THE BEHAVIOR OF MUSLIM INVESTORS IN INVESTING IN STOCKS ON THE INDONESIA STOCK EXCHANGE DURING THE COVID-19 PANDEMIC

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ABSTRACT

In the study of stock investment in the capital market by investors in Pandemic Covid-19, it is always carried out rationally. In fact it is not always rational in making stock investment decisions. For a Muslim investor, his behavior should be based on adherence to sharia principles, but in reality a Muslim's religiousness affects adherence to sharia principles. This study aims to examine the effect of accounting information, subjective norms, sharia principles, risk, and perceptions of individual behavior control in making decisions to invest in stocks on the Indonesia Stock Exchange. The research method used is path analysis with accounting information, subjective norms, sharia principles, and risk as independent variables and stock investment decision making as the dependent variable. The research findings show that only the sharia principle affects stock investment decision making through perception of individual behavior control.

Keywords: accounting information, subjective norms, sharia principles, behavior control, decision making

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INTRODUCTION

A mysterious pneumonia emerged in Wuhan in Hubei province, China at the end of December 2019. According to Chinese scientists, a new coronavirus is much faster spreading than the SARS virus that emerged in China in 2003 which has killed nearly 800 people globally (Callaway, Ledford, and Mallapaty, 2020). The World Health Organization (WHO) has declared the corona virus a pandemic on March 11, 2020. Due to the pandemic status of COVID-19, governments in several countries have decided to implement lockdown or total isolation or quarantine. (Widiyani, 2020). To prevent the spread of the corona virus, several countries have implemented lockdowns, including China, Spain, Italy and Malaysia, by closing all access to public facilities and transportation. (Kottasova, 2020). Indonesia itself imposes a large-scale social restriction policy with physical distancing (Perdana, 2020).

The implementation of lockdown or large-scale social restriction resulted in a slowdown in economic movements which also resulted in stock investment on the Indonesia Stock Exchange (IDX). YTD recorded, since the pandemic took place March 2 to May 2020, IHSG has corrected 24.54%. In March alone it experienced a decrease of 16.76% MoM, although April rose again by 3.91% and 0.79% in May. (IDX, March, April and May 2020). Whereas as of December 2019 there was an increase of 22 basis points from the previous month or 4.79%, while in YTD it increased by 20 basis points or 1.70% (IDX, December 2019). In the study of investment in the capital market, there are two approaches to financial decision making, namely standard finance which focuses on a rational and static approach and behavioral finance which sees financial actors as human

behavior (Pompian, 2012). Various factors influence investors' decisions to invest in stocks including news, accounting information, unsystematic risk, subjective norms, policies, and considerations of investor confidence (Arrozi and Dhihin, 2011). Several studies have shown that all dimensions of accounting information have an influence on individual investment decisions (Ahmad, 2017; Iqbal & Usmani, 2009; Merikas et al., 2011; Bashir et al, 2013; Ikeobi and Jat, 2016). The risk factors also do not have a high correlation and the best decision making (Kahneman and Tversky, 1979; Mitroi and Oproiu, 2014).

In fact investors in the market are not always rational in making stock investment decisions, there are other factors that can influence them when they make investment decisions (Thaler, 2015). The phenomenon of investor behavior in some stock markets following the advice of friends and groups in stock investing (herding behavior) is part of subjective norm behavior. This condition is found in research on the US market (Chiang and Zheng, 2010), in the European market (Chiang et al., 2010; Khan et al., 2011) and in the German market (Walter and Moritz Weber, 2006) as well as in Taiwan and South Korea (Chang et al., 2000) as well as in the Pakistani market (Malik and Elahi (2014). However, Javed et al. (2011) did not find the Pakistani market under extreme market conditions and Shaha, Shaha, and Khan (2017) found but weak, Neither did Demirer and Kutan (2006) find it in the Chinese market.

Other investor behavior factors, such as subjective norms and perceptions of behavioral control, affect investors' intention to invest (Jian and Phan, 2014; Broome and Philmore, 2010). Compliance with sharia principles in investing among Muslim investors based on research by Tahir and Brimble

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(2011) shows that the behavior of religious Muslim investors chooses investments that are in accordance with Islamic principles, while the behavior of Muslim investors who are not religious is tantamount to the behavior of non-Muslim investors. Perceptual behavior control factors also support investors' intention to choose a stock (Pahlevi and Oktaviani, 2018; Philmore and Broome, 2010; Masrurun and Heri, 2015; and Phan and Zhou, 2014).

This paper aims to examine the effect of accounting information, subjective norms, sharia principles, risk, and perceptions of individual behavior control in making decisions to invest in stocks on the Indonesia Stock Exchange during the Covid 19 pandemic.

LITERATURE REVIEW

Investment is a process of investing money that is expected to provide benefits in the future (Rasheed et al., 2018). The decision-making process starts from explaining objectives, exploring alternatives, analyzing cost-benefit and finally choosing the cheapest option (Jhandir and Elahi, 2014). According to Sindhu and Kumar (2014) that investment decisions are decisions made by investors regarding where, how and how much funds will be invested in various financial instruments to generate income or increase in value. Rusyida and Pratama's research (2020) concluded that the share price of PT Garuda Indonesia, Tbk during the Covid-19 pandemic tended to decline until July 13, 2020. Likewise according to Haryanto (2020) that Covid-19 had an impact on lowering the IHSG. Meanwhile, according to Kartikaningsih, Nugraha, and Sugiyanto (2020), the exchange rate affects the stock price of the infrastructure sector during the Covid-19 pandemic.

According to Pompian (2012) there are two approaches to financial decision making, namely standard finance and behavioral finance. If standard finance or also known as the traditional investment approach focuses on a rational and static approach, then behavioral finance is more about seeing financial actors as human behavior (Pompian, 2012). A well-known figure of the traditional approach is Markowitz (1999), who developed a modern portfolio selection theory using rational choice and minimizing portfolio risk. Meanwhile, behavioral finance is an approach by proving that individual investors do not behave rationally, but that their decisions are influenced by their psychological feelings (Bakar and Yi, 2016).

There are various factors that can influence an investor's decision to invest in the right stocks. Among them are news, accounting information, unsystematic risks, subjective norms, policies, and considerations of investor confidence in stock investment decisions (Arrozi and Dhihin, 2011). The main issue of this research is not only the rationality factor in making stock investment decisions, but also investor behavior. Therefore the selection of variables is accounting information, subjective norms, sharia principles, risks, and perceptions of individual behavior control.

The rational analysis in making investment decisions is shown by Jagongo & Mutswenje (2014) that apart from accounting information, investment decisions can be influenced by several factors such as market characteristics and personal profiles, fundamental analysis, technical analysis, and their own judgment. The results of Ahmad's (2017) research on individual investment behavior on the Karachi Stock Exchange and the Islamabad Pakistan Stock Exchange and Ikeobi and Jat's (2016) research show that accounting information is the most significant factor. However, Somathilake's research (2020) in Sri Lanka shows that accounting information has no effect on making stock investment decisions on the Colombo Stock Exchange.

Tversky and Kahneman (1979) compared several models of decision making under risk and uncertainty with economic models of rational behavior in that individual investors do not always behave in their best interest. Mitroi and Oproiu (2014) show that high risk is not correlated with high returns. Subjective norms are individual perceptions of the expectations of those who are influential in their lives (significant others) regarding the doing or not doing certain behaviors (Ajzen, 2005). This perception is subjective in nature which is also influenced by individual beliefs obtained from other people's views of the object of attitudes which are known as normative beliefs (Ajzen, 2005). Jian and Phan's (2014) research shows that subjective norms affect investors' intention to invest. Meanwhile, research by Broome and Philmore (2010) found that subjective norms are the most important predictor of stock investment decision making.

Perceived behavioral control or can be called behavioral control is an individual's perception of the ease or difficulty of realizing a particular behavior (Ajzen, 2005). Perceived behavioral control is determined by control belief, which is the belief in the availability of resources in the form of tools, compatibility, competence, and opportunities that support or inhibit behavior in realizing that behavior. This behavioral control together with the intention is closely related to the doing or not doing a behavior (Ajzen, 2005). Strong selfbelief, capital support, and technology support will support investors' high intention to choose a stock (Pahlevi and Oktaviani, 2018). The results of research by Philmore and Broome (2010), Masrurun and Heri (2015), Jian and Phan (2014) and Phan and Zhou (2014) found that perceptions of behavior control are significant predictors of predicting investor intentions to invest. The behavior of Muslim investors is not Homo Economicus but Homo Islamicus. Homo Islamicus is conceptualized as an example of virtue because it is based on positive human traits found in primary sources (Mahyudi, 2016). Homo Islamicus or Islamic man can be defined as an individual who acts in accordance with Islamic norms in daily life (Azizy, Mahyudi and Yusop, 2019). These humans, as identified by Furqani, are humans who are built within the framework of an Islamic economy with their own micro foundation consisting of goals or motives, meanings or basic and main virtues (Furgani, 2015). The main goal of Homo Islamicus, according to Furgani (2015), is to maximize maslahah. In simple terms maslahah can be interpreted as providing benefits and protection from damage (Azizy, 2014). The choice of decision for homo Islamicus is based on; 1) calculation, both profit and loss that can affect oneself and others, 2) consideration of whether or not he has a share in ukhrawi affairs, 3) by maximizing maslahah, all kinds of immoral acts, overexploitation, and immoral behavior are avoided, 4) will really consider the halal and haram characteristics in every goods and services used, and 5) the concept of maslahah not only considers the human dimension, but also the environmental dimension (Furqani, 2015). One of the important concepts in Homo Islamicus' behavior is the fulfillment of compliance with sharia principles, namely religious rules and norms in every aspect of life, including in the economic and financial fields, which emphasize the halal, usefulness and benefit of instruments in investing in shares, avoiding usury (interest), gharar (deceit), and maisir (speculation). Tahir and Brimble's research (2011) concluded

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that the behavior of religious Muslim investors chooses investments that are in accordance with Islamic principles, while the behavior of Muslim investors who are not religious is the same as the behavior of non-Muslim investors.

METOHDOLOGY

1. Sampling and data collection

The sample selection of this research is based on two criteria, namely investors who are Muslim and active in stock transactions. The number of share investors as of 23 December 2019 was recorded at 1,102,608 owners of Single Investor Identification (SID). However, only 15% or around 120,000 are actively conducting stock transactions every month (Qolbi, 2019). Meanwhile, the exact number of the investor population for Muslims is not known. So that the determination of the sample using the Hair method, namely the number of indicators in the study multiplied by 5-10 (Hair at al, 2014). So the number of samples is the multiplication of 33 indicators and 5 totaling 175 samples. Purposive sampling technique was used in this study. The questionnaire was given to Muslim investors through the Whats App application both personal chat and Whats App Group, in facilitating the distribution of the questionnaire researchers were assisted by the Capital Market Study Group throughout Indonesia.

2. Questionnaire design

This research questionnaire uses answers with a Likert scale with 5 ranges of scores; Strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). This questionnaire consists of 41 questions which are divided into six sections; The first part covers questions related to the quality of accounting information which has five dimensions (relevance, reliability, secondary quality, limitations and performance) as many as 13 questions. The second part is a question about subjective norms from as many as 4 questions. The third part is about 5 questions of sharia principles, while the fourth part is the risk of 7 questions. The fifth part is about the perception of individual behavior control which includes 6 questions. The sixth part is making stock investment decisions as well as 6 questions.

3. Data analysis technique

This research consists of three types of variables. First, the dependent variable, namely making stock investment decisions is a decision in the long term. Second, the independent variable which consists of four variables, namely the quality of accounting information, subjective norms, sharia principles and risks. Third, the intervening variable, namely the perception of individual behavior control. The machine variables and indicators of each dimension can be seen in Table 1.

| Class | Variable | Dimension | Indicator |
|--------------------------|----------|--------------------|---|
| Independent variables | | | |
| Quality of accounting | QAI | Relevance | Predictive |
| information | | 1000 / 0000 | Feedback |
| | | | On time |
| | | Reliability | Checkable |
| | | | Accuracy of symbolization |
| | | | Netral |
| | | Secondary quality | Comparative |
| | | | Consistency |
| | | | Easy to understand |
| | | Limitation | Cost and benefit |
| | | | Materiality |
| | | Performance | Short-term performance |
| | | | Long-term performance |
| Subjective norm | SN | Social referral | Observer's influence |
| 2 | | | Friends influence |
| | | | Mass media influence |
| | | | Regulator influence |
| Shariah principles | SP | Shariah compliance | Avoid interest (riba) |
| | | | Avoid deceive (gharar) |
| | | | Avoid gambling (maysir) |
| | | | Avoid prohibited (haram) |
| | | | Avoid suspicions (syubhat) |
| Risk appetite | RA | Unsystematic risk | Financial statements indicate financial difficulties |
| | | | Concerns about the company's financial condition |
| | | | Financial conditions cannot be controlled |
| | | | The relationship between financial risks and the timing |
| | | | of their occurrence |
| | | | Probabilitas kerugian ekonomi |
| | | | Predicted losses on the company |
| | | | Financial risks occur in the company |
| Intervening variable | | | |
| Perception of individual | PIBH | Capability | Self confidence |
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Tabel 3.1. Variables, Dimension, and Indicator

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| behavior control | | | Capital support Technology support |
|---|------|----------------|---------------------------------------|
| Dependent Variable Stock investment decision making | SIDM | Long term time | Return Risk the time factor |

The analysis technique used is path analysis to determine the direct or indirect effect of the independent (exogenous) variable on the dependent (endogenous) variable. The model specification of this path analysis is as follows:

$$\begin{split} PIBH &= \alpha + \beta_1 QAI + \beta_2 SN + \beta_3 SP + \beta_4 RA + \epsilon 1\\ SIDM &= \alpha + \beta_1 QAI + \beta_2 SN + \beta_3 SP + \beta_4 RA + \\ \beta_5 PIBH + \epsilon 2 \end{split}$$

EMPIRICAL RESULT

1. Regression Model The number of research respondents was 175 people consisting of 70 men (40%) and 105 women (60%). Judging by age, the largest number of respondents were young people, namely 17-25 years as many as 144 people or 82.3%. Then followed by the 26-34 years age group as many as 16 people or 9.1%, the 35-43 age group as many as 11 people or 6.3% and the age group over 43 years as many as 4 people or 2.3%. In terms of duration of stock transactions, the largest was between 1-3 years, namely 151 respondents or 86.3%. Then followed by 3-5 years of 20 people (11.4%), then 5-7 years and over 7 years of 2 people each (1.1%). The research data were collected by distributing questionnaires to respondents. Based on the results of the questionnaire, tests were carried out on instrument reliability, normality and multicollinearity of data. The test results can be seen in Table 1.

| Table 1. Reliability of Instrument, Normality and Multicollinearity | | | | | | |
|---|----------------|------------------------|-------|--|--|--|
| Variable | Cronbach Alpha | Asymp. Sig. (2-tailed) | VIF | | | |
| QAI | 0.862 | 0.308 | 2.162 | | | |
| SN | 0.681 | 0.101 | 1.812 | | | |
| SP | 0.909 | 0.153 | 1.562 | | | |
| RA | 0.815 | 0.174 | 2.208 | | | |
| PIBH | 0.808 | 0.219 | 1.852 | | | |
| SIDM | 0.802 | 0.104 | | | | |

Reliability test results show that all variables are reliable because they have Cronbach Alpha, as shown in Table 1 is greater than 0.60. The results of the data normality test show that Asimp. Sig (2 - tailed) of each variable is greater than 0.05 so that the data is normally distributed. While the multicollinearity test results based on table 1 above the VIF value of all independent variables is less than 10, it means that there are no symptoms of multicollinearity between the independent variables in this study.

| Model | Unstandardized Standardized Coefficients Coefficients | | t-Test | | F-Test | | \mathbb{R}^2 | $\sqrt{1+R^2}$ |
|-------------------------|--|------|--------|------|--------|------|----------------|----------------|
| Widden | В | beta | Т | Sig | F | Sig | | |
| Structural Equations I | | | | | 36.196 | .000 | .0460 | |
| (Constant) | 11.849 | | 2.097 | .038 | | | | |
| QAI | .337 | .284 | 3.548 | .001 | | | | |
| SN | .218 | .232 | 3.151 | .002 | | | | |
| SP | .048 | .063 | .890 | .375 | | | | |
| RA | .244 | .229 | 2.802 | .006 | | | | |
| ε1 | .211 | .229 | 2.002 | .000 | | | | .734 |
| Structural Equations II | | | | | 80.553 | .000 | .704 | |
| (Constant) | 644 | | 150 | .881 | | | | |
| QAI | .081 | .068 | 1.099 | .273 | | | | |
| SN | .052 | .055 | .972 | .333 | | | | |
| SP | 036 | 047 | 895 | .372 | | | | |
| RA | .460 | .429 | 6.898 | .000 | | | | |
| | | | | | | | | |
| PIBH ε2 | .451 | .446 | 7.843 | .000 | | | | .544 |

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Regression analysis model I (first) is used to determine the strength of the relationship of the independent variable (independent) to the mediating variable (intervening). Based on table 2 part of the Unstandardized Coefficients B column, the regression equation model I can be formed as follows:

$$\label{eq:PIBH} \begin{split} PIBH &= 11.849 \pm 0.337 QAI \pm 0.218 SN \pm \\ 0.048 SP \pm 0.244 RA \pm \epsilon 1 \end{split}$$

The t-table for model I of this study has 170 degrees of freedom with a confidence level of $\alpha = 0.05$, so the t-table is 1.65387. The t test results as shown in Table 2 in the t-Test column show that only the sharia principle (SP) variable has no effect on variable perception of individual behavior control (PIBH). Meanwhile, the variable quality of accounting information (QAI), subjective norms (SN) and risk appetite (RA) have a significant effect on the PIBH variable. Simultaneously based on the results of the F test, as shown in table 2 in the F-test column that the four variables QAI, SN, SP, RA have a significant effect on PIBH at sig 0.000 <0.05.

However, when viewed from the results of the regression coefficient test shown by R Square in table 1, it is 0.460 or 46.0%. This means that the PIBH variable can be explained by the four variables QAI, SN, SP, RA only by 46.0%. The remaining 54.0% is explained by other variables outside the model.

Regression analysis model II (second) is used to determine the strength of the relationship between the independent variable (independent) and the dependent variable (dependent). Based on table 2 section of the Standardized Coefficients B column, the regression equation for model II can be formed as follows:

SIDM = -0.644 + 0.081QAI + 0.052SN - 0.036SP + 0.460RA + 0.451PIBH + \varepsilon2

T-table for model II has 169 degrees of freedom with a level of confidence $\alpha = 0.05$, so the t-table is 1.65392. The t test results as shown in Table 2 in the t-Test column indicate that the RA and PIBH variables have an effect on the variable Stock investment decision making (SIDM). While the QAI, SN and SP variables do not have a significant effect on the SIDM variable. Simultaneously based on the results of the F test, as shown in table 2 in the F-test column that the five variables QAI, SN, SP, RA and PIBH have a significant effect on SIDM at sig 0.000 <0.05.

2. Path Analysis Coefficient

Path analysis is an extension of multiple linear regression analysis. Regression analysis was carried out in two tests. Based on the table. 1 in the Standardized Coefficients beta column, a path diagram image can be made as can be seen in Figure 1.



Figure 1. Path Diagram

The research path model explains the direct and indirect effect of exgeneous variables on endogenous variables. If the indirect effect is greater than the direct effect, it can be concluded that the real relationship is indirect. Based on the research path model as in Figure 1 it can be explained that first, QAI has no effect on SIDM intervening through PIBH. This is because the value of the direct effect is greater than the indirect effect (0.068> 0.0012). Second, SN has no effect on SIDM intervening through PIBH. This is because the value of PIBH.

value of the direct effect is greater than the indirect effect (0.055> 0.0103). Third, SP has an effect on SIDM intervening through PIBH. This is because the value of the direct effect is smaller than the indirect effect (-0.047 <0.0028). Fourth, RA has no effect on SIDM intervening through PIBH. This is because the value of the direct effect is greater than the indirect effect (0.0429> 0.0102). The results of the analysis of the direct and indirect effects above can briefly be seen in table 3.

| Tabel 4.31. Results of Direct and Indirect Effect Analysis | | | | | | |
|--|--------|----------------|--------------------------------|----------------------------------|--|--|
| Variabel | Direct | Indirect Total | Kriteria | Kesimpulan | | |
| QAI | 0,068 | 0,0012 0,0692 | Direct Effect >Indirect Effect | PIBH is not Intervening Variable | | |

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| SN | 0,055 | 0,0103 0,0653 | Direct Effect >Indirect Effect | PIBH is not Intervening Variable |
|----|--------|----------------|---|----------------------------------|
| SP | -0,047 | 0,0028 -0,0442 | Direct Effect <indirect effect<="" td=""><td>PKPI is Intervening Variable</td></indirect> | PKPI is Intervening Variable |
| RA | 0,0429 | 0,0102 0,0531 | Direct Effect >Indirect Effect | PKPI is not Intervening Variable |

DISCUSSION

This study proves that quality of accounting information, subjective norms and risk appetite have a positive effect on perception of individual behavior control. This is in line with Masrurun and Heri's (2015) research that the quality of accounting information and subjective norms have an effect on the perception of individual behavior control.

This study also proves that risk appetite and perception of individual behavior control have a positive effect on stock investment decision making. Rational investors try to maximize profits while minimizing the amount of risk they take (Nofsinger, 2005). Too much risk aversion behavior will reduce trading volume (Phan and Zhou, 2014). Risk can be accepted as a reference for the attitude of investors in investing (Phan and Zhou, 2014). Likewise, Tandelilin (2010) states that one of the bases for investment decisions is risk. This result is also in line with the research of Philmore and Broome (2010), Masrurun and Heri (2015), Phan and Zhou (2014), Pahlevi and Oktaviani (2018) who found that perceptions of behavioral control are significant predictors of predicting investor intentions to invest.

This study also shows that the sharia principle has no effect on both perception of individual behavior control and stock investment decision making. This study is in line with the research of Tahir and Brimble (2011) that the behavior of religious Muslim investors chooses investments that are in accordance with Islamic principles, while the behavior of Muslim investors who are not religious is the same as the behavior of non-Muslim investors. However, this study also shows that only the sharia principle affects stock investment decision making through perception of individual behavior control. The existence of this indirect influence provides a unique picture of the behavior of Muslim investors where Muslim investors often react quickly to the inherent sharia compliance of themselves to support their stock investment decisions.

This study found that subjective norms have no effect on stock investment decision making that is intervened through perceptions of individual behavior control. This means that Muslim investors are among those investors who are not easily influenced by social referrals. This is positive for Muslim investors because of this confident behavior. This Muslim investor will invest for a long term. Based on subjective norms, Muslim investors include investors who are confident in making stock investment decisions and include long-term investors. This behavior is very positive to prevent investors from speculating in stock transactions and to help the psychology of Muslim investors themselves in the midst of unfavorable market situations and global economic uncertainty.

CONCLUSION

This study concludes that first, risk appetite and perception of individual behavior control have a positive effect on stock investment decision making. Meanwhile, quality of accounting information, subjective norms, risk appetite, and the shariah principle have no effect on stock investment decision making. Second, only the sharia principle affects stock investment decision making through perception of individual behavior control.

The limitation of this research is that some of the main variables of investment behavior have not been touched. For further researchers, they can add attitudes, behavioral beliefs, normative beliefs, control beliefs and the intention of investing not only in stocks. Subjective norms in this study proved to have no effect on stock investment decision making, so additional variables are needed such as investment motive, normative belief, interest in investing, investment planning and control, investor risk control.

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