What Affects Investment Decisions among Undergraduates during COVID-19 Pandemic?
(Apakah yang Mempengaruhi Keputusan Pelaburan di Kalangan Mahasiswa semasa Pandemik COVID-19?)

HOOI-YEE CHAN, LAIN-TZE TEE* & SI-ROEI KEW

ABSTRACT

Due to advancements in technology, increased convenience and other developments, investing has become popular among the younger generation. They can boost their income and accumulate wealth more quickly by investing. However, the investors should plan and execute trading strategies carefully before investing to avoid losing money. This study aims to investigate factors affecting investment decisions among undergraduates in the Malaysian stock market during COVID-19 pandemic. Factors examined include firm image, information, economic expectations and advocate recommendations which might influence investment decisions among investors. There are 100 undergraduates from the Universiti Kebangsaan Malaysia involved in the study. The findings indicate that firm image, economic expectations and advocate recommendations have a positive and significant relationship with investment decisions among undergraduates during COVID-19 pandemic. That is, undergraduates tend to invest in the stock market when firm image and economic expectations are optimistic while advocate recommendations are supportive. In addition, information does affect the investment decisions among undergraduates. This study is able to provide several important implications to policymakers, firms and investors.

Keywords: Investment Decisions; Firm Image; Advocate Recommendations; Undergraduates; COVID-19

ABSTRAK

Disebabkan kemajuan dalam teknologi, peningkatan kemudahan dan perkembangan lain, pelaburan telah menjadi popular di kalangan generasi muda. Mereka boleh meningkatkan pendapatan mereka dan mengumpul kekayaan dengan lebih cepat dengan melabur. Walau bagaimanapun, pelabur harus merancang dan melaksanakan strategi perdagangan dengan teliti sebelum melabur untuk mengelakkan kerugian wang. Kajian ini bertujuan untuk menyiasat faktor-faktor yang mempengaruhi keputusan pelaburan dalam kalangan mahasiswa dalam pasaran saham Malaysia semasa pandemik COVID-19. Faktor yang dikaji termasuk imej firma, maklumat, jangkaan ekonomi dan syor advokat yang mungkin mempengaruhi keputusan pelaburan di kalangan pelabur. Seramai 100 pelajar dari Universiti Kebangsaan Malaysia telah terlibat dalam kajian ini. Dapatan kajian menunjukkan bahawa imej firma, jangkaan ekonomi dan syor advokat mempunyai hubungan yang positif dan signifikan dengan keputusan pelaburan dalam kalangan mahasiswa semasa pandemik COVID-19. Iaitu, mahasiswa cenderung untuk melabur dalam pasaran saham apabila imej firma dan jangkaan ekonomi adalah optimis manakala syor advokat adalah menyokong. Di samping itu, maklumat mempengaruhi keputusan pelaburan di kalangan mahasiswa. Kajian ini mampu memberikan beberapa implikasi penting kepada penggubal dasar, firma dan pelabur.

Kata kunci: Keputusan Pelaburan; Imej Firma; Syor Advokat; Mahasiswa; COVID-19

INTRODUCTION

Investment is becoming ever more popular worldwide in this technological age. One approach to make money or improve revenue is through investment. Long-term investments and short-term investments are the two different sorts of investments. Short-term investments are based on current assets such as cash while long-term investments are based on real assets (Kusumaningrum et al., 2019). Additionally, there are two categories of investors who are active investors and passive investors. Active investors actively purchase and sell the assets in an effort to outperform a benchmark or index and make a profit. Investors that use a passive strategy seek to maximize profit while reducing purchasing and selling.

According to the conventional idea, the investor will purchase more stocks from various companies in an effort to reduce risk without taking into account how the stocks' yields relate to one another (Islamoglu et al., 2015). According to the conventional wisdom, investors are urged to buy stocks with high yield values without being told of the risks involved. The yield value denotes the anticipated profit (Reilly & Brown, 2000). In his "Portfolio Selection" study, Markowitz (1952) created a novel hypothesis in this area. One theory holds that diversifying an investor's portfolio with more stocks from various companies won't lessen risk. Nevertheless, it can be done by taking the strength and direction of the relationships between the various investment instruments into account. Consequently, the conventional viewpoint was disregarded. According to Markowitz's theory, a portfolio with reduced risk was favoured above one with a higher predicted return.

Investment decisions depend on the investor and investment manager. Essentially, financial analysis, fundamental analysis, technical analysis, and judgement will all be used by investors while making investments (Mutswenje, 2014). When an investor seeks to enhance their income through investment, they are regarded as rational (Divanoglu, 2018). Classical finance makes the assumption that investors make logical decisions, but behavioural finance does the exact reverse. Examining psychological and sociological influences on decision-making when investors make investing decisions is known as behavioural finance. Individual investors cannot make sensible decisions (Muradoglu & Harvey, 2012). In conclusion, behavioural finance is a decision-making paradigm that differs from traditional finance, which is a logical one.

Investor attitudes toward the stock market might have changed as a result of the COVID-19 pandemic. During the COVID-19 pandemic, investors might alter their investment approach, while others might not. There must be a variety of elements that may influence investors who prefer to change their investment plan or are reluctant to change their investment strategy during the COVID-19 pandemic. Thus, the purpose of this study is to shed light on how investors particularly undergraduates made investment decisions during the COVID-19 pandemic and what causes were at play in Malaysia. Specifically, this research examines the nexus between the firm image, information, economic expectations, and advocate recommendations with investment decisions among undergraduates during COVID-19 pandemic. This study provides significant implications to policymakers, investors and academicians regarding the main factor influencing the investor decisions towards their investments. Therefore, effective strategies can be developed to encourage investments among undergraduates. The remaining of this paper is organized as follows. Section 2 reviews the literature. Section 3 presents the data and the methodology. Section 4 provides discussion on the results and the conclusion is reported in Section 5.

LITERATURE REVIEW

Investor Decisions

Making investment decision is a complicated process that requires investors to estimate future financial success. When making decisions, every person behaves and hold different views. Some of them rely on their intuition while making decisions, while others consider a variety of criteria (Mhd Raffin & Ahmad, 2012). A wise choice will enable the investor to maximise their gain, whereas a poor choice will result in the investor losing money. An investment decision may be influenced by macroeconomic and microeconomic performance. In macroeconomics, they are concerned with the GDP, whereas in microeconomics, investors are concerned with the company's success (Bialowolski & Weziak-Bialowolska, 2014). According to economic theory, decisions about investments are influenced by previous profits and expectations of future profit opportunities (Virlics, 2013). According to Kannadhasan and Nandagopal's (2010) study, investors who want to optimize their profits must stay updated in this multifaceted industry. Additionally, behavioural, emotional and physiological features influence investment decisions (Divanoglu, 2018; Aruna & Rajashekar, 2016). The research by Qureshi et al. (2012) also demonstrates that investor decisions

are influenced by variables such the use of financial tools and information at the company level. Figure 1 shows the theoretical framework that examines the factors that influence the investment decisions among undergraduates during COVID-19 pandemic.
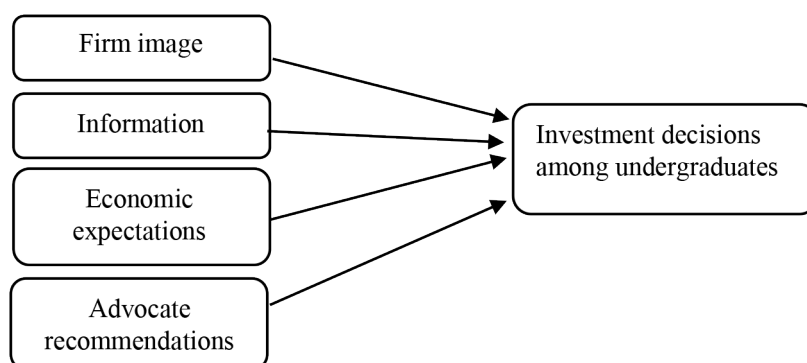

FIGURE 1. Theoretical Framework

Firm Image

The firm image is just what people initially thought of when they learned about it. The activities of a company, such as charitable giving and volunteer work, help to improve the company's reputation. According to Epstein and Freedman's (1994) earlier research, the annual report of a company is significant to the shareholders since the investor will take the financial situation and the firm social information into account. Additionally, shareholder investment choices are influenced by the company's contributions to the community and its standing in the sector (Koirala, 2014). According to Gupta et al. (2018), the CEO's personality influences the company's image. If the CEO manages the firm properly, the investor will invest in it. Additionally, according to Nelson's research (2017), the board of directors of a firm with an accountability attribute will persuade investors to invest in the company. Additionally, the study by Mutswenje and Jagongo (2014) reveal that, of all the criteria covered in the study, including accounting information, individual financial demands and neutral financial information, the firm image had the greatest impact on investor decisions. According to study by Melati et al. (2016), the firm reputation is the primary aspect that new investors take into account when making investment selections, followed by other factors including individual financial needs, unbiased information and advocate recommendations. Businesses with strong brand perception place a higher value on other criteria like effective management choices, brand building, and openness in dispute resolution. As a result, one of the key aspects that may influence the choice to invest is the company's reputation.

H_1: Firm image has a significant relationship with investment decisions among undergraduates during COVID-19 pandemic.

Information

Both investors and traders can benefit greatly from accurate information. According to the research done by Riaz et al. (2012), investors are more inclined to invest in the firm with the knowledge at their disposal because of the influence the investment has. Compared to other criteria like personal financial needs, corporate image, and advocate recommendations, accounting information has the largest influence on investment decision (Bashir et al., 2013). The market provides more information, the less uncertain risk there is in the investment. Excellent information can assist the investor in managing risk more effectively (Gill et al., 2018). Based on Muth's (1961) "Rational Expectations Theory of Price Movements", it was demonstrated that investors would buy into a company if they had sufficient knowledge, sufficient experience and rational opinions. According to Lodhi (2014), accounting data is crucial for analyzing financial accounts and making investment decisions. The findings of the study indicated a significant association between accounting knowledge and investment choices. Investors will make investments based on the information they acquire from various sources, which plays a significant part in their decision-making (Mahmood et al., 2011). In contrast to

company-specific features, reputation, net asset value, trading opportunity, publicity, ownership structure and the influence of people, Hossain and Nasrin (2012) found that accounting-information is the most crucial principal element to promote investments.

H_2: Information has a significant relationship with investment decisions among undergraduates during COVID-19 pandemic.

Economic Expectations

Economic expectations are the projected expectations for how the economy will affect the performance for a company in the future. Economic forecasting can be done using historical GDP, inflation, unemployment, fiscal deficit or other economic-related variables (Allen & Fildes, 2000). Economic forecasts are crucial for investors who want to plan their investing activities before making a purchase in a company (Abudu et al., 2018). Investors place importance on the company's earnings projection since it gives them the capacity to predict future business initiatives and make investment decisions (Trueman, 1986). Additionally, the individual who has a better awareness of the company's broader economic situation should foresee with greater accuracy and make better investment selections (Goodman et al., 2013). On the other hand, Hemmer and Labro's (2008) research indicated that investors will make appropriate investment selections when the company's economic expectations are of a higher calibre.

H_3: Economic expectation has a significant relationship with investment decisions among undergraduates during COVID-19 pandemic.

Advocate Recommendations

According to prior studies, investors will receive some advice from advocates in a variety of methods when making investing selections. A few buy, hold and sell recommendations will be given to investors by advocates (Francis & Soffert, 1997). According to research by Krishnan and Booker (2002), investors use expert recommendations to make short-term investing decisions. This can aid them in minimising loss and maximising income. Additionally, suggestions from brokerage firms, individual stock brokers, friends or co-workers can play a role in how much an investor will invest (Shiundu, 2009). Malmendier and Shanthikumar's (2007) research also revealed that the investor receives recommendations that include an average suggestion to buy, hold or sell as well as

some supplementary recommendations. Additionally, according to Aregbeyen and Mbadiugha (2011), recommendations from respected stock brokers and the management of the company have the most influence on investor decisions. Al-Tamimi and Kalli's (2009) study revealed that there are several aspects that have the most impact on investment decisions, including accounting information, firm image, impartial information and advocate recommendations. Shafi (2014) also agreed that advocate recommendations and accounting data are among the most prevalent elements that affect investor decisions.

H_4: Advocate recommendation has a significant relationship with investment decisions among undergraduates during COVID-19 pandemic.

DATA AND METHODOLOGY

This study utilizes a quantitative methodology in the examination. Quantitative methodology is employed to quantify the information in numbers and test the connection between the factors influencing investment decisions among undergraduates during the COVID-19 pandemic. All undergraduate students with a variety of demographic characteristics make up the population selected for this study. Many researchers have remarked that a sample size of more than 30 and less than 500 is the most useful in a research (Sprott et al., 2009). In this study, the convenience sampling is employed to select 100 respondents from Universiti Kebangsaan Malaysia during the period of COVID-19 pandemic. None of the respondents are discarded for providing incomplete information because they all completed the questionnaires.

The questionnaire developed is based on the findings of past research related to factors influencing investment decisions. The questions are measured using a 5-point Likert scale, ranging from "strongly disagree" to "strongly agree". To make sure that the respondents understand the question being asked and to minimize ambiguity, the questionnaire's questions are straightforward and clear. The Statistical Package for the Social Sciences is used to code and transpose the data obtained through the questionnaire survey. To analyze the data, a number of analyses is performed. The demographic factors used in this research are explained using descriptive analysis. Another analysis utilized in this study is reliability analysis. The internal consistency of the constructs is assessed using Cronbach's alpha. During the COVID-19 pandemic, investment decisions made by undergraduates will be influenced by a number

of factors, including firm image, information, economic expectations and advocate recommendations. The reliability test uses Cronbach's alpha to measure these factors. The strength and direction of the link between the variables are also assessed using the correlation analysis. Next, multiple regression analysis is used to examine the relationship between dependent and independent variables. In this research, the regression specification is written as follows:

$$INVESTD = \beta_0 + \beta_1 FIMAGE + \beta_2 INFO + \beta_3 ECONOMICE + \beta_4 ADVOCATER + \varepsilon \quad (1)$$

where INVESTD is investment decision, FIMAGE is firm image, INFO is information, ECONOMICE is economic expectation and ADVOCATER is advocate recommendation.

FINDINGS AND DISCUSSION

Table 1 lists the demographics of the respondents, including their gender, age, ethnicity, faculty, education level, the year of education, the form of education, and employment category. The sample consists of 58 undergraduate women and 42 undergraduate men or 58% and 42% respectively. The majority of respondents is made up by 22 years old which is 43 respondents (43%), followed by 21 years old respondents which are 31 respondents (31%), 13 respondents (13%) are 23 years old, 11 respondents (11%) are 24 years old and only 2 respondents (2%) are 20 years old. Chinese students accounted for the majority of respondents (75%), followed by Malay students (17%) and Indian students (8%). In the sample, 65 respondents (65%) are from Faculty of Economy and Management (FEP), 21 respondents (21%) are from Faculty of Science and Technology (FST), 8 respondents (8%) are from Faculty of Engineering and Build Environment (FKAB), 3 respondents (%) are from Faculty of Science Information and Technology (FTSM), 2 respondents (2%) are from Faculty of Social Science and Humanities (FSSK), and 1 respondent (1%) is from Faculty of Law (FUU). Students in their third year represent the majority of respondents (63%), followed by those in their fourth

TABLE 1. Demographic Profile

Characteristic		Frequency	Percentage (%)
Gender	Male	42	42
	Female	58	58
Age	20	2	2
	21	31	31
	22	43	43
	23	13	13
	24	11	11
Ethnicity	Malay	17	17
	Chinese	75	75
	Indian	8	8
Faculty	FEP	65	65
	FST	21	21
	FSSK	2	2
	FKAB	8	8
	FTSM	3	3
	FUU	1	1
Education level	Degree	100	100
Year of education	First year	6	6
	Second year	15	15
	Third year	63	63
	Fourth year	16	16
Form of education	Full-time study	100	100
Employment category	Part-time employment	18	18
	Non-employment	82	82
Investment knowledge	Yes	94	94
	No	6	6
Concern on investment	Yes	81	81
	No	11	11

year (16%), second year (15%) and first year (6%). All 100 respondents (100%) in this sample are full-time, degree-seeking students. In the sample, 82 respondents (82%) are unemployed, while 18 respondents (18%) have part-time jobs. Additionally, the vast majority of respondents (94%) are knowledgeable about investing, with only 6 respondents (6%) lacking this expertise. In addition, 81 respondents (81%) have worries about investments, compared to 11 respondents (11%), who have no worries about stock market investing.

Table 2 provides the descriptive statistics for variables used in the study including investment decisions, firm image, information, economic expectations and advocate recommendations. Each variable has a high interpretation based on the analysis because each variable's mean is high. Economic expectation, an independent variable, has the highest mean (4.161), which is followed by firm image (4.122), information (4.114) and advocate suggestions (3.593).

The investment decision, which is the dependent variable, has a high mean of 3.994 as well. When making investment decisions during the COVID-19 pandemic, the undergraduates believe that the independent variables with high score means are crucial. Meanwhile, Table 3 provides the reliability analysis for variables employed in the study including investment decisions, firm image, information, economic expectations and advocate recommendations. Due to the high reliability values of Cronbach's Alpha, all variables are generally trustworthy. In particular, the values for economic expectations and advocate recommendations for Cronbach's Alpha are 0.880 and 0.887, respectively. Furthermore, the Cronbach's Alpha for firm image is 0.779 whereas that for information is 0.751. Besides, Cronbach's Alpha for the investment decision is 0.762. As a result, the survey instrument consistently and accurately measures all of the constructs.

TABLE 2. Descriptive Statistics

Variable	Minimum	Maximum	Mean
Investment decisions	3.00	5.00	3.994
Firm image	2.60	5.00	4.122
Information	3.00	5.00	4.114
Economic expectations	2.57	5.00	4.161
Advocate recommendations	1.50	5.00	3.593

TABLE 3. Reliability Analysis

Variable	Number of Item	Cronbach's Alpha
Investment decisions	7	0.762
Firm image	5	0.779
Information	5	0.751
Economic expectations	7	0.880
Advocate recommendations	4	0.887

Table 4 shows Pearson correlation coefficients between investment decisions, firm image, information, economic expectations and advocate recommendations. All independent variables have a positive and significant relationship with investment decisions at the 1% significance level. The strongest association between firm image and investment decisions is captured by the correlation coefficient value (0.706). As a result, both the direction and the magnitude of the direction are substantially positive. That is, undergraduates are more concerned with the firm reputation when making investment decisions. In addition, information (0.670), economic expectations (0.643) and advocate recommendations (0.611) exhibit a significant result with a strongly positive link and correlation coefficient

value, indicating that respondents believe these variables also play a substantial role during the decision-making process for investments. The findings also demonstrate the absence of multicollinearity between independent variables.

Table 5 presents the results for the impacts of firm image, information, economic expectations and advocate recommendations on investment decisions among undergraduates during the COVID-19 pandemic. The adjusted R-squared for the model is 0.661, indicating that the regression specification adequately fits the data. This indicates that the independent variables account for roughly 66.1% of the variance in the dependent variable. The variance

TABLE 4. Pearson Correlation Coefficients

	INVESTD	FIMAGE	INFO	ECONOMICE	ADVOCATER
INVESTD	1				
FIMAGE	0.706^{***}	1			
INFO	0.670^{***}	0.671^{**}	1		
ECONOMICE	0.643^{***}	0.557^{**}	0.656^{***}	1	
ADVOCATER	0.611^{***}	0.398^{***}	0.447^{***}	0.482^{***}	1

Notes: INVESTD is investment decision; FIMAGE is firm image; INFO is information; ECONOMICE is economic expectation; ADVOCATER is advocate recommendations. ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels respectively.

TABLE 5. Multiple Regression Results

Variable	Coefficients		VIF
Firm image	0.374	(4.619)***	1.921
Information	0.166	(1.850)*	2.344
Economic expectations	0.180	(2.191)**	1.368
Advocate recommendations	0.302	(4.411)***	1.966
Adjusted R-squared	0.661		
F-statistic	49.355		
Probability(F-statistic)	0.000		

Notes: The t-statistics are presented in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels respectively.

inflation factor (VIF) test confirms that there is no multicollinearity between the independent variables in the regression model. The variance inflation factor's value falls within the ranges of 1.368 and 2.344. The multiple regression results show that firm image has the highest explanatory power on investment decisions. It infers that investors tend to invest in firm with good reputations. This finding is in line with those of Gupta et al. (2018), Nelson (2017), Jagongo and Mutswenje (2014), Melati et al. (2016), among others. Furthermore, advocate recommendation has a significant and positive link with investment decisions at the 1% significance level. This implies that advocate recommendation plays a vital role in assisting investors to make investment decisions. This is consistent with the findings of Aregbeyen and Mbadiugha (2011), Shiundu (2009), Al-Tamimi and Kalli (2009), Shafi (2014), among others. Meanwhile, economic expectation has a positive and significant relationship with investment decisions at the 5% significance level. This suggests that investors are able to make informed investment selections the better the company's economic outlook. This finding lends support to the results obtained by Abudu et al. (2018), Goodman et al. (2013), Hemmer and Labro (2008), among others. Next, information is a significant explanatory factor in explaining investment decisions among undergraduates during the COVID-19 pandemic at the 10% significance level. It shows that excellent information can assist investors better manage risk and motivate them to make investments. This is consistent with Raiz et al. (2012), Bashir et al. (2013). Gill et al. (2018), Hossain and Nasrin (2012), among others.

CONCLUSION

The focus of this research is to shed light on the factors influencing investment decisions among 100 undergraduates at Universiti Kebangsaan Malaysia during the COVID-19 pandemic. This study specifically looks at how undergraduate investment decisions during the COVID-19 pandemic are influenced by firm image, information, economic expectations and advocate recommendations. Taken together, firm image, information, economic expectations and advocate recommendations are significant in affecting investment decisions among undergraduates. In terms of the primary element impacting investor decisions regarding their investments, this research provides important implications for policymakers, firms and investors. Policymakers can pinpoint factors that attract investors to make the market environment investor-

friendly and appealing, ultimately improving the investment climate. Meanwhile, firms can determine which criteria investors consider when making investment decisions. To reach their ultimate goal of maximizing wealth, investors are mindful of the most significant aspects that influence their investment decisions.

REFERENCES

Abudu, K., Nosayamen, U., & Esohe, E. (2018). Economics of Forecast and Investor's Decision. *Finance and Banking Review, 12(1&2)*, 19-47.

Allen, G., & Fildes, R. (2000). Econometric forecasting strategies and techniques. *Principles of Forecasting: A Handbook for Researchers and Practitioners*, 1-45.

Al-Tamimi, H. A., & Kalli, A. (2009). Financial literacy and investment decisions of UAE investors. *The Journal of Risk Finance, 10*, 500-516.

Aregbeyen, O., & Mbadiugha, S. (2011). Factors influencing investors decisions in shares. *The Social Sciences, 6(3)*, 205-212.

Aruna, P., & Rajashekar, H. (2016). Factors Influencing Investment Decisions of Retail Investors- A Descriptive Study. *International Journal of Business and Management Invention*, 6-9.

Bashir, T., Aaqiba J., Ali, A., Azam, N., Tanveer, A., & Ansar, I. (2013). An Assessment Study on the Factors Influencing the Individual Investor Decision Making Behavior. *IOSR Journal of Business and Management*, 37-44.

Bialowolski, P., & Weziak-Bialowolska, D. (2014). External Factors Affecting Investment Decisions of Companies. *Economics: The Open-Access, Open Assessment E-Journal*, 1-22.

Divanoglu, S. U. (2018). Determining the Factors Affecting Individual Investors' Behaviours. *International Journal of Organizational Leadership*, 284-299.

Epstein, M. J., & Freedman, M. (1994). Social Disclosure and the Individual Investor. *Accounting, Auditing & Accountability Journal, 7(4): 16*, 94-110.

Francis, J., & Soffert, L. (1997). The Relative Informativeness of Analysts' Stock Recommendations and Earnings Forecast Revisions. *Journal of Accounting Research 35(2)*, 193-211.

Gill, S., Khurshid, M., Mahmood, S., & Ali, A. (2018). Factors Effecting Investment Decision Making Behavior: The Mediating Role of Information Searches. *European Online Journal of Natural and Social Sciences*, 758-767.

Goodman, T. H., Neamtiu, M., Shroff, N., & White, H. (2013). Management Forecast Quality and Capital Investment Decisions. *The Accounting Review*, 1-50.

Gupta, G., Mahakud, J., & Debata, B. (2018). Impact of CEO's characteristics on investment decisions of Indian listed firms: Does crisis make any difference? *Cogent Economics & Finance*, 1-15.

Hemmer, T., & Labro, E. (2008). On the optimal relation between the properties of managerial and financial reporting systems. *Journal of Accounting Research 46(5)*, 1209-1240.

Hossain, M., F., & Nasrin, S. (2012). Factors Affecting Selection of Equity Shares: The Case of Retail Investors in Bangladesh. *European Journal of Business and Management 4(20)*, 110-124.

Islamoglu, M., Mehmet Apan, A., & Adem Ayvali, A. (2015). Determination of Factors Affecting Individual Investor Behaviours: A Study on Bankers. *International Journal of Economics and Financial Issues*, 531-543.

Kannadhasan, M., & Nandagopal, R. (2010). Influence of decision makers' characteristics on risk analysis in strategic investment decisions. *Journal of Modern Accounting and Auditing*, 38-44.

Koirala, U. (2014). Factors Influencing the Investors' Decision Making in Stock Market.

Krishnan, R., & Booker, D. (2002). Investors' Use of Analysts' Recommendations. *Behavioral Research in Accounting (2002) 14(1)*, 129–156.

Kusumaningrum, T. M., Yuyun, I., & Sista Paramita, R. (2019). Factors Affecting Investment Decisions: Studies on Young Investors. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 10-16.

Lodhi, S. (2014). Factors Influencing Individual Investor Behavior: An Empirical Study of City Karachi. *IOSR Journal of Business and Management*, 68-76.

Mahmood, I., Ahmad, H., Khan, A., & Anjum, M. (2011). Behavioral implications of investors for investments in the stock market. *European Journal of Social Sciences, 20(2)*, 240-247.

Malmendier, U., & Shanthikumar, D. (2007). Are Small Investors Naive About Incentives? *Journal of Financial Economics 85(2)*, 457-489.

Markowitz, H. (1952). Portfolio Selection. *The Journal of Finance*, 77-91.

Melati, I. S., Nuryana, I., & Setyawati, Y. (2016). What Influences New Traders' Decision: A Case of Economics Perspective. *The 1st International Conference on Economics, Education, Business, and Accounting*, 228-240.

Mhd Raffin, N., & Ahmad, N. (2012). A conceptual paper on factors affecting investment decision of Malaysian investor. *International Conference on Innovation, Management and Technology Research*, 450-453.

Muradoglu, G., & Harvey, N. (2012). Behavioural Finance: The Role of Psychological Factors in Financial Decisions. *Review of Behavioral Finance*, 68-80.

Muth, J. F. (1961). Rational Expectations 4nd the Theory of Price Movements. *Econometrica, 29*, 315-335.

Mutswenje, V. S. (2014). A Survey of the Factors Influencing Investment Decisions: The Case of Individual. *International Journal of Humanities and Social Science*, 92-102.

Mutswenje, V., & Jagongo, A. (2014). A Survey of the Factors Influencing Investment Decisions:

The Case of Individual Investors at the NSE. *International Journal of Humanities and Social Science, 4(4)*, 92-102.

Nelson, M. (2017). *The Importance of Nonfinancial Performance to Investors*. From Harvard Law School Forum on Corporate Governance: https://corpgov.law.harvard.edu/2017/04/25/the-importance-of-nonfinancial-performance-to-investors/

Qureshi, S. A., Rehman, K., & Hunjra, A. (2012). Factors Affecting Investment Decision Making of Equity Fund Managers. *Wulfenia Journal*, 280-290.

Reilly, F. K., & Brown, K. (2000). *İnvestment Analysis and Portfolio*. Pennsylvania, USA: Dryden Press.

Riaz, L., Hunjra, A., & Azam, R. (2012). Impact of Psychological Factors on Investment Decision Making Mediating by Risk Perception: A Conceptual Study. *Middle-East Journal of Scientific Research 12(6)*, 789-795.

Shafi, M. (2014). Determinants Influencing Individual Investor Behavior in Stock Market: A Cross Country Research Survey. *Arabian Journal of Business and Management Review 2(1)*, 60-71.

Shiundu, M. V. (2009). A Survey Of The Factors Influencing Investment Decisions: The Case Of Individual Investors At The NSE. 1-51.

Sprott, D., Czellar, S., & Spangenberg, E. (2009). The importance of a general measure of brand engagement on market behaviour: development and validation of a scale. *Journal of Marketing Research, 46(1)*, 92-104.

Trueman, B. (1986). Why do managers voluntarily release earnings forecasts? *Journal of Accounting and Economics 8(1)*, 53-71.

Virlics, A. (2013). Investment Decision Making and Risk. *Procedia Economics and Finance, 6*, 169-177.

Hooi-Yee Chan, Lain-Tze Tee* & Si-Roei Kew
Fakulti Ekonomi & Pengurusan,
Universiti Kebangsaan Malaysia,
43600 Bangi, Selangor, Malaysia.

*Pengarang untuk surat menyurat; e-mel: jrtee@ukm.edu.my