THE NOVICE VERSUS THE EXPERIENCED INVESTORS: INSIGHTS INTO THE WORK OF THE INVESTMENT BEHAVIOR

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Abstract: - This paper compared investing behaviors of experienced and novice share investors in theMalaysian equity market. The comparison is made betweenboth experienced institutional and retail investors with novice share investors. Despite some obvious differences in their behaviors, all three types of investors did behave the same in using main information to make financial decision. Investors' behavior is related to their investment preferences and risk tolerance. Novice share investors are risk averse and financially less knowledgeable. They have great dissatisfactions with their current savings in their bank accounts and property investment despite possessing excess cash on-hand. The dissatisfaction of novice share investors on investment and their average investment skills suggest the need of financial literacy to reduce the performance gap they face. Financial education at a young age and innovation in simplifying financial products and their processes cast important consumer and policy implications.

Key-Words: -Behavioral finance, novice investors, experienced investors

1 Introduction

Research in behavioral finance grew when researches began to incorporate psychology in making financial decision. There is a vast range of research that studied the behavioral perspectives of investors. Nonetheless, these studies are still lacking in differentiating the decision making process of different types of investors ranging from novice to professional investors. It would be useful and interesting to examine how these investors behave and the differences of their investment practices. Little knowledge is known on how novice share investors make financial decisions. Hence, this study is motivated to investigate the behaviors of experienced institutional and retail share investors as well as novice share investors in both bullish and bearish markets. A novice investor is a person who is new or has no experience in stock investment. This study focuses on the Malaysian stock market which experienced both bull and bear markets from 1990s to 2000s. At the same time, the official exchange, Bursa Malaysia, has continuously put tireless efforts to improve investor education. In April 2014, Bursa Malaysia established Bursa Marketplace, an online market information platform to communicate trading ideas and boost retail investors' participation. On April 2014, local retail participation in Bursa Malaysia was about 19.71%. It is hoped that with the launch of the market platform, it would be able to attract young or novice investors who are between the ages of 25 to 35 years old to invest in the local stock market (Tang, 2014). The results of this paper will tie the gap of current behavioral finance literature by providing evidence on the behavioral characteristics of novice, institutional, and retail investors in different market outlooks. The findings provide a better understanding on how and where the investors, especially the novice share investors, can be trained to become experts in making investing decision in stock market.

2 Literature Review

This section reviewed related past studies on institutional and retail investors which are all about people. Mansor and Lim (1995) examined 192 retail investors in Malaysia on their investment behavior and practices. Their results showed that Chinese retail investors played an active role in the market. The results also indicated that the retail investors traded stocks based on rumors and randomly selected stocks during bullish periods. Nevertheless, they were more rational and referred to fundamental analysis during bearish periods. As a whole, more retail investors employed technical analysis during bearish than bullish period. Among all the fundamental variables, dividend yield appeared as the most important variable during bearish periods.

Lai, Low, and Lai (2001) employed the questionnaire survey method to find out the behavior of institutional investors as well as their reactions towards important events that happened during the South East Asian financial crisis between 1998 to mid-1999. The findings showed that investors employed fundamental and technical analysis during both markets. Fundamental analysis was as the most prevalent analysis used by institutional investors. Interestingly, institutional investors generally were more rational than it was believed. Investors were not influenced by rumor even though the stock market in Malaysia was somewhat rumor-driven. This finding is inconsistent with the work of Mansor and Lim (1995) that surveyed on retail investors who were influenced by market rumors in their investment decision making. After a decade, Lai, Chong, and Tan (2010) reinforced the improved rationality of Malaysian investors by looking at differences in behavioral characteristics that they may have.

Maditinos, Sevic, and Theriou (2007) examined investor behavior and investment techniques of 435 professional and individual investors from the Athens Stock Exchange from 2003 to 2004 by using a survey and a semi-structured interview. The overall results indicated that the subjects were more concerned with fundamental and technical analyses rather than portfolio analysis. This finding is line with the previous studies on emerging stock markets. The findings also indicated that fundamental and technical analyses were vital for institutional investors but not for retail investors. Retail investors were somewhat influenced by their gut feeling or experience, the news or media and noise in the market.

Waweru, Munyoki, and Uliana (2008) examined the effects of behavioral factors in investment decision making of 23 institutional investors in the Nairobi Stock Exchange. Overall, the findings showed that behavioral factors influenced the investment decision-making process with greatest impact from market information and the fundamentals of the underlying stocks. Availability bias, anchoring, gamblers' fallacy, and herd behavior were exhibited by the institutional investors in their stock investments. Nonetheless, no homogeneous trading activity in choice of stocks and the length of time to hold stocks were observed.

Freund, Prasad, and Andrews (2013) examined variables in security selection by novice and experienced investors through surveys conducted on undergraduate students who were taking an investment course in one of public universities in the United States during 2007/2008 academic year. A face-to-face survey was conducted on 69 students and 64 students were administered an online survey. Students who did not possess stocks, bonds, mutual funds, or certificate of deposits prior to the investment class were considered as novices while students who had bought securities were considered as experienced. The results showed that having one semester investment course experience did affect the selections of investment variables in security selection. The course managed to bring students with different backgrounds slightly closer toward agreement. The results showed that the novice investors who did the face-to-face survey were more likely to choose non-financial but firm-specific characteristics variables. On the other hand, those novice students who participated in the online survey chose technical analysis variables as most relevant. For the experienced students, those who did the face to-face survey made quite similar selection in investment variables as those who did the online survey.

3 Data and Method

This study conducted surveys for three groups of investors, namely, novice, institutional and retail investors in the second half of 2009. In total, 593 usable questionnaires were received. Novice share investors are retail investors who did not trade in stock market at all and new to the market when the survey was conducted. Institutional and retail investors are those who have experience in trading securities in the stock market. Pre-testing on the questionnaire was done on a group of finance

academicians who are familiar with investments and experienced market practitioners such as stockbrokers. They served as the panel of content experts in which their comments were taken into consideration to establish face validity. Data collection process and the questionnaire details are described below.

The survey questions for both institutional and retail investor were relatively similar. The first survey was targeted at the institutional investors in Malaysia. The targeted institutional investor under the survey were fund managers, investment bankers, and those from insurance companies in Malaysia. The prospective fund managers of targeted companies were reached by telephone calls to solicit their participations and then the questionnaires were sent to them. In total, 51 usable responses from 260 institutional investors were received in July 2009.

The second survey was collected from retail investors who had participated in the local stock market. Given the data was deemed to be personal and confidential, convenience sampling methods were used. 200 complete questionnaires were received from the central, northern, and southern regions of West Malaysia. It should be pointed out that the third survey on novice share investors was conducted in parallel with the second survey by using convenience sampling and the same sample regions. When the respondent indicated that he or she had not participated in the stock market at all or had no knowledge in stock investment, he or she was eligible to participate in the third survey. 342 usable responses were obtained from the novice share investors.

Given both institutional and retail investors had knowledge and experience in stock investment, more sophisticated financial concepts were included in the questionnaires. Section 1 of the questionnaire was on demographic information such as gender, race, age, educational level, the number of years in investment, method of trading, estimated portfolio value, average duration stock held, investment horizon etc. In section 2, eight sub-parts were asked by requesting the respondents to indicate his or her agreement using a 5-point scales range, from 1 (strongly disagree) to 5 (strongly agree) in each statement on price anchoring, overconfidence, prospect theory (loss aversion), representativeness, control, herd behavior, risk attitude and liquidity during bullish and bearish markets. In these surveys, a bullish period is defined as rising stock prices, high economic growth, and increasing investor confidence whereas a bearish period is classified as falling stock prices, bad economic news, and decreasing investor confidence. Since the results of the behavior of both institutional and retail investors during bulls and bears had been reported by Lai, Tan, and Chong (2013), this paper only examined the behavior of the respondents on the importance of the analyses and events in investment decision making as stated in section 3 of the questionnaires. This section can also be found in the questionnaire for novice share investors. The influential of external factors to equity transaction was also asked.

There was no sophisticated investment terms used in the questionnaire to novice share investors as they lacked basic financial knowledge as compared to experienced investors. Section 1 of the questionnaire dealt with demographic information such as gender, race, age, educational level, investment horizon, annual personal income, etc. In section 2, there were three sub-parts where respondents would specify his or her response to each statement using a 5-point scale range from 1 (strongly disagree) to 5 (strongly agree) on his or her investing experience, the importance of the types of investment and their satisfaction from bond investments to gold and saving passbook investments.

In the section 3 of the questionnaire, respondents were asked to indicate his or her main reason for not investing in the stock market as well as the reason for not researching before investing. In section 4 of the questionnaire, the respondents were asked on investor confidence and financial decision making responsibilities. Subsequently, in the section 5 of the questionnaire, the respondents were asked for the importance of the sources of information and the timing of buying and selling his or her investments.

In the section 6 of the questionnaire, the respondents were asked to indicate his or her responses on the importance of the analyses and events in investment decision using a 5-point scale range from 1 (strongly disagreed) to 5 (strongly agreed) in both bullish and bearish markets. The respondents were also asked to indicate their preferred types of investments ranging from cash to real estate investment with a 5-point scale range from 1 (least preferred) to 5 (very preferred).

The internal consistency of the multi-item scales was tested with Cronbach's alpha (α) in which most of the Cronbach's alphas were higher than 0.7.

Constructs with its Cronbach's alphas lower than 0.7 were excluded from the analyses.

4 Analyses and Discussions

Table 1 reports the demographic profile of 593 respondents from three different groups of investors, about 52.4% were male and 47.6% were female. The respondents who participated in these three surveys were generally between 25 to 45 years old (59.8%), Chinese (68.6%) and earned less than RM30,000 annually (46%). The vast majority of the respondents had at least a degree (51.3%), 39.5% of respondents work as executive (middle management). For the state of origin, 32.7% were from Kuala Lumpur. Pertaining to their investment horizons, while 37.8% of respondents adopted long term investment horizon for more than one year, 41.2% of them considered both short-term and long-term investment horizons.

Table 1: Respondents' profiles of novice share, retail and institutional investors

	Overall		Novice share		Retail		Institutional	
Characteristics	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Gender								
Male	311	52.4	105	52.5	172	50.3	34	66.7
Female	282	47.6	95	47.5	170	49.7	17	33.3
Age								
Below 25 Years	118	19.9	19	9.5	97	28.4	2	3.9
25 - 35 Years	200	33.8	75	37.7	106	31.0	19	37.3
35.01 - 45 Years	154	26.0	61	30.7	72	21.1	21	41.2
45.01 - 55 Years	90	15.2	31	15.6	51	14.9	8	15.7
Above 55 Years	30	5.1	13	6.5	16	4.7	1	2.0
Races								
Malay	134	22.8	38	19.0	72	21.2	24	47.1
Chinese	404	68.6	152	76.0	228	67.1	24	47.1
Indian	51	8.7	8	4.0	40	11.8	3	5.9
Education								
Certificates/Diploma	153	25.7	53	26.5	98	28.5	2	3.9
University/professional degree	305	51.3	105	52.5	165	48.0	35	68.6
Postgraduate	57	9.6	18	9.0	25	7.3	14	27.5
Others	80	13.4	24	12.0	56	16.3	-	-
State of origin								
KL	195	32.7	71	35.5	73	21.2	51	100
Melaka	61	10.2	38	19.0	23	6.7	-	-
Johor Baharu	65	10.9	10	5.0	55	15.9	-	-
Muar	49	8.2	20	10.0	29	8.4	-	-
Putrajaya	69	11.6	6	3.0	63	18.3	-	-
Seremban	65	10.9	5	2.5	60	17.4	-	-
Penang	92	15.4	50	25.0	42	12.2	-	-
Job category								
Top management	25	4.2	9	4.5	10	2.9	6	11.8
Executive (Middle Mgmt.)	234	39.5	90	45.2	105	30.6	39	76.5
Non-executive	108	18.2	28	14.1	80	23.3	-	-
Self-employed	99	16.7	43	21.6	56	16.3	-	-
Retired	17	2.9	5	2.5	12	3.5	-	-
Housewife / houseman	31	5.2	6	3.0	25	7.3	-	-
Others	79	13.3	18	9.0	55	16.0	6	11.8
Annual Personal Income								
Less than RM30,000	249	45.9	69	34.7	180	52.3	-	-
RM30,001-RM60,000	155	28.6	70	35.2	85	24.7	-	-
RM60,001-RM90,000	84	15.5	36	18.1	48	14.0	-	-
RM90,001-RM120,000	32	5.9	13	6.5	19	5.5	-	-
More than RM120,000	22	4.1	10	5.0	12	3.5	-	-
Investment Horizon								
Short term (< 1 year)	124	21.1	37	18.6	82	24.3	5	9.8
Long term (> 1 year)	222	37.8	60	30.2	150	44.4	12	23.5
Both	242	41.2	102	51.3	106	31.4	34	66.7

Note: Freq.= frequency.

Table 2 compares the information used in investment decision making by these three groups of investors. As shown in Panel A of Table 2, policy and decisions made by governments, important local political events such as general elections as well as important international political events were the most important information for both the institutional and retail investors when they made their financial decisions during bullish and bearish periods. The novice investors, on the other hand, considered the policy and decisions made by governments, important local political events such as general elections, and news released in newspapers/media major information in their investment decision making, regardless of the market conditions. Overall, the mean scores for the novice investors were reported lower than the institutional and retail investors.

Table 2: Information used in decision making between novice share, retail and institutional investors

	Bull markets			**Bear markets**		
	Novice	Retail	Institutional	Novice	Retail	Institutional
Panel A	Mean(S.D.)	Mean(S.D.)	Mean(S.D.)	Mean (S.D.)	Mean(S.D.)	Mean (S.D).)
Newspapers/media	3.52[a] (0.86)	3.46[a] (0.80)	3.57[a] (0.96)	3.52[a] (0.86)	3.55[a] (0.87)	3.47[a] (0.80)
Instinct (gut feeling) of investor	3.24[a] (0.90)	3.25[a] (0.89)	3.39[a] (0.89)	3.22[a] (0.90)	3.22[a] (0.90)	3.17[a] (0.90)
Performance of DJIA in US	3.43[a] (0.98)	3.68[a] (0.74)	3.84[a] (0.75)	3.55[a] (0.91)	3.46[a] (0.99)	3.64[a] (0.76)
Policy and decisions made by government	3.69[a] (0.93)	3.78[a] (0.81)	4.02[a] (0.56)	3.73[a] (0.88)	3.69[a] (0.94)	3.72[a] (0.80)
Rumors/tips pertaining investments	3.13[a] (1.08)	3.10[a] (1.01)	2.94 (1.09)	3.06 (1.04)	3.08 (1.07)	3.13[a] (0.95)
Important local political events i.e. general election	3.58[a] (0.96)	3.79[a] (0.79)	3.88[a] (0.67)	3.65[a] (0.90)	3.55[a] (0.96)	3.77[a] (0.81)
Important international (foreign) political events	3.51[a] (0.92)	3.71[a] (0.81)	4.00[a] (0.55)	3.61[a] (0.91)	3.53[a] (0.96)	3.64[a] (0.86)

Panel B: Mean Gap Difference	N-I	N-R	R-I	Sig.	Games-Howell
Bull markets					
Newspapers/media	-0.050	0.059	-0.109	0.63	
Instinct (gut feeling) of investor	-0.150	-0.008	-0.142	0.55	
Performance of DJIA in US	-0.406**	-0.251**	-0.155	0.00	I, R >N
Policy and decisions made by government	-0.331**	-0.094	-0.238**	0.03	I>N, R
Rumors/tips pertaining investments	0.195	0.037	0.157	0.48	
Important local political events	-0.293**	-0.206**	-0.087	0.01	I, R >N
Important international political events	-0.491**	-0.196**	-0.294**	0.00	I, R >N, I > R
Bear markets					
Newspapers/media	-0.006	0.076	-0.082	0.61	
Instinct (gut feeling) of investor	-0.252	0.043	-0.295	0.13	
Performance of DJIA in US	-0.287	-0.186**	-0.101	0.02	R>N
Policy and decisions made by government	-0.332**	-0.032	-0.299**	0.05	I>N, R
Rumors/tips pertaining investments	0.397	-0.055	0.452**	0.03	R>I
Important local political events	-0.234	-0.221**	-0.013	0.02	R>N
Important international political events	-0.423**	-0.104	-0.319**	0.01	I>N, R

Note: S.D. refers to standard deviation. N denotes novice investors, R denotes retail investors, I denotes institutional investors. DJIA denotes Dow Jones Industrial Average. [a]indicates significant at 5% level from mean of 3. ** indicates the mean difference is significant at 5% level.

Not surprising, the performance of DJIA in the U.S. and international political events were viewed as

more important by both the institutional and retail investors than the novice investors (see Panel B of Table 2). The mean results indicated that the institutional investors considered policy and decisions made by the government more important when compared to the other groups of investors, regardless of the market conditions. It is interesting to note that the retail investors, but not the institutional investors, used "rumors/tips pertaining investments" when making their financial decisions during the bearish periods. This finding is consistent with Mansor and Lim (1995).

As shown in Panel A of Table 3, cash, saving and fixed deposits turned out to be the two most preferred types of investments by the novice investors regardless of the market conditions. Cash, saving and fixed deposits as well as insurance were the types of investments the novice investors preferred. It is interesting to note that the novice investors ranked shares/ stocks as the fourth preferred type of investment during the bullish period even though they did not have any experience in this type of investment. Nonetheless, this option was not preferred during bearish periods mainly due to the risk averse behavior of the novice investors as indicated earlier. On the other hand, the mean scores for all types of investments (except saving and fixed deposits) during the bullish periods were statistically significantly higher than the bearish periods, implied that investors were more active during the bullish periods.

Table 3: Preferred types of investments by novice share, retail and institutional investors

Panel A:	Novice		
	Bullish Mean (S.D.)	Bearish Mean (S.D.)	Bull-Bear Mean difference
Cash	3.50[a] (0.97)	3.32[a] (1.04)	0.18**
Saving and Fixed Deposits	3.61[a] (0.92)	3.51[a] (1.00)	0.11
Individual Shares/Stocks	3.40[a] (1.15)	2.64[a] (1.19)	0.76**
Insurance	3.43[a] (0.96)	2.95 (1.11)	0.48**
Private Unit Trust/mutual funds	3.32[a] (1.06)	2.72[a] (1.12)	0.61**
PNB Unit Trust (i.e. ASW2020, ASM, ASB)	3.24[a] (1.10)	2.79[a] (1.12)	0.45**
Bonds (e.g. Sukuk Bond, Bon Simpanan Merdeka)	3.06 (1.14)	2.63[a] (1.06)	0.43**
Real Estate/Property (e.g, house, shop lot, land)	3.25[a] (1.13)	2.88[b] (1.17)	0.37**
Foreign Currency/Foreign Currency Fixed Deposits	2.93 (1.15)	2.47[a] (1.02)	0.46**
Gold and Gold Saving Passbook Investments	2.90 (1.15)	2.55[a] (1.10)	0.35**

Panel B:	Retail			Institutional		
	Bullish Mean(S.D.)	Bearish Mean(S.D.)	Bull-Bear Mean difference	Bullish Mean(S.D.)	Bearish Mean(S.D.)	Bull-Bear Mean difference
Blue-chip stocks	3.68[a] (0.88)	3.65[a] (0.90)	0.03	4.20[a] (0.74)	4.00[a] (0.96)	0.20
Growth stocks	3.70[a] (0.83)	3.53[a] (0.86)	0.17**	4.06[a] (0.80)	3.49[a] (1.20)	0.57**
Cyclical stocks	3.23[a] (0.84)	3.16[a] (0.81)	0.07	3.63[a] (0.83)	2.89 (1.07)	0.74**
Defensive stocks	3.35[a] (0.85)	3.34[a] (0.86)	0.00	3.16 (0.96)	3.98[a] (0.85)	-0.82**
Penny stocks	3.07 (0.92)	3.06 (0.91)	0.01	2.86 (1.00)	2.85 (1.02)	0.01
Value stocks	3.35[a] (0.88)	3.25[a] (0.91)	0.10	3.98[a] (0.80)	4.06[a] (0.89)	-0.08

Note: S.D. refers to standard deviation. [a] and [b] indicate significant at 5% and 10% level from mean of 3. ** denotes significant difference between bullish and bearish periods at 5% level.

Panel B of Table 3 reports the preferred types of investments by the retail and institutional investors, during both the bull and bear markets. Overall, blue chips and growth stocks were their preferred types of investments. Column 4 and 7 of Panel B of Table 3 reports the mean differences in preferred types of investments for the retail and institutional investors during the bullish and bearish periods. Regardless the market conditions, the institutional investors than the retail investors preferred blue chip stocks and value stocks. During the bullish periods, the institutional investors preferred growth stocks and cyclical stocks compared to the retail investors. When compared to the retail investors, these institutional investors chose more defensive stocks during the bearish period.

Table 4 reports the influence of external factors to equity transactions on the institutional and retail investors. The experienced institutional and retail investors were asked to rate the most influential external factors in equity transactions during the bullish and bearish markets. For the institutional investors' bullish outlook, they showed their concerns over world stock market performance, policy stability, business cycle and government political intervention. They considered foreign reserve, trade surplus/deficit, fuel hike, employment rate as the least important factors. At the time of bullish markets, the retail investors ranked political stability to be most important followed by world stock market performance, government policy intervention and election. The least significant factors included trade deficit, foreign reserve, employment rate and gross domestic product.

Table 4: The most influential external factors to equity transactions by retail and institutional investors

External factors	Retail investors				Institutional investors			
	Bullish		Bearish		Bullish		Bearish	
	Mean (S.D.)	Rank	Mean (S.D.)	Rank	Mean (S.D.)	Rank	Mean (S.D.)	Rank
World stock market performance	3.95[a] (0.71)	2	3.88[a] (0.73)	1	4.34[a] (0.56)	1	4.24[a] (0.82)	3
Business cycle	3.77[a] (0.76)	6	3.73[a] (0.76)	6	4.22[a] (0.61)	3	4.24[a] (0.69)	3
Inflation pressure	3.64[a] (0.80)	10	3.61[a] (0.79)	9	3.94[a] (0.61)	10	4.00[a] (0.73)	8
Interest rate movement	3.68[a] (0.79)	7	3.65[a] (0.76)	7	4.16[a] (0.54)	5	4.08[a] (0.78)	6
Fuel hike	3.68[a] (0.75)	7	3.63[a] (0.75)	8	3.78[a] (0.64)	12	3.78[a] (0.84)	12
Employment rate	3.56[a] (0.80)	12	3.41[a] (0.82)	14	3.84[a] (0.81)	11	3.86[a] (0.90)	11
Trade surplus/deficit	3.52[a] (0.80)	14	3.47[a] (0.79)	12	3.76[a] (0.71)	13	3.78[a] (0.84)	12
Gross domestic product	3.59[a] (0.82)	11	3.53[a] (0.76)	10	4.02[a] (0.68)	8	4.00[a] (0.83)	8
Foreign reserve	3.54[a] (0.87)	13	3.46[a] (0.82)	13	3.73[a] (0.63)	14	3.70[a] (0.74)	14
Money flow	3.66[a] (0.80)	9	3.53[a] (0.85)	10	4.10[a] (0.67)	7	4.06[a] (0.71)	7
Government political intervention	3.95[a] (0.81)	2	3.88[a] (0.84)	1	4.20[a] (0.61)	4	4.18[a] (0.72)	5
Bad governance	3.89[a] (0.81)	5	3.88[a] (0.81)	1	4.16[a] (0.68)	5	4.28[a] (0.67)	2
Election	3.91[a] (0.83)	4	3.81[a] (0.84)	5	3.96[a] (0.64)	9	3.98[a] (0.71)	10

Political stability	4.03[a] (0.80)	1	3.88[a] (0.87)	1	4.34[a] (0.48)	1	4.34[a] (0.59)	1

Note: S.D. refers to standard deviation. [a] and [b] indicate significant at 5% and 10% level from mean of 3.

Apart from political stability, the institutional investors also viewed bad governance as one of the influencing factors in equity transactions under the bearish market outlook. Most of the external macroeconomic factors such as foreign reserve, trade surplus/deficit, however, remained as the least important indicators, which were also consistent during the bullish outlook. For the retail investors, political stability, world stock market performance, government political intervention and bad governance were ranked as the most dominant external factors in equity transactions. The open economy macroeconomic variables such as foreign reserve and trade surplus/deficit, were the least influential.

Generally, for both types of experienced investors, the external factors considered in equity transactions, be it the most influential or the least influential, for different market condition were quite similar. However, it is worth noting that, regardless of the market condition, while the retail investors rated the election as one of the top influencing external factor, the institutional investors were not that concerned when equity transactions were concerned.

It is important to find out why the novice investors did not invest in the stock market with the excess cash-in-hand. Why did they not invest in the stock market to maximize their investment returns? The novice or new share investors were asked to provide the reasons for not investing in the stock market. Table 5 reports that about 40% of the respondents claimed that "high risks" was the main reason. Reasons of "no knowledge/no idea" and "not clear what a stock investment is" were ranked number 2 and 3, respectively. The respondents were also asked if any research was conducted prior to making investment decisions and also provided reasons of not doing the research. About 42% claimed that they did not know how to do research on investments or found difficulty in searching for information on investments, while approximately 18% of them were not interested in or hated research.

Table 5: Reasons for not investing in stock market and reasons for not doing research before investing – Novice share investors

Reasons for not investing	%	Reasons for not doing research	%
High risks	39.3	No time to do my own research	34.1
No knowledge/no idea	18.2	Do not know how to do research on investments	31.7
Not clear what a stock investment is	13.3	No interest to do research on investment	13.2
No extra money to invest	9.9	Difficult to search for information/details on investments	9.6
High capital involved	9.2	Hate to do my own research	5.4
No interests to invest	5.0	I am confident in my ability to manage my investments myself	4.8
Low/Unattractive returns	3.0	Doing research is NOT important	1.20
Not recommended by people around me	2.0		

The survey also sought to determine the most important factors that influence the novice investors when investing. As shown in Panel A of Table 6, the three most significant factors are the expected risk and returns of investment as well as their past performance. In other words, risk and return were the major concerns for the novice investors when investment decisions were concerned.

The survey also sought to ask the respondents to indicate the importance of the source of information that they had obtained pertaining to investments. Panel B of Table 6 reports the results. Prospectus, banks and sales agent/broker/remisier are their three major sources of information. Panel C of Table 6, on the other hand, reports the reasons of why these respondents were buying and selling investments. Regardless the buying or selling investment decisions, the price movement was always observed to be the major concern for the novice investors.

An analysis was performed to determine whether the novice investors' confidence influences their investment decisions and the roles they assumed in making their household's financial investment decisions. In this analysis, the novice investors were divided into primary or shared financial investment decision makers. Table 7 reports that the primary financial investment decision makers had high mean scores than shared financial investment decision makers in all the items. The respondents who are the primary financial investment decision maker in their household indicated confidently that they "know the personal tax implications of investments", "are able to communicate the purpose of each investment in their portfolio", "have the right investment to achieve goals", "have a clear understanding of how the financial markets work", and "clearly understand the impact of fees/costs/charges on investments". The respondents who share their financial investment decision equally with someone else in their household, on the other hand, report that they "do not have a clear understanding of how the financial markets work". Significant differences are highlighted in these items in Table 7.

Table 6: Factors considered, sources used, and reasons for buying and selling investment by novice share investors

Panel A: Factors considered when deciding to invest in an investment	Mean#	(S.D.)
Investment risks	3.88	(2.79)

Future expected investment returns	4.18	(2.98)
Past performance history of the investments	5.02	(3.02)
Reputation of the companies	5.03	(2.89)
Investment costs (e.g. commissions, fees)	5.21	(3.11)
Current economy including stock market conditions	5.31	(3.24)
Investment horizons (periods)	6.23	(2.93)
Recommendations from Agents/Brokers/Financial Planners	6.79	(3.61)
Recommendations from Family & Friends	7.74	(3.61)
Service quality of Trust Agents	7.88	(3.57)
Published articles/recommend on newspapers/magazines	8.01	(3.33)
Advertisement	8.95	(3.20)
Panel B: Source of information		
Prospectus	3.50[a]	(1.00)
Banks	3.45[a]	(0.95)
Sales Agent/broker/remisier	3.40[a]	(0.99)
Family & Family Members	3.24[a]	(1.02)
Online Company Website	3.16[a]	(0.95)
Newspapers/Magazines	3.13[a]	(0.90)
Friends & Colleagues	3.07	(0.93)
Advertisements	2.97	(0.91)

Panel C: Reasons for buying and selling investments

Reasons for BUY	Mean	(S.D.)	Reasons for SELL	Mean	(S.D.)
When the market or unit price declines	3.60[a]	(1.02)	Once the unit price reaches my expected returns	3.82[a]	(1.01)
Once the unit price drops to my lowest limit	3.57[a]	(1.01)	When the market or the unit price rises	3.70[a]	(0.94)
When extra money is available	3.49[a]	(1.05)	When extra money is needed	3.40[a]	(1.12)
To diversify my investment (to reduce risks)	3.35[a]	(0.89)	When there is a bear market	3.12[a]	(0.93)
When there is a bullish market	3.23[a]	(0.92)	When friends/ colleagues/ family/ relatives advise to do so	2.87[a]	(1.07)
Whenever I like	2.75[a]	(1.03)	Whenever I like	2.74[a]	(1.06)
I usually buy when other people buy	2.60[a]	(0.98)	I usually sell when other people sell	2.55[a]	(0.97)
When friends/ colleagues/ family/ relatives advise to do so	2.94	(1.07)			

Note: S.D. refers to standard deviation. # The respondents are to rated the most important (1) till the most unimportant (12). The lower the mean score, the more important will be the factors. [a] indicates significant at 5% level from mean of 3.

The respondents from the group of novice investors were subsequently asked to indicate the importance of various types of investment and their satisfaction levels towards their investments. The mean scores are reported in Panel A of Table 8. They were rather satisfied with the investments in saving and fixed deposits, unit trusts and insurance. Nonetheless, they appeared to be dissatisfied with the investment in the bond, foreign currency and gold investments. The performance gap scores as reported in panel A of Table 8 showed statistically significant difference from its means on saving and fixed deposits as well as property at 5% significant level.

Table 7: Investors' confidence and financial decision making responsibilities of novice share investors

	G1		G2		G1-G2
	Mean	(S.D.)	Mean	(S.D.)	t-stat.
Know the personal tax implications of investments	3.13[a]	(0.84)	2.91	(0.88)	2.37**
Are able to communicate the purpose of each investment in their portfolio	3.11[b]	(0.84)	2.95	(0.88)	1.70*
Have the right investment to achieve goals	3.27[a]	(0.84)	3.07	(0.85)	2.19**
Have a clear understanding of how the financial markets work	3.11[b]	(0.90)	2.84[a]	(0.92)	2.75**
Your investments will be safe in the face of market volatility	3.07	(0.94)	2.91	(0.81)	1.62
Clearly understand the impact of fees/costs/charges on investments	3.21[a]	(0.88)	3.09	(0.95)	1.23

Note: S.D. refers to standard deviation. G1: Primary financial investment decision maker in household; G2: share the financial investment decision-making equally with someone else in my household. [a] and [b] indicate significant at 5% and 10% level from mean of 3. ** indicates significant difference between G1 and G2 at 5% level.

Table 8: Performance gap score analysis for novice share investors for various types of investments

	Importance[@]		Satisfaction[@]		Gap	
A: Performance gap score	Mean	(S.D.)	Mean	(S.D.)	Mean	(S.D.)
Bond	2.59[a]	(1.05)	2.69[a]	(0.98)	-0.09	(0.88)
Saving and Fixed Deposits	3.74[a]	(0.97)	3.52[a]	(1.05)	0.21[#]	(0.94)
Unit Trust	3.16[a]	(1.12)	3.17[a]	(1.09)	0.00	(0.81)
Property	3.07	(1.08)	2.86[b]	(0.99)	0.21[#]	(0.83)
Foreign currency	2.59[a]	(1.08)	2.58[a]	(0.89)	0.02	(0.86)
Insurance	3.27[a]	(1.13)	3.20[a]	(1.02)	0.08	(0.90)
Gold and saving passbook	2.61[a]	(1.10)	2.59[a]	(0.96)	0.04	(0.86)

B: t-test based on Gender and Education levels	Mean Gap Difference			
	Male (M) versus Female (F)		Non-degree (N) versus Degree (D)	
	Mean difference	t-test	Mean difference	t-test
Bond	0.21*	M>F	-0.30**	D>N
Saving and Fixed Deposits	-0.21**	F>M	0.21**	N>D
Unit Trust	-0.03		-0.03	
Property	0.08		0.00	
Foreign currency	0.11		-0.18*	D>N
Insurance	-0.03		-0.09	
Gold and saving passbook	-0.03		-0.10	

Note: S.D. refers to standard deviation. [@]The respondents were asked to indicate their importance of each stated investments in their overall investments that he/she has experienced on a 5-point scale anchored on 1 (very unimportant) to 5 (very important).
[@] The respondents were asked to indicate their satisfaction level of each stated investments that he/she has experienced on a 5-point scale anchored on 1 (not at all satisfied) to 5 (extremely satisfied).
[a] and [b] indicate significant at 5% and 10% levels from mean of 3, while # denotes significant at 5% level from mean of zero.
** and * indicate significant at 5% and 10% levels, respectively.

Panel B of Table 8 reports the mean performance gap scores based on gender and education levels. By comparing the mean performance gap score based on gender (see Panel B of Table 8), the gap score for bond is statistically higher for men while the gap score for saving and fixed deposits for the women was statistically lower than the men respondents. This result is consistent with Lusardi and Mitchell (2011) who indicated that women were financially less knowledgeable than men.

On the other hand, the performance gap scores for bond and foreign currency were higher for the respondents who held at least a university degree, indicating significant deviations between the importance and satisfaction levels of these respondents towards these types of investments in their overall investments. The results were presented in the last two columns of Panel B. The gap scores are also performed based on various income levels; however, no significant performance gap scores were found.

The survey results further provided interesting insights that about 68% of the experienced institutional and 61% of the retail investors had more than a 6-year investment experiences. Nonetheless, only about 56.8% and 19% of the experienced institutional and retail investors respectively self-rated themselves to possess good to very good investment skills and knowledge. Likewise, about 41% of the institutional investors and 57% of the retail investors self-rated themselves to possess an average investment skills and knowledge.

Overall, the results may imply that financial illiteracy is widespread in Malaysia. This phenomenon is not unusual in an emerging economy like Malaysia or in advanced economies. Financial literacy should be developed at a young

age. Lusardi (2014) pointed out that only a minority of people understood sophisticated financial concepts even in advanced economies including the United States. There is a strong link between financial literacy and financial decision as well as the degree of participation in the financial markets. The results may imply the need to increase financial literacy for novice investors in particular by policy makers through investor education initiatives. "Financial decision—whether related to asset building, portfolio choice, or debt management—require the capacity to do calculations and an understanding of basic financial concepts, including risk diversification…" and "Research has identified the pressing need for greater financial literacy, but the challenge is not yet being met" (Lusardi, 2014, p.17).

The results have important implications to investor education. The implementation of financial education at the tertiary level or even as early as in high school is supported by Lusardi as financial education could address financial problems (Chan and Appelbaum, 2010). Financial literacy is a necessary skill in an increasing risky and globalized marketplace (Lusardi, Mitchell and Curto, 2010). Financial education can be introduced to children through class projects or activities with their peers and parents.

At the same time, given the widespread of financial illiteracy, financial services providers such as investment banks, should consider to simplify their financial products and processes to enhance the understanding of consumers on financial products. In addition, the findings of this study also indicate that the demographic characteristics of investors such as gender and education are useful in research and financial product development in particularly relating to investments.

5 Conclusion

The overall results showed that majority of the respondents were Chinese with a tertiary degree. Both novice and experienced investors were concerned with government policies and political news when making their investment decisions. The experienced investors, both retail and institutional, had better comprehension of this information. The novice investors were skeptical in their investments and preferred non-gearing savings deposits. They were risk averse as investment risk was the factor they considered the most. They also had no time and knowledge to research on stock investment. Based on the list of investment choices, the novice investors were not fully satisfied with the performance of their investments. The gap between the importance and satisfaction of investment indicated that they were still unhappy with their investment performance especially with bank savings and property. The female novice investors were keener on bank savings even though they were aware of the least attractiveness of bank savings investment.

The importance-satisfaction gap of the novice investors reflected their attributes in financial assets investment performance. Overall, the performance of the various types of investment was not up to their expectations. The novice investors had lack of financial literacy in selecting their investment choices especially in stock market investment. Even though they considered stocks as one of their preferred choices of investment, they still did not invest in stock market. They were risk adverse especially during bearish market as they had little knowledge on stock investment. They were left with free cash on-hand and great dissatisfaction. Investors' education is essential not only to educate novice investors but also retail and institutional investors who have substantial length of investment experience but with average self-rated skills and knowledge on financial literacy. Future research to examine in-depth relationships between investment behavior and financial literacy in emerging and advanced economics would be of interest.

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