THE DRIVING FACTORS FOR INVESMENT IN STOCK RETAIL INVESTORS DURING PANDEMIC COVID-19 IN INDONESIA

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Abstract - The covid-19 pandemic during 2020-2021 drove the economic uncertainty and stock retail investment in Indonesia. However, the stock retail transaction increased significantly during pandemic. The paper investigates the determinant factors of stock retail investor behaviour. Pandemic Covid-19 made people work from home and stay at home. Work from home with long hours at the computer made people interested in investing in the stock market. A high number of investors led by phenomenon referred to as herding by certain individuals or groups that are tempting to joint invest came from influencers or public figures. This study combines Theory Planned Behavior (TPB) and Technology Acceptance Model (TAM) to uncover the decision investment from retail investors. The novelty of the research is herding behavior as an antecedent of the decision. Online survey method is distributed through social media, email, and personal messages. The study is able to collect 116 respondents. The data will be analyzed using PLS – SEM. The research found that planned behavior does not significantly affect the investment behavior, while variables from TAM do significantly affect the investment decision. The study concludes that variables from TAM influenced the investment decision. The limitation is the herding behavior does not influence investor decision in stock market. The implication of the research is that retail investors are still interested in investing in stock. Technology indeed is an enabler for the stock trading process, although it seems investors prefer offline processes.
Keywords: Retail Investors; Attitude towards Behavior; Behavioral Control; Ease of Use of Digital Platforms; Herding Behaviour

1. INTRODUCTION

1.1 Research Background

In 2020, there is coronavirus outbreak (SARS-Cov-2), that cannot be avoided and makes all over the world suffer. The impact from this outbreak affected our daily life from social, economic, and health, making many countries enact a tight restriction and lockdown their territory to prevent numbers of cases increasing significantly. The outbreak also caused a significant decline in the financial market (Zhang et al., 2020), which was reflected in the sharp decline in capital market indices in various parts of the world. As of March 26th, 2020, several major stock market indices fell by more than 20 percent. As the pandemic created a major shock in the capital market, it turned out that the number of investors actually increased significantly through the year 2020.

In Indonesia, the number of retail investors increased significantly up to 1.2 million as of June, 2020 which became a major issue during pandemic COVID-19 according to the data of the Indonesian Central Securities Depository (KSEI) (Jakartapost, 2020). The capital market transactions of retail investors increased four times along the year 2020 during pandemic situations (Akbar & Budiman, 2020). The total addition of a new single investor identification (SID) in the last year was the highest rate for the capital market.

Those high numbers of investors in the stock market are dominated by new investors or better known as retail investors. Retail investors are new non-professional investors using personal names with the aim of increasing wealth in the future. When the capital market indices collapsed, this opportunity was taken by the majority of millennials who began investing in stocks as retail investors (CNBC, 2020). Unfortunately, the increasing number of new investors also raises new problems because the new retail investors have minimal technical and fundamental knowledge about stock investment and depend on the trend just to gain money in a short time (Puspitasari, 2021).

The social restriction policies and the adoption of digital technology also become one of the factors increasing the number of stock investors because it is easy to open a securities account and do trading activities that can be done online (Uly, 2020). The ease of disseminating information related to stock investment in social media and forums or online communities also affects the increase in investor awareness (Suryahadi, 2021). As it is known, one of the securities applications, namely Mandiri sekuritas, recorded an increase in new investors of more than 50%, and the daily transaction value of retail customers also increased by 70% compared to the same period last year (Sidik, 2020).

There is a phenomenon referred to as herding which is caused by the invitation to buy certain shares by certain individuals or groups eventually increasing the number of stock investors in Indonesia. This phenomenon causes the stock price to rise significantly, so it looks tempting to investors. If this continues, it will damage the stability of stock prices. Many of these invitations and encouragements came from influencers or public figures such as clerics or artists to the president's son. They recommend and discuss certain stock investments in their social media channels that have an impact on the stock's price, rising instantly because of many people buying it. This is less noticed by novice investors who end up investing money for daily needs and even go into debt with a large interest in hopes of getting short profits that end in big losses (Ulya, 2021).

1.2. Literature Review

1.2.1 Retail Investor

The pandemic COVID-19 created a major shock in the capital market, however there is a high addition of a new single investor identification (SID). The new single investor identification mostly comes from retail investors. Retail investors are new non-professional investors using personal names with the aim of increasing wealth in the future. Retail investors also explained as individuals or non-firm investors who do stock buying and stock selling as known as stock trading through securities companies and investing for themself which is driven for personal goals like retirement, saving and education planning (Palmer, 2019). Retail investors define themselves as small individual investors who execute capital from their personal accounts rather than on behalf of another company (DasGupta & Singh, 2018). In investing, retail investors have many advantages, such as investors being able to play for a long period of time without having to be pressured to play. Playing prices in the capital market, the amount of funds invested is relatively small when compared to institutional investors, retail investors can trade their shares to foreign capital markets, the number of shares is relatively small so that it cannot be influenced by the liquidity process, retail investors have the freedom to choose the focus of their portfolio, and retail investors have the freedom to determine the focus of their investment without being required to produce the best by certain parties (Investbro.id, 2021). The results of research by Komalasari, Manik, and Ganiarto (2020) stated that there has been a change in the investment behavior of retail investors in the Indonesian stock market during the COVID-19 pandemic. Where the desire of retail investors to invest significantly decreased due to various factors. These factors are attitude, subjective norm, perceived risk, and perceived behavioral control. During the pandemic, retail investors have assumed that investing in the stock market is not a good idea and unattractive. This is not in accordance with the increased numbers significantly of investors during pandemic COVID-19. Therefore, this research tries to fill the gap by evaluating and integrating factors that have a possibility to affect investment decisions from the perspective of the theory of planned behavior (TPB), technology acceptance model (TAM), and herding behavior of the retail investor in Indonesia

1.2.2 Attitude Towards Behaviour

Attitude has an impact on consequence or behavior expectation (Dewi et al., 2020) and is defined as the extent of like and dislike of an individual that feels like a psychological object (Ajzen & Fishbein, 2000). Attitude is a key factor for the intention to accept the system technology (Davis, 1993; Taylor & Todd, 1995) and controlling element for intention behavior to use excel spreadsheet (Tornatzky & Klein, 1982). Two factors of attitude towards physical objects (internet, computer) and attitude towards behavior or showing a specific action (using the internet for stock trading online) (Ajzen, 1987, Ajzen & Fishbein, 2005). On online stock trading positive attitude from an individual on object and behavior specifically on behavior intention and implementation of the behavior (Gopi & Ramayah, 2007). Attitude also refers to individual thoughts and evaluation about interesting behavior given which is beneficial or not (Raut & Das, 2017). Attitudes also relate to certain behaviors which were supported from previous experience (Kashif, Zarkada, & Ramayah, 2018). In terms of investment, attitude refers to the individual's feelings, minds, and opinion based on financial behavior (Ameliawati & Setiyani, 2018). In this research, attitude towards behavior is defined as the individual’s behavior toward stock investment ideas which are influenced by technology and his previous investment experience especially in pandemic COVID-19 situations.

1.2.3 Behaviour Control

Behavior control is based on the last incident and some part of the trade-off information from relatives, friends, and aspects which can oversee the extent of difficulty from performing behavior of interest (Ajzen, 1991). Increasing resources (time, computer, network, and money) and opportunities affect greater control of the specific behavior (Ajzen, 1991) so that the performance behavior, in this case, is online trading stock. Many kinds of research have shown that perceived behavior control described tremendous discrepancy in intention and behavior, and there is a positive relationship between PBC and intention (Mathieson, 1991; Taylor & Todd, 1995; Teo & Pok, 2003). Thus, with all assets accessed, trust in self-competence is high, also there is a high possibility to buy stock in online trading. Behavioral control can be defined as the individual perceived ease or difficulty in performing behavior (Lortie & Castogiovanni, 2015). Behavioral control refers to individuals' beliefs from past experiences which were obtained by themselves or others (Paramita et al., 2018). In this research, behavioral control of retail investors is defined as how the individual investor controls investment activity based on information, technology, and experiences when pandemic COVID-19 situations occur.

1.2.4 Ease of use of Digital Platforms

Ease of Use (EOU) refers to a person’s belief that using the systems or application without big effort (Ramayah et al, 2009). The less effort required to operate a system leads to increased job performance by regular use of the systems (Davis, 1989; Venkatesh et al., 2002). With less complexity in the system could be developed subsequently to intention. Therefore, ease of use (EOU) is defined as the technology is easy to use which removes the barriers to eventually having a positive attitude towards it. In the pandemic COVID-19 situation, the adoption of digital technology allowed stock investors can easily open a securities account and do trading activities online, also easy to get information. That factor is used in this research to evaluate how strong this factor is toward retail investors’ intention in investing in stocks.

1.2.5 Herding

Herding is a behavioral tendency of the investors to suppress their own belief and information in favor of the market consensus in their trading activities (Rahman, Chowdhury, & Sadique, 2015). Herding happens when investors with the same inclinations follow the trading behavior of leaders (Hsieh et al, 2020). Herding (or herd behavior) explains the situation when people make decisions based on incomprehensive information and tend to ignore highly relevant facts (Kukacka & Barunik, 2013). People exhibit herding by neglecting and untrusting information they had and overreacting to the information publicly with the idea that the public has accurate output (Avery and Zemsky, 1998; Bikhchandani et al., 1992; Bikhchandani and Sharma, 2001; Wang, 2008). Kumar and Goyal (2015) explain the herding bias happens when plausible people duplicate the irrationality of the action whilst making a decision to invest. Information-driven herding specifies that investors may make similar investment decisions when they face correlated information environments (Hsieh et al, 2020) which are strengthened by Zhou and Lai (2009) that use data from the Hong Kong market to verify the theory of information cascades in herding. In Indonesia, herding activities come from the invitation to buy certain shares by certain individuals or groups which makes the capital market indices decline sharply. Although, the investors, especially retail investors that are fully aware of stock investment sometimes consider the decision to invest in some stock although the information related to stock is from influencers or public figures. This herding factor is used in this research to evaluate how strongly this factor influences retail investor intention in investing in stocks.

1.2.6 Intention to Invest in Stock

The intention is a person's conscious motivation to behave according to the person's expectations or desires. Ajzen (1991) said that intention is a representation of behavior that is influenced by motivational factors. There are three factors that determine intention, namely the attitude of assessing something either positive or negative, social factors (subjective norms) that influence behavior to act or not, and behavior control factors that control individuals to do an action (Ajzen, 1991). Intention determines a person's behavior to perform certain deeds, activities, or actions. A strong person's intention will make it likely that a behavior will occur immediately (Ajzen, 1991). However, the actualization of behavior will occur if there is a will that controls whether the person decides to be involved or not (Ajzen, 1991). In the case of pandemic COVID-19 situation in Indonesia, this research wants to evaluate that the increase of investors is influenced by the factors that influence intention of retail investors to invest. Those factors are attitude toward behavior, behaviour control, ease of use of digital platforms, and herding behavior of the retail investor in Indonesia.

1.2.7 Investment Decision in Stock

Investment is a behavior to allocate resources at a certain time with the aim of recovering investment costs and obtaining profits, where the investment is affected by economic situation with the result that the expected esults are unpredictable (Avram et al., 2009). Investors should consider the short-term and long-term factors in making investment decisions. These factors are in the form of internal factors that come from within the investor itself, such as the level of education, knowledge, psychology, and others. There are also external factors such as macro factors (political, economic, social, and other environmental conditions) and micro factors (company financial reports). The decision to invest is dominantly influenced by the rational thinking of the individual and information gathered from the resources (Waweru et al., 2008). At the same time, behavioral finance has prospective investors as irrational manners made by emotion and limited conceptual thinking (Shah et al., 2017). Decision-making is the choosing of a specific solution from several alternatives that are available in certain conditions (Chandra, 2008). Decision-making in stocks involves two things that are personal aspects and technical aspects (Chandra, 2008). Psychological factors in internal factors will control the degree of the bravery of investors in catching risks, where progressively uncertain information in external factors will affect the decision making in determining investment risk. In the case of pandemic COVID-19 situation in Indonesia, this research wants to evaluate that the increase of investors is influenced by the intention of retail investors due to some factors which influence it. However, there are also factors that influence investors to invest in stock without considering the intention that are due to adoption of technology encouraging ease of use of digital platforms and direct judgment to invest referring to certain individuals or groups (herding behavior).

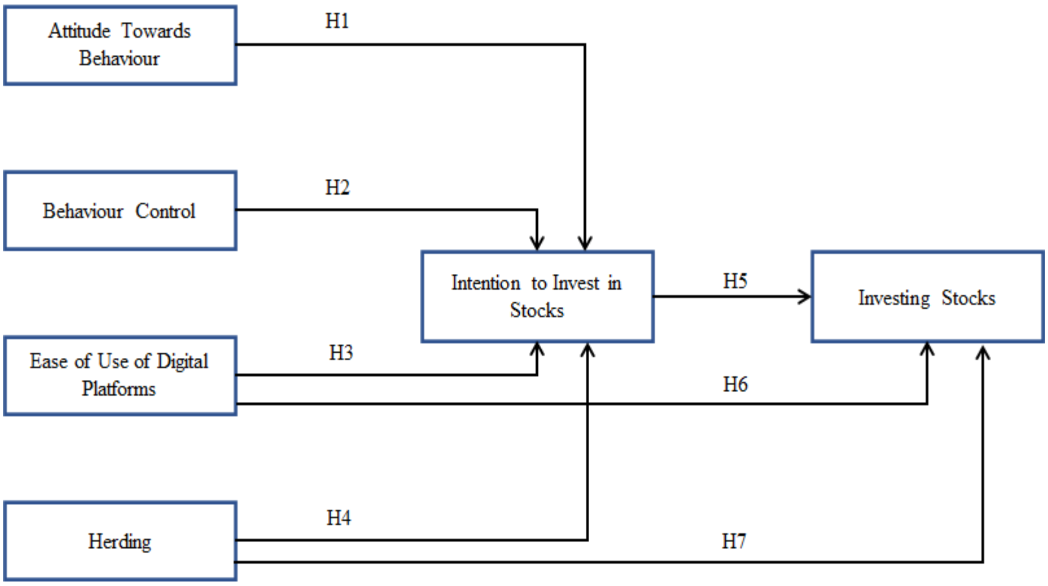

Figure 1. Research Model

2. RESEARCH METHODOLOGY

The study adopts Theory Planned Behavior (TPB) and Technology Acceptance Model (TAM) and adds herding variable as explanatory factors when retail investors enter the market. The indicators in the survey utilize tested items from previous research. The population for this research is retail investors who have a new single investor identification (SID) which is included in 1.39 million new investors (Olavia, 2020) during COVID-19 pandemic. They are also retail investors who start stock trading so their behavior will be analyzed which causes a significant increase in the number of investors in that situation. The target sampling data was carried out using a purposive sampling method which was obtained by using a screening question. The screening questions are : 1) the respondent should have SID number, 2) do trading during pandemic and 3) trading follow others. The survey was distributed through personal contacts, community of trading in social media, for two months. There are 207 respondents that replied to the questionnaire, but only 116 respondents are eligible for further analysis.

3. RESULT AND DISCUSSION

3.1 Measurement Model (Outer Model)

The results of the outer measurement model using smart PLS 3.0 can be seen in the image below:

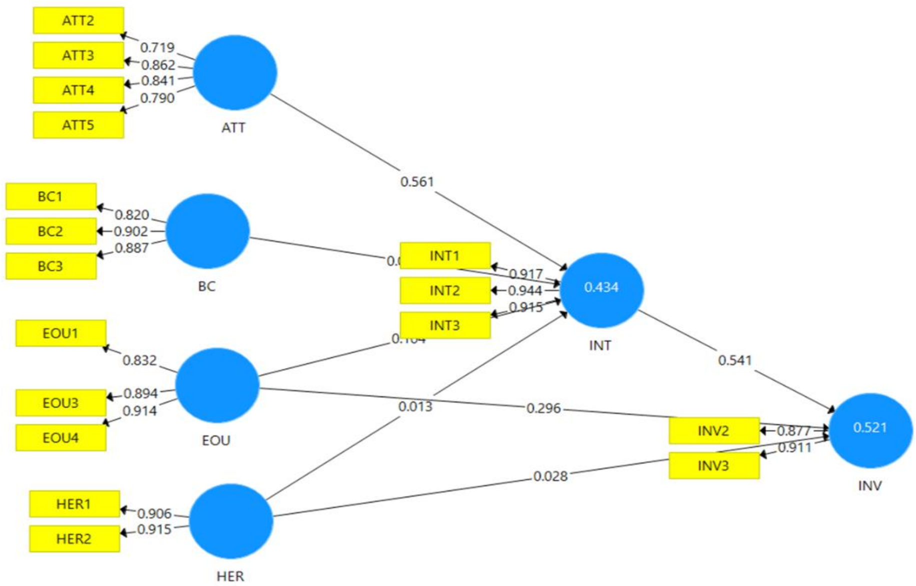

Figure 2. Result from SmartPLS

3.2 Structural Model (Inner Model)

The coefficient of determination (R^2) shows the predictive power of the model and the combined effect of exogenous latent variables on endogenous latent variables (Hair et al., 2017). The R^2 adjusted of this model is 0.508, where independent variables have the power to explain 50% of dependent variables.

Table 1. Result of Coefficient of Determination

	R Square	R Square Adjusted
Intention to Invest	0.434	0.413
Investing to Stock	0.521	0.508

Next is to conduct analyzing the path coefficient and testing the hypothesis by performing the bootstrapping process on smart PLS 3.0 with 500 subsamples. The path coefficient has a value between -1 and +1, where the path coefficient value that is close to +1 will indicate a strong positive among variables (Hair et al., 2017). To test the hypothesis using a two-tailed test with a level of significance of 5% so that the required hypothesis measurement standard is t-statistic > 1.96 and p-values < 0.05 (Hair et al., 2019). The following is the path coefficient data for bootstrapping results with smart PLS 3.0:

Table 2. Result of Path Analysis

Hypothesis	Original Sample	T Statistics (>1.96)	P Values (<0.05)	Conclusion
H1: Attitudes Towards Behavior → Intention to Invest	0.561	6.339	0.000	H1 is accepted with a positive and significant effect
H2: Behavior Control → Intention to Invest	0.056	0.741	0.459	H2 is rejected
H3: Ease of Use → Intention to Invest	0.104	1.165	0.245	H3 is rejected
H4: Herding → Intention to Invest	0.013	0.184	0.854	H4 is rejected
H5: Intention to Invest → Investing to Stock	0.541	7.058	0.000	H5 is accepted with a positive and significant effect
H6: Ease of Use → Investing to Stock	0.296	3.858	0.000	H6 is accepted with a positive and significant effect
H7: Herding → Investing to Stock	0.028	0.396	0.692	H7 is rejected

Based on the output path coefficient data as shown in Table 2, it is known that all hypotheses from H1 - H7 have a positive influence where this is shown by the original sample value with positive values in all hypotheses. However, at the level of significance in each hypothesis there is a hypothesis that does not have a significant effect, namely H2, H3, H4, and H7, this is indicated by the t-statistics and p-values that do not meet the required minimum standards, while H1, H5, and H6 have a significant effect on the t-statistics and p-values that meet the required minimum standards which mean the hypothesis have a positive and significant influence effect.

3.3. Hypothesis Discussion

3.3.1 Hypothesis 1 (H1): Attitude (ATT) has a significant influence and positive relation to intention to invest in stock (INT)

The finding shows retail investors believe that using stock trading was interesting and gave profit. Also, the retail investors feel that engaging with stock investment is wise and meaningful for their life. This output, similar with the previous research that explains attitude, has a positive and in line with the investors desire to invest (Lee, 2009). Stock investors felt that using stock trading online was a good idea and wise option to make an investment. The idea of using stock trading online was liked by the stock investor also this gave a pleasant experience to their intention to use stock trading online. Dewi & Tamara (2020) shows that attitudes have a positive and significant influence on employee intention to invest in retail bonds. The employees assure investing in retail bonds is right and beneficial, feel confident about the knowledge they have to invest in retail bonds. This condition contradicts research from Komalasari, Manik, & Ganiarto (2020) that mentions there is a significant difference in investment behavior between before and after pandemic COVID-19. The investors' attitude towards investing in the stock market during COVID-19 pandemic was a realistic reason in the bad business situation investing in any in, subjective norm, perceived risk, and perceived behavioral control of investors is decreasing to avoid uncertainty in business situations.

Based on the demographic of respondents, the level education of majority respondents consists of bachelors (65.52%) and postgraduate (15.52%) shows that respondents can evaluate stock investment. Those abilities and competence will encourage the intention investor to invest in stock. Same with the results that show the highest frequency of the answers of the respondents is that they think that engaging with the stock investment is interesting. Most of the respondent's income per month ranges from Rp. 1.000.000 - Rp. 20.000.000 up to 85.34%, also with the portfolio investment more than >10.000.000, - up to 62.93%, its means that the respondents have a positive and significant intention to invest in stock. They also have a positive attitude toward the intention to invest in stock due to most of the respondents (63.79%) define investment purpose for both long term and short term. From these the researchers conclude that the attitude has positive and significant influence toward intention to invest which can be seen from the investor's competence regarding stock knowledge and positive mind toward stock investment ideas that are meaningful, wise, interesting, and profitable.

3.3.2 Hypothesis 2 (H2): Behavior Control (BC) has a significant influence and positive relation to intention to invest in stock (INT)

The finding shows retail investors with new single identification numbers during pandemic COVID-19 have limited competences and are unfamiliar to use stock trading online. Also, the retail investors feel the ability to run stock trading online was low. This outcome has the similar result with the previous research by Dewi & Tamara (2020) which is that behavior control does not affect the intention to invest in ORI products. The investors feel the ease, opportunity, and investment effect does not have a significant impact on their life. Perceived behavior control towards intention to invest in stock during pandemic decreasing significantly because there is a panic situation and unstable market condition (Komalasari et al, 2020) so there is a change investor behavior before and after pandemic happens.

From the demographic data, respondents' ages are 17-30 years old with 48 respondents (41.38%) and 31-40 years old with 52 respondents (44.83%). This condition shows that the numbers of investors from age 18 up to 40 covers up to 75% of stock investors in Indonesia Stock Exchange (Bisnis, 2021). From the respondent income, they receive monthly income Rp. 1.000.000 - Rp 5.000.000, - (32.76%). Those productive age conditions assume that they are willing to invest in stock but obstructed by their limited free cash. So even though they have limited competences, limited ability to run and operate, and limited familiarity with stock trading online systems, they have limited funds to support their intention to invest in stock.

Based on the demographic of respondents, the level education of majority respondents consists of bachelors (65.52%) and postgraduate (15.52%) shows that respondents can evaluate stock investment. However, they are new investors that don't have experience in running and operating online stock trading which make them limited in their intention to invest due to perceived risk of unfamiliar systems. Besides that, the platform that the respondents used for stock trading activities, the majority using mobile based apps with 50.86%. Due to tight restriction and lockdown, even they can join stock online, but the respondent still has difficulty operating and running the online stock trading might be because the system is still unfamiliar without sufficient explanation of system usage or lack of guidance.

The target respondents are retail investors who open new single investor identification (SID) who joined stock trading during pandemic COVID-19 which causes a significant increase in the number of investors. This means that their competence to run and operate online stock trading is still limited. They feel unfamiliar with the system. This condition can be seen from the respondents' feelings in the frequency of the indicator answers that lack competence to use internet stock trading, have a limited ability to run internet stock trading and are not familiar with internet stock trading. Therefore, due to difficulties in operating and running online stock trading led to less intention to invest in stock.

3.3.3 Hypothesis 3 (H3): Ease of Use (EOU) has a significant influence and positive relation to intention to invest in stock (INT)

The finding shows the respondents do not match with the indicators which is that interaction with the system is understandable, the system to be easy to use and the system can do what they want to do. The addition of a new single investor identification (SID) will increase significantly up to 61% at the end 2020 (Olavia, 2020). The additional number of retail investors due to technology adoption that made the investors easily open a securities account and do trading activities online (Uly, 2020). That condition differs with the output of data analysis where the systems of stock online trading which is easy to use, understandable and can do what they want to do proven has no significant effect on the intention to invest in stock. In contrast with previous study, Ramayah et al (2009) found that the ease of using technology has a positive relation and significant influence on a person's interest in investing in stocks.

From the profile of respondents, the level of education is dominated by bachelor (65.52%) and postgraduate (15.52%), so there is a possibility with their education level that respondents already know about stock online trading technology. Contradicting the result that ease of use does not affect the intention to invest in stock, it can be assumed that respondents know about stock trading online but not enough skill to operate it. This condition can be seen from the respondents' answer that the highest preference frequency mentions that the online stock trading system is not clear and not understandable. The difficulty of operating and running the online stock trading might become an obstacle to the intention to invest in stock. Moreover, our respondents are new retail investors who made a new SID during the pandemic which don't have experience in running and operating online stock trading which make them limited in their intention to invest due to perceived risk of unfamiliar systems. Most respondents' ages are 17-30 years old with 48 respondents (41.38%) and 31-40 years old with 52 respondents (44.83%). It means they have an identity card that can be used to make a stock investment account due to adoption of technology which makes it easy to make SID. However, making a new SID is easy, but because the system requires a lot of effort and cannot do what they want to do, it might limit their intention to invest. From the investment platform chosen by respondents, most respondents used a mobile apps platform (50.86%) then both mobile apps and web-based apps (46.55%). Srinivas and Gregorie (2021) mention that in 2021 about six million people downloaded trading apps and recorded high daily volume for trading activities. One of digital trading applications, namely Mandiri sekuritas, notes an increment of new retail investors more than 50%, and the daily transaction increasing up to 70% compared to last year (Sidik, 2020). Due to tight restrictions and lockdown, the investor can easily join stock trading online but due to the system is still not clear, not understandable, and not easy to use eventually will limit their intention to invest in stock.

3.3.4 Hypothesis 4 (H4): Herding (HER) has a significant influence and positive relation to intention to invest in stock (INT)

The finding shows the respondents do not follow recommendations from public figures, influencers, friends, or family. Even though stock prices increase for a certain period due to opinion or recommendations from certain individuals, respondents have no intention to invest in stock. They only follow market movement while buying or selling stock in the stock market. Besides that, it can also be seen from the results of the pilot test which shows that the indicators that indicate respondents will buy shares following public figures, influencers, friends, or family produce invalid and unreliable measurements. They do not follow the public figures when making decisions to invest in stock which is shown by the respondent's intention to invest by following the market movement.

The result of the analysis contradicts with the phenomena, where public figures, famous people and clerics make a recommendation for certain shares which finally makes the shares price skyrocket and makes retail investors follow the recommendations (Ariyanti, 2021). These conditions, like the previous study from Shantha (2019), found that herding did not affect stocks investment intentions because there was no correlation between learning outcomes and stock market conditions.

According to the respondent data, the level of education dominated by bachelor (65.52%) and postgraduate (15.52%) there is a possibility that respondents already have a sufficient knowledge about stocks investment and are not affected with recommendation from others to buy or sell stocks. This condition can be seen from the respondents' answer that the highest preference frequency mentions that they prefer to join the market movement when buying and selling stock. They are not influenced by others' opinions, and they might be considered technical and fundamental aspects of the public company. Therefore, the herding behaviour does not significantly influence the intention to invest in stock.

The respondent majority receive monthly income Rp. 1.000.000 - Rp 5.000.000, - (32.76%) but their portfolio investment majority more than >10.000.000, - up to 62.93%, it means that they have positive intention to invest in stock, however to make decision to invest they seriously consider the market movement rather than opinion of public figure or influencer because their opinion can be wrong. They also might have sufficient knowledge about stock investment that makes them consider the risk of investment.

Based on the domicile, most respondents located outside java island (24.14%) means the respondents have a boundary access to get information from others to buy or sell stocks which make them less aware of herding behavior. From the investment purpose, it is shown that respondents that choose long term investment (23.28%) is greater than short term (12.93%) this illustrates that investors have principles in stocks investment, so they are not influenced by others' opinions. From these the researchers conclude that the herding has positive but not significant influence toward intention to invest which can be seen from the investors that follow market movement while buying or selling stock in the stock market rather than following recommendation from public figures or influencers.

3.3.5 Hypothesis 5 (H5): Intention to invest in stocks (INT) has a significant influence and positive relation to investing in stock (INV)

The finding shows the respondents already have a plan to invest in stocks and have an intent to invest in stocks and believe a high probability for joining investment in the stock market. The outcome of research was similar to the previous research by Dewi & Tamara (2020) who found that intention to invest retail bonds had a significant influence and positive relation on retail bonds decisions by employees. The investors feel the need for an investment because the investment can give profits and make the intention to invest in retail bonds increase.

From the occupation of respondents, even unemployment reaches 12 persons (10.34%), they do have a planning and intention to be able to invest in the stock market. It can be seen from the respondent's answer that there is a high probability to invest in the stock market. So even respondent's monthly income which is around Rp. 1.000.000 - Rp. 5.000.000, - reaching 32.76%, which means that the funds owned are very limited, respondents have good investment planning and intentions.

The respondents' answer that the highest preference frequency mentions that they have a high probability to invest in the stock market. This condition is supported by the ownership of an identity card that can be used to make a stock investment account due to adoption of technology. Most respondents' ages are 17-30 years old with 48 respondents (41.38%) and 31-40 years old with 52 respondents (44.83%) which means that they already have an identity card. So having an identity card can encourage investors' intention to invest in stocks because it can be easy to create a stock account to invest in.

According to the respondent data, the level of education dominated by bachelor (65.52%) and postgraduate (15.52%) there is a possibility that respondents already have sufficient knowledge about stocks investment which can encourage investor intention to invest in stock. It also can be seen from the majority the respondent receives monthly income Rp. 1.000.000 - Rp 5.000.000, - (32.76%) but their portfolio investment majority more than >10.000.000, - up to 62.93%, it means that they have positive intention to investing in stock. They also have a positive attitude toward the intention to invest in stock due to the majority of the respondents (63.79%) define investment purpose for both long term and short term. From these the researchers conclude that the respondent having positive and significant intention to invest in stock which can be seen from the investors already planning to join stock investment.

3.3.6 Hypothesis 6 (H6): Ease of use (EOU) has a significant influence and positive relation to investing in stock (INV)

The finding can be explained as follows: the respondents find that interaction with the systems is understandable, the system can be used easily, and the system can do whatever the user wants. The results have a different result from the previous research, Ramayah et al (2017) shows that perceived ease of use does not have a significant factor to Facebook usage. This condition happens because respondents consist of the Millennial generations which have no difficulty with technology. The profile respondents from Table 4.1 from the level of education consists of Bachelor (65.52%) and Postgraduate (15.52%) indicate that respondents have skill to understand stock trading online. In addition, most respondents' ages are 17-30 years old with 48 respondents (41.38%) and 31-40 years old with 52 respondents (44.83%) which means that they already have an identity card. However, due to tight restrictions and lockdown, the investor can easily join stock trading online because of technology adoption that made the investors easily open a securities account and do trading activities online. So having knowledge regarding stock trading online and having an identity card can encourage investors' intention to invest in stocks because it can be easy to create a stock account to invest in. Besides that, from the perspective of age range between 17 - 40 years old can be categorized as Gen-Y or Millennials who grew up with developed technology, fast learner and adaptive to the newest technology which eventually make it easier to make a stock account. This can also be seen from portfolio ownership investment majority more than >10.000.000, - up to 62.93%, it means that they have positive investment in stock. The ease of creating a new securities account allows respondents to directly make a decision to invest in stocks without any difficulty in accessing and operating the systems.

The majority investment platform was chosen by respondents who are using mobile apps platform (50.86%) then both mobile apps and web-based apps (46.55%). Their positive sentiment in using online stock trading that can be seen from one of digital trading applications, namely Mandiri sekuritas, notes an increment of new retail investors more than 50%, and the daily transaction increasing up to 70% compared to last year (Sidik, 2020). The investors feel the need for an investment, because the investment can give profits and make the intention to invest in stock increase. It is supported by technology which makes it easier to make a stock account. It also can be seen from the majority the respondent receives monthly income Rp. 1.000.000 - Rp 5.000.000, - (32.76%) but their portfolio investment majority more than >10.000.000, - up to 62.93%, it means that they have positive investing in stock due to adoption of technology.

3.3.7 Hypothesis 7 (H7): Herding (HER) has a significant influence and positive relation to investing in stock (INV)

The finding shows the respondents have the independence to invest without being distracted by information, a recommendation from influencers, public figures, friends or family. The respondents only follow market movement while buying or selling stock in the stocks market. Even though stock prices increase for a certain period due to opinion or recommendations from certain individuals, respondents have no direct investment in stock because of the effect of fear of missing out. Besides that, it can also be seen from the results of the pilot test which shows that the indicators that indicate respondents will buy shares following public figures, influencers, friends, or family produce invalid and unreliable measurements. They do not follow the public figures when making decisions to invest in stock which is shown by the respondent's intention to invest by following the market movement.

From the prior research, Haritha & Uchil (2019) also revealed that herding can affect a person's interest in investing in stocks. Haritha & Uchil (2019) found that market effect and herding have significant influencing factors of investors sentiment and investors sentiment have a significant influence on decision making investment. The result was different with this research wherein herding does not have a significant influence on the investing in stocks.

From the respondent data, the level of education dominated by bachelor (65.52%) and postgraduate (15.52%) there is a possibility that respondents already have sufficient knowledge about stock investment or how to operate online trading systems which are not affected with recommendation from others to buy or sell stocks. This condition can be seen from the respondents' answer that the highest preference frequency mentions that they prefer to join the market movement when buying and selling stock. They are not influenced by others' opinions and they might be considered technical and fundamental aspects of the public company.

Moreover, the respondent has a stock investment purpose both short term and long-term purpose with 63.79% even more for long term 23.28%, there is a possibility that the respondent does not follow herding behavior which is more tend to trading or short-term investment. Besides that, it can also be seen from the results of the pilot test which shows that the indicators that indicate respondents will buy shares following public figures, influencers, friends, or family produce invalid and unreliable measurements so must be removed from the framework model.

The respondent majority receive monthly income Rp. 1.000.000 - Rp 5.000.000, - (32.76%) but their portfolio investment majority more than >10.000.000, - up to 62.93%, it means that they have positive to invest in stock, however to make decision to invest they seriously consider the market movement rather than opinion of public figure or influencer because their opinion can be wrong. They also might have sufficient knowledge about stock investment that makes them consider the risk of investment.

The outputs show that retail investors follow the market movement when buying stock and selling stock. However, the herding behavior of retail investors doesn’t have a significant influence on investing in stock during pandemic COVID-19. On the other side there is a possibility that respondents of this research don't admit that they invest and buy stock following public figures. Sometimes it is not easy to dig up information about how people make profits, they will tend to be closed and limit the information provided. Therefore, the phenomenon of the stock investors and traders often following the opinion or recommendation to buy or sell stock from the influencer / public figure without considering fundamental aspects of the company or stock that the influencer bought (bisnis.com, 2021) did not happen in this research.

4. CONCLUSION

4.1 Conclusion

This study intends to investigate the factors of investment decision from retail investors. The retail investor utilized those opportunities to invest in stock which led to the number of retail investors increasing significantly. The factor that greatly influences retail investors' decisions to invest in stocks in the Indonesian stock market is attitude toward investment behavior. This can be seen from hypothesis H1 result which is the relationship between the variables is positive and significant influences. These results indicate that the retail investors still have a better attitude towards investment in stock. They understand and feel that stock investment will provide benefits, give meaning, wise things, and be attractive, so they still have positive intentions to invest during pandemic COVID-19. The factor of behavior control does not significantly influence the intention to invest in stocks. This can be seen from hypothesis H2 which is the relationship between the variables is positive influence but not significant. Based on the result, the respondents are new retail investors who open stock account or SID during pandemic COVID-19. They have less competence to use internet stock trading, limited ability to run internet stock trading, and are not familiar with internet stock trading. Due to the difficulty using internet stock trading leads to less intention to invest in stock.

The technology will remove boundaries and make activities easier. Moreover, in the pandemic COVID-19 situation where the tight restriction does not limit the adoption of digital technology. Investors can easily open a stock account (SID) and do stock trading activities online which leads to the number of retail investors increasing significantly. However, the intention to invest is not significantly influenced by the ease of use of digital platforms. Based on hypothesis H3, the stock online trading system is not clear, not understandable, and not user friendly for the new retail investors. It can be assumed that respondents know about stock trading online but not enough skill to operate it eventually leads to less intention to invest in stock. The increasing numbers of new SID during the pandemic is significant due to the ease of opening stock accounts. This can be seen from hypothesis H6 which is that the relationship between ease of use of digital platforms toward investing in stock is positive and significant. The new retail investor feels getting experience, pride, and enjoyment will greatly influence retail investors' decisions to invest in stock. They can directly decide to invest in stocks without any difficulty in accessing them without complex requirements. The ease of disseminating information related to stock investment in social media, forums, and online communities increases the investor awareness. These conditions were used by public figures or influencers to endorse and invite investors to buy certain stock which led to the herding phenomenon. New retail investors, even experienced investors sometimes considering those opinions that increased the number of investors significantly.

However, herding behaviour does not influence investor behavior regarding the intention to invest in stock. It can be seen in the result of hypothesis H4 which is positive but not significant. They prefer long term investment rather than short term investment that illustrates the investors' principle considering investment purpose so they are not influenced by others' opinions and even they consider technical and fundamental aspects of the public company. In addition, the herding behaviour does not influence significantly to investing in stock. It can be seen in the result of hypothesis H7 which are positive but not significant. The retail investors have the independence to invest without being distracted by information, a recommendation from influencers, public figures, friends or family. They only follow market movement while buying or selling stock in the stock market. Besides that, it can also be seen from the results of the pilot test which shows that the indicators that indicate respondents will buy shares following public figures, influencers, friends, or family produce invalid and unreliable measurements. The result concludes that investors do not follow the public figures when making decisions to invest in stock which is shown by the respondent's intention to invest by following the market movement

4.2 LIMITATION

This research has been carried out in the investment market focusing on stock trading under the time when the trade environment is very uncertain due to the pandemic COVID-19 situations. And the data retrieval location limit is in the Indonesian area when a pandemic COVID-19 situation occurs. This research also does not compare the condition of stock investment before the pandemic with the time of the pandemic occurs. Therefore, in terms of the type of the market and its environment condition, this is a suitable context for learning the driving factor for investment in the stock market. The following limitation, the results of this study cannot be generalizable to both emerging and developing markets due to differences in the investment and regulatory that are applicable on those markets. Furthermore, the unit analysis in this research is the individual investor, therefore the result of this research cannot be generalizable to predict the driving factor for investment in stock for other types of investors such as an institutional investor. Another limitation is the research doesn't consider many indispensable drivers of investors' sentiment like socio-economic, fundamental of the macroeconomic and specific policy, the political factors, etc. From the results, the variables which are behavior control, ease of use and herding have a positive relation but don't have significant influence on the intention to invest (INT). These can be seen from the respondent's portfolios dominantly greater than Rp. 10.000.000, -, that the respondents directly make an investment decision based on the assumption they fear being left behind, so they follow market movement (buying and selling). The herding phenomenon is opposite to our hypothesis that the herding has positive relation but not significant influence toward intention investment and investing in stock. In the beginning of the operational variable for pilot test, the indicator of the questionnaire contained eight questions to assess several aspects of the herding behavior of retail investors prior to the previous study. However, after running the reliability and validity test in the pilot test, there are six indicators that do not fulfill the requirement of the reliability and validity analysis. Therefore, the remaining two indicators are not able to measure with certainty the herding behavior.

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