial decision making is influenced by many factors, such as internal and external factors. Furthermore, the availability of money also becomes an important part of the investment. It can be attained by labour force participation. However, the inequality in labour force participation seems very critical in several countries, such as Jordon, Yemen and Samoa.

In Malaysia, it had been reported that Malaysia Gender Gap Index in 2017 is 0.697, which means that only 0.303 is the gender inequality between male and female. Globally, Malaysia has been ranked the 70th out of the 144 countries with the index score of 0.697 in 2017. The improvement of gender index also has been achieved in educational attainment, health and survival, economic participation and political empowerment. In investment involvement, the focuses are on economic participation. Still, the economic participation comprised of the labour force participation; earned income; legislators, senior officials and managers; and professionals and technical workers, are dominated by men.

According to Annette Dixon, the World Bank Country Director for Malaysia in 2012, "*Malaysia has the opportunity to accelerate its transformation into a high-income economy if more women were in the labour force*". Thus, the government calls to enhance women participation in Malaysia economic development, as they admitted that employment model that had been practising is quite discouraging to the women. In a way, the government has established a crèche in the workplace, allowing

longer maternity leaves and financial educations to boost up the level of women participation in almost all branches of economics.

Given the importance of women involved in the investment through economic development, this paper attempts to investigate gender differences among investors with different socio-demographic profiles comprising age, years of investment experience, as well as to whether the size of the company influences investment decision making and the size of the invested company. The study also would like to observe the gender differences pattern in Malaysia's investors' behaviour.

Literature Review

Metawa et al. (2018) explore a detail investigation of the relationship between investors' demographic characteristics and investment decision making, mediated by behavioural factors in the Egyptian stock market. The study capable to conduct a survey to the 384 diversifies respondents, involving local Egyptian, foreign, institutional and individual investors. The study discovered that the demographic factors, which are age, gender and educational levels have a positive significant relationship to the investment decision making, mediated by behavioural factors (investor sentiment, investor overconfidence, over/under-reaction, herd behaviour). Thereby, only the investors' experience is found to have an insignificant effect. It is explained that as investors gain more investment's experience, they tend to overlook the emotional factors. Matured investors adopted an emotional control to ensure a sound investment decision making.

A research was conducted by Sadiq, Khan and Bashir (2018), in determining the association between different demographic characteristics and financial satisfactory level among individual investors in Pakistan. Further analysis by SPSS software was adopted to test the objective of the study. The study discovered that age group and the size of the family are the demographic characteristics that have a significant relationship to the financial satisfaction. Hence, the remaining variables, which are gender, marital status, income level, qualification and occupation, are presented to have very little to no association with financial satisfaction.

In a study by Sharma, Douglas and Jaworski (2017) in exploring the factors of investment decision making of women in Singapore. The focus of this study is on the impact of age, gender, birth order, income and culture on the investment decision-making process. By involving 200 respondents in Singapore and test the link through correlation calculation and chi-square test, the study reveals that demographic profile factors play an important role in investment decision making. Most of the respondents of the study are women in the age of 20 until 40 years old. Thereby, the findings also discovered that there is a negative relationship between the age of the respondents and investment decision making. It can be concluded that most of the young women investors are involved in the financial investment for future savings.

In exploring the investment pattern and financial decision making of individual and risk tolerance, Chavali and Mohanraj (2016) conducted a survey of 101 investors in Bangalore, India. The study adopted a Chi-square test to analyse the demographic profile and investment pattern. The authors explored the aspects of gender, occupation and age as the demographic profile of the respondents. Based on the analysis, it was found that there is a significant relationship between the gender and investment pattern. Plus, age and occupation are discovered to have no association with the investment pattern of the investors in India.

Kumar and Goyal (2016) analysed the influence of demographic differences on a rational investment decision making process among individual investors in India. The study successfully constructed a survey of 386 respondents. The demographic differences analysis towards rational investment decision-making process shows that only gender has statistically significant differences, in contrast to the occupation of the investors. The study explained that male investors prefer to make further analysis through newspapers, magazines and consultation with relatives and friends. Thereby, it proved that male investors possess more confidence level in rational investment decision in comparing with female investors. It is believed due to the other information support that boosts their confidence level.

Methodology

As this study attempts to examine the relationship between gender differences and demographic profile of the individual shareholders, this paper analysed four different demographic characteristics, which are age group, years of investment experience, and either size of company influence investment and size of the company. The gender differences are represented by male and female individual shareholders. A survey questionnaire is used to identify the relationship between gender and socio-demographic among individual shareholders in the Malaysian PLCs. All questions in the questionnaires were classified into categorical data.

The population of the present study was the individual shareholders investing in the Malaysian PLCs. The respondents are limited to the individual shareholders that made an investment in the three main sectors in Malaysia, which are trading services sector, industrial product sector and consumer product sector, in the Klang Valley area. The questionnaires were personally administered to the individual shareholders that are present on the day of the invested companies' annual general meeting. Out of the 700 questionnaires distributed to those three sectors, 680 valid questionnaires were available for the study and to be analysed. 97.14% representing a response rate of total samples. After data collection, data have been compiled and analysed by using SPSS software. The findings of the data analysis were briefly explained in the next section.

Findings

Descriptive statistics presents an overview and summary of the respondents' demographic profile. 56.0% of the respondents are male and 44.0% of them are female based on the survey. The statistics show that the involvement in the investment activity is dominated by male and the result supported that female investor's less participation in the stock market is due to their risk-aversion investment behaviours. The range of the respondents' age is starting from 18 years old, due to the qualified age that is permissible to open up CDS account for share trading transaction. 67.1% of the respondents belong to the age group of above 46 years old, whereas 32.9% belonging to the age group of fewer than 46 years old. This shows that in the middle age onwards, people believed to have stable financial support that can be allocated in the investment activity. Then, the analysis shows that 53.4% of the respondents that participated in the company's annual general meeting had less than nine years of investment experience. It is because they prefer to have a talk session with the management of the company and to have a detailed view of the company's development. Further, most of the respondents agreed that they consider the size of the company in investment decision making (86.3%); meanwhile, the remaining of them did not agree on that perspective. The size of a company might be an external indicator of the financial capability of the company. This study has an equal number of respondents in a small and large size of the company. The proxy for the size of the company is measured by the total assets of the investing company at the end of 2017, similar with the study by Timbate and Park (2018) and Purwohandoko (2017). The descriptive statistics are shown in Table 1 below:

Table 1: Demographic Variables (N=680)

Variables		Frequency	Percentage (%)
Gender	Male	381	56.0
	Female	299	44.0
Age	18-45 years	224	32.9
	Above 46 years	456	67.1
Years of investment experience	0-8 years	364	53.5
	More than 9 years	316	46.5
Influential Size on Investment	Yes	587	86.3
	No	93	13.7
Size of Company	Large	340	50.0
	Small	340	50.0

The second part of data analysis looks at the hypothesis testing to explore the relationship between gender differences of the individual shareholders and their demographic variables; age, years of investment experience, influential size of company and scale of the company. Chi-square test is carried out to analyse the relationship. There are several interpretations based on the output discovered in the chi-square. First, the interpretation is to check the violated of the assumptions concerning the 'minimum expected cell frequency', which should be more than 5. If more than 5, it shows the assumption of the output is not violated. Second, the main value from the output is the Pearson Chi-square. If the study has a 2 by 2 table, the value in the Continuity Correction should be considered. It is associated with the significant value. To be significant, the value has to be 0.05 or smaller. If the significant value is more than 0.05, it has no significant relationship with the variables. Third, the significant value will bring the result to the effect size of the relationship. The level of strength is shown at the Cramer's V value, for the two categories, 0.01 is considered as small, 0.30 is the medium size of the relationship and 0.50 is a large relationship (Pallant, 2016). Last, the interpretation provided the summary information of the variables through a cross tabulation table. The table informs the segmented and overall summary of information based on each variable.

For the first objective is to determine the relationship between gender and age group of the individual shareholders in the Malaysian PLCs. Table 2 shows the result of the analysis. For the first interpretation, the minimum expected count is 98.49, more than 5, so, this assumption is not violated. The corrected value of the relationship is 4.571 with a significant value of 0.033. It can be concluded that there is a significant relationship between gender and age group of the individual shareholders. Once the significant relationship is notified, the study measures the strength of the relationship based on the Cramer's V value. There is a small relationship between the variables as the Cramer's V value is 0.085. The last interpretation is to have an analysis of the demographic pattern of the individual shareholders. Based on the cross-tabulation table, 70.6% of the male individual shareholders are in age group of senior investors (above 46 years old); meanwhile 29.4% of them are young investors (18-45 years old). It is the same goes to the female individual shareholders; which senior investors dominated the number of investors in Malaysian PLCs. As a total, the majority of the respondents (62.5%) are in the age group of senior investors that participated in this study. The result showed that young investors have less investment involvement in the Malaysia stock market.

Table 2: Chi-Square Analysis to Test the Relationship between Gender and Age Group

		Young Investors	Senior Investors	Total	
The corrected value is 4.571 and the significant level is 0.033 (p<0.05)					
X^2 (1,n=680) = 4.571, p= 0.033, phi= 0.085					
Male	Count	112	269	381	
	% within GENDER	29.4%	70.6%	100%	
	% within AGE	50.0%	59.0%	56.0%	
	% of Total	16.5%	39.6%	56.0%	

Female	Count	112	187	299
	% within GENDER	37.5%	62.5%	100.0%
	% within AGE	50.0%	41.0%	44.0%
	% of Total	16.5%	27.5%	44.0%
Total	Count	224	456	680
	% within GENDER	32.9%	67.1%	100.0%
	% within AGE	100.0%	100.0%	100.0%
	% of Total	32.9%	67.1%	100.0%

The second objective is to test the relationship between gender and investment experience of the respondents. The calculated value of Chi-square concerning the 'minimum expected cell frequency' is 138.95, which is more than 5. This information indicated that there is no violated assumption of this study. Next, based on the value and significant value of Continuity Correction, it discovered that the value is 0.475, with a significant value is 0.491. In this case, the relationship is not significant. The investment experience of the investors did not have a correlation to the gender differences. Although most male and female individual shareholders have more than 9 years of investment experience than the investors' that have less than 9 years of investment experience, the difference was not significant. The result of the analysis is shown in Table 3 below:

Table 3: Chi-Square Analysis to Test the Relationship between Gender and Investment Experience

		The corrected value is 0.475 and the significant level is 0.491 (p>0.05) X^2 (1,n=680) = 0.475, p= 0.491, phi= -0.029		
		Less than 9 years	More than 9 years	Total
Male	Count	199	182	381
	% within GENDER	52.2%	47.8%	100%
	% within EXPERIENCE	54.7%	57.6%	56.0%
	% of Total	29.3%	26.8%	56.0%
Female	Count	165	134	299
	% within GENDER	55.2%	44.8%	100.0%
	% within EXPERIENCE	45.3%	42.4%	44.0%
	% of Total	24.3%	19.7%	44.0%
Total	Count	364	316	680
	% within GENDER	53.5%	46.5%	100.0%
	% within EXPERIENCE	100.0%	100.0%	100.0%
	% of Total	53.5%	46.5%	100.0%

The third objective of this study is to explore the association between gender differences and influential of the company's size. Underneath the chi-square table provide the violation of the assumption. In this case, the 'minimum expected cell frequency' is greater than 5, which means that there is no violated the assumptions (40.890). Then, the value of the chi-square statistic is 2.207; meanwhile, the significant value is 0.137. As the value is more than 0.05, it indicates that there is no relationship between gender differences and influential size of the company in the investment. It shows that male and female individual shareholders did not have a unique contribution to the influential size of the company. Table 4 depicts the result of the third objective.

Table 4: Chi-Square Analysis to Test the Relationship between Gender and Influential Company's Size

		The corrected value is 2.207 and the significant level is 0.137 (p>0.05) X^2 (1,n=680) = 2.207, p= 0.137, phi= 0.061		
		Yes	No	Total
Male	Count	336	45	381
	% within GENDER	88.2%	11.8%	100%
	% within INFLUENCE	57.2%	48.4%	56.0%
	% of Total	49.4%	6.6%	56.0%
Female	Count	251	48	299
	% within GENDER	83.9%	16.1%	100.0%
	% within INFLUENCE	42.8%	51.6%	44.0%
	% of Total	36.9%	7.1%	44.0%
Total	Count	587	93	680
	% within GENDER	86.3%	13.7%	100.0%
	% within INFLUENCE	100.0%	100.0%	100.0%
	% of Total	86.3%	13.7%	100.0%

The last objective conducted by this study is to explore the relationship between gender and the size of the company through Chi-square analysis. First thing is to determine the assumption violation of the case through 'minimum expected cell frequency'. The result has a 149.50 for the minimum expected count and found to have not violated assumptions because of more than 5. Further, the corrected value of 0.382 with a significant value of 0.537 proved that the relationship of gender differences is not affected by the large and small size of the invested company. The result presented in Table 5:

Table 5: Chi-Square Analysis to Test the Relationship between Gender and Size Company

		Large	Small	Total
		The corrected value is 0.382 and the significant level is 0.537 (p>0.05)		
		X^2 (1,n=680) = 0.382, p= 0.537, phi= 0.027		
Male	Count	195	186	381
	% within GENDER	51.2%	48.8%	100%
	% within SIZE	57.4%	54.7%	56.0%
	% of Total	28.7%	27.4%	56.0%
Female	Count	145	154	299
	% within GENDER	48.5%	51.5%	100.0%
	% within SIZE	42.6%	45.3%	44.0%
	% of Total	21.3%	22.6%	44.0%
Total	Count	340	340	680
	% within GENDER	50.0%	50.0%	100.0%
	% within SIZE	100.0%	100.0%	100.0%
	% of Total	50.0%	50.0%	100.0%

Discussions

The main objective of this study is to explore the relationship between gender differences and demographic profiles of the individual shareholders in Malaysian PLCs. The findings based on the Chi-square table discovered that gender differences have a significant relationship to the age group of the investors. While, the remaining demographic variables which are investors' experience, influential size of the company and the size of the company is found to have no relationship to the investors' gender differences.

These findings revealed that the increase in the age caused an increase in male and female investment. Old male and female individual shareholders are believed to have stable financial support and thus encouraging them to take a risk in the investment. Older investors were more likely to take the risk because of past experience as they gain more investment knowledge. In comparing with the younger, they are reluctant to involve in the investment because of the scarcity of financial resources. Younger investors also prefer in the investment of a less risky portfolio, such as fixed deposit and insurance. So that, the less risky investment is associated with less return. In comparing with the male and female, it is supported that female individual shareholders in investment are less than male. In that case, the investment behaviours of female investors are known to have less risk taker and more into a conservative investment portfolio. It is supported by the previous study by Pavani and Anirudh (2010). Then, the findings revealed that no relationship was seen in the experience, influential company's size and size of company among both male and female individual shareholders investment in Malaysia. The inconsistency relationship between gender and experience is discovered in a study by Metawa et al. (2018), which highlighted that investors' experience plays an opposite role in the investment decision making. The rationality in making an investment decision depends on investors' experience, regardless of gender differences. Matured investors have the ability to analyse the investment pattern in the stock market. It is easier for them to reduce investment risk and make a sound decision. On the other hand, investors tend to avoid repeating past mistakes. There is a significant extent that future investment decision is made up through past experiences of the investors.

In addition, individual shareholders with a different gender are found to have no relationship in the influential size of the company and the size of the company in trading stocks. It is believed that all the individual shareholders have a common perspective regarding the characteristic of the company for their investment decision making. The evaluation of the characteristic of the company is made through the availability of information that is provided to the investors. All the investors were exposed to the same type of information, and it depends on the disclosure material information served by the company. The result of this study is an inconsistency with the findings by Khan et al. (2016) discovered that male and female evaluation of the firm's characteristic is different. The different findings might be due to the different instrument conducted even though it is examining the same scope. This study concentrated the characteristic of the company on the total asset, which represents the size of the company. In every financial year end, it is mandatory for the company to disclose the accounting information. As part of that, there is only one and fixed value of the total asset. Thereby, all the investors relying on the same total asset value to the investment decision making.

The findings concluded that the gender difference is found to have a relationship towards the age group of investors. Meanwhile, investors' experience, the influential company's size and size of the company are found to have no association in the gender differences. It is related to the increasing age is affected by many factors, such as the addition of family members and life commitments. Besides, investors' experience is involving the maturity of their involvement in the investment activity and the ability to control investment's behaviour. It is not really related to gender differences. On part of that, the criterion of the company is about the general information that is available to the investors as a whole. The dissemination of the information is made through the same channel to the public, such as mass media and company's announcement.

Conclusion

This paper investigates the gender differences relationship in the demographic profile of the individual shareholders in Malaysia. The results show a gender gap in the age group of the investors. Male and female individual shareholders mostly belonged to the senior age groups. In total, there are a 34.2% of gender differences between young investors and senior investors. It shows a

radical implementation that has to be done to promote young investors involvement in investment activity. The public should aware that the investment at a young age can give many benefits in future. In addition, learning starts at home to spur the investment culture in Malaysia. Parents as a close person should encourage the kids to have a saving from their young age. It is a general initiative that has to be done by the public.

Further initiatives have to be conducted among policy makers, company, brokerage houses and investors. This study is important for the policy makers to understand the demographic patterns that influence male and female individual shareholders in Malaysia. Thus, they have to work on the framework strategies to provide financial education about the investment in rural and urban regions. It might be effective for the educational policymakers to implement investment knowledge as a compulsory subject practice in institutions. Policy makers also have to close the gender inequality gap that is obviously in the investment activity. They have to provide financial products that are suitable for the age group and gender differences because investors are one of the key success for the stock market development.

Besides, as stipulated in the result, the company and brokerage houses have to promote strategic planning to focus on which investors' group that needs an urgency involvement in the stock market. The company also have to treat different investors with a specific programme due to they have different demographic profiles and investment objectives. In having detailed information on preferences of female and male investors, company able to create shareholders value by focusing on particular areas and attracting the less investor's involvement in their company. The findings also help the investors to improve the investment skill and make a rational investment decision making in future for a better return.

Apart from that, even though experience, influential size and size of company are discovered to have no influential relationship in the gender differences, it does not mean that the policy makers, company, brokerage houses and investors can ignore the effect in the investment decision making. This is because the study is not representing the demographic pattern of individual shareholders in Malaysia as a whole. The most important aspect of investment is the availability of information and cash, and the control of emotions is possible for the development of the stock market.

The limitation of this study is exploring only four demographic profiles of the respondents, which are an age group, investors' experience, influential size of company and size of the company, towards the relationships on gender differences. This study limited only to the respondents that invest in a company located in the Klang Valley area, mainly in the trading services sector, industrial product sector and consumer product sector. The survey had been conducted to the respondents without having their own opinions and explanations regarding the investment.

As noted, this study comes with several limitations and could be improved in the future for further studies. First, the findings require the investment trends to represent investors' behaviour in Malaysia as a whole. Thus to make sure that there are no biases occur in the study, it is suggested for future research to conduct a survey to all regions in Malaysia, regardless focusing in Klang Valley area and certain sectors (trading-services, industrial product, consumer product) only. Second, it is also suggested for future research to explore on the different demographic profile of the respondent other than existing study (age, years of investment experience, influential size of company and size of company) to get a better indication on decision-making style in Malaysia, by interviewing the investors.

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