

THE BIG FIVE PERSONALITY TRAITS INDONESIA INVESTOR DURING THE COVID-19 PANDEMIC

Werner Ria Murhadi

Universitas Surabaya, Indonesia

Email: werner@staff.ubaya.ac.id (corresponding author)

Bertha Silvia Sutejo

Universitas Surabaya, Indonesia

Email: bertha@staff.ubaya.ac.id

Phan Thị Hồng Xuân

University of Social Sciences and Humanities, VNU – HCM, Vietnam

Email: xuan.pth@hcmussh.edu.vn

Abstract

This study aims to determine the effect of the big five personality traits on financial risk tolerance and investment decision. The context of this research occurs for investors in Indonesia during the covid-19 pandemic period. The approach taken in this study is to use a quantitative approach method by distributing questionnaires to respondents who have become investors in Indonesia. Five independent variables measure a person's personality: extraversion, openness to experience, conscientiousness, and emotional instability, and two dependent variables are financial risk tolerance and investment decision. The results of this study prove that Personality traits extraversion, Intellect, and conscientiousness positively affect the level of financial risk tolerance. While personality traits of agreeableness and emotional instability negatively and significantly affect investors' financial risk tolerance levels. This research also provides results that financial risk tolerance positively affects investment decisions. This research has contributed to developing investor behavior theory which has yet to be widely carried out in Indonesia. The research shows that the big five personality impacts an investor's financial risk tolerance. Finally, this will have an impact on the investment decisions that an investor will make.

Keywords: Financial behavior; Investment Decision; Pandemic, Risk tolerance; The Big five personality.

JEL Classification: G11, G40, G41

Article History: Submitted: 2023-09-22; Revision: 2023-10-24; Accepted: 2023-10-01; Published: 2024-01-15

Copyright ©2024 Faculty of Economics and Business, Universitas 17 Agustus 1945 Semarang

This is an open access article under the CC BY license <https://creativecommons.org/licenses/by/4.0>

How to Cite: Murhadi, W. R., Silvia Sutejo, B. S., & Xuân, P. T. H. (2024). The Big Five Personality Traits Indonesia Investor during the Covid-19 Pandemic. *Media Ekonomi dan Manajemen*, 39(1), 99-114.

INTRODUCTION

The classical economic theory of finance assumes that in the financial market, investors are considered rational. However, as research on behavioral finance develops, only some researchers challenge the assumptions of this classical

economic theory. Behavioral finance proves how psychology influence on the behavior of financial practitioners and its subsequent influence on the market (Sewell, 2007). based on behavioral finance, the decision-making actions of every human being are not an entirely

rational process; a person who makes these decisions is very vulnerable to errors due to bias on emotional factors that each individual has (Chang, 2008; Kumar & Goyal, 2016). Personality owned by each individual has different and diverse characteristics due to the uniqueness that distinguishes one individual from another. Personality will appear when the individual interacts with others or reacts to certain situations. The covid-19 pandemic made the uncertain situation at that time significantly impact investors' psychology, causing changes in people's behavior, emotions, and investment decision-making patterns.

Indonesia's investment situation during the new pandemic can be felt the difference at the end of March or in early April, when the number of patients exposed to COVID-19 began to show significant numbers and with the implementation of PSBB resulted in obstruction of trade relations involving countries that are called the heart of the world economy, one of which is China, declining sharply, Investment Coordinating Board (BKPM). The investment value of the People's Republic of China (PRC) became the second largest foreign realization in Indonesia at USD 4.7 billion, and it is predicted by the Development of Economics and Finance (INDEF) that Indonesia could potentially lose its investment value of IDR 127 trillion. This uncertainty stimulates investors to withdraw their investment in the Indonesian capital market. When someone experiences a situation of uncertainty in the past, they will take risks from positive experiences in the future but then choose to avoid risk if they cannot eliminate the situation of uncertainty even though they want to eliminate it (Lee & Andrade, 2015). The emotional stability of each individual can distinguish whether the personality traits reflected in them are temporary or not (Matthews et al., 2009). Research on personality traits' effect on individual investors' risk tolerance during the

COVID-19 pandemic has yet to be widely conducted. Precisely one year when this research was first done, the pandemic spread throughout Indonesia, so this situation can be categorized as one of the shocking uncertainty situations for all elements of society in Indonesia. This phenomenon is fascinating to be researched more deeply regarding the influence of personality traits owned by investors on the high and low levels of investor risk tolerance in making investment decisions during the COVID-19 pandemic. During the pandemic there was an increase in the number of investors by 101.19% from 1.69 million investors at the end of 2020 to 3.41 million investors at the end of 2021. The increase in the number of investors during this pandemic is because at that time there was work from home, so many people were looking for other activities by starting to learn investment. However, during the pandemic period there were also various fraudulent investment problems that harmed the community.

Several studies have examined how "the big five personality traits" can potentially diversify risk tolerance among individual investors. The big five personality traits include extraversion, intellect (openness to experience), agreeableness, conscientiousness, and emotional instability (Pinjisakikool, 2018). Personality traits as an instrumental variable can also indirectly predict investors' financial behavior. This research is necessary because compared to previous studies that found a direct relationship between personality traits and financial behavior, this research aims to study the underlying reasons for the relationship between the two variables.

When looking at this fact, the development of personality traits research can change according to the situations and circumstances at that time, affecting how investor behavior determines investment decisions through their financial risk tolerance levels. For this reason, the object of this research is Indonesia, which is still

in COVID-19 and amid an uncertain situation. Indonesia also experienced a decline in economic growth at the beginning of the third quarter of 2020. This research will examine the influence of the personality traits of investors in determining their investment decisions during this pandemic. This research is necessary because the differences in personality traits owned by each investor have great potential as one factor determining the risks investors take in investment decisions. This research has also yet to be done much, especially in a pandemic situation that just occurred in early 2020. Investors must recognize the personality traits that exist within themselves because this impacts how to manage and make the right investment decisions.

This study also examines the effect of financial risk tolerance on investment decisions. Financial risk tolerance is the investor's attitude towards a risk that will be faced, whether he likes a risk seeker, risk averter, or risk indifferent (Wardani & Lutfi, 2017). Financial risk tolerance is one of the main factors in making an investment decision. Several studies have found that financial risk tolerance is a strong benchmark in investment decisions (Bailey & Kinerson, 2005). Each investor will choose for themselves the level of risk to be taken. The higher the level of financial risk tolerance, the more brave someone makes decisions (Wulandari & Iramani, 2014). Research results consistently show that financial risk tolerance positively affects investment decisions (Fridana & Asandimitra, 2020; Hikmah et al., 2020; Pradikasari & Isbanah, 2018). Behavioural Finance Theory becomes relevant when associated with investment decisions influenced by financial risk tolerance. Behavioral finance theory explains how humans behave financially (Baker et al., 2021). Financial risk tolerance is essential because it has a role in investor reasoning, including the emotional processes involved and the extent to

which investors influence decision-making.

The problem formulations faced in this study include the following: Will investors with extraversion personality traits positively affect the level of financial risk tolerance? Will investors with personality traits intellect (openness to experience) have a positive effect on the level of financial risk tolerance? Will investors with personality traits of agreeableness have a negative effect on the level of financial risk tolerance? Will investors with personality traits of conscientiousness have a positive effect on the level of financial risk tolerance? Moreover, Will investors with personality traits of emotional instability have a negative effect on the level of financial risk tolerance? Finally, this research aims to determine the effect of financial risk tolerance on investment decisions.

LITERATURE REVIEW

Traditional finance theories are built on the hypothesis that investors are rational and markets are efficient. The relationship between investors acting rationally and market efficiency will produce a perfect combination where investors can obtain relevant information and accurately evaluate their securities appropriately (Fama & Laffer, 1971; Fama & MacBeth, 1973). However, investors are human beings based on feelings/emotions within themselves, so their decision-making ability will certainly only partially be rational in the face of uncertainty. Investors' irrationality is an inevitable reality that will continue to exist and develop as long as the market runs. The unwillingness to realize losses is one of many examples of the difference between rational and normal investors (Shefrin & Statman, 1985). The aversion confuses rational investors because rational investors are only concerned with how to get rich, not the form of wealth. The theory of bounded rationality suggests that humans have limited cognitive abilities and are influ-

enced by emotions when making choices under risk and uncertainty (Simon, 2000). Therefore, people sometimes make irrational or partially rational decisions and are prone to behavioral biases.

The prospect theory argues that investor decisions are influenced by cognitive, environmental, and personal factors, so investor decision-making is constrained and irrational. Based on prospect theory shows that stock price fluctuations are based on several factors, including human error arising from investors using instincts, feelings, habits, emotions, thinking, reasoning, risk, and social interactions to make decisions (Bannier & Neubert, 2016). Investors' investment decisions involve cognitive biases (De Bondt et al., 2013) and heuristic biases (Ceschi et al., 2019; Oehler et al., 2018). Investor attitudes move towards behavior, subjective norms (individuals think differently), and perceived behavioral control. Perceived behavioral control refers to investors' beliefs that they can control any situation or behavior. The theory of planned behavior refers to individual beliefs and behaviors. In addition, perceived behavioral control is related to two quantities: self-efficacy and controllability. Self-efficacy indicates that an investor can face or endure difficulties or has the potential to perform a specific task. Controllability refers to external factors an investor can easily control and perform well. The concept of cognitive bias was first introduced by Kahneman & Tversky (1972) as errors in judgment, some related to memory and others to problems. Heuristic biases relate to mental shortcuts used in decision-making (Gutierrez et al., 2020) that often result in systematic errors in judgment (Kahneman & Tversky, 1972).

Financial risk tolerance is defined as the maximum amount of uncertainty that someone is willing to accept when making a financial decision (Grable, 2000). While another opinion states that financial risk tolerance refers to the degree of uncertainty an investor is willing to accept, and can

often be influenced by individual characteristics" (Ferreira, 2019). In determining the level of risk tolerance of an investor, there is a great influence of personal psychological preferences that play an important role in the judgement and relationship of investors with their respective finances.

Personality Traits

Most psychologists and scientists who study human behavior consider that personality is a concept that involves examining an individual's traits or characteristics and the relationship between those traits and the way they adapt and interact with other individuals or in a given situation. Personality traits distinguish cognitive, emotional, and motivational characteristics influencing individual decision-making (Dole & Schroeder, 2001). Personality is the unique characteristic that shapes an individual's behavior and decision-making processes (Cooper, 2003). another opinion states that personality traits refer to a person's pattern of thoughts, feelings, and behaviors that distinguish others and reflect the tendency to respond in specific ways and particular situations (Roberts & Mroczek, 2008). From a psychological science perspective, it is argued that personality is essential in determining investor behavior and performance in the stock market (Borghans et al., 2008; Sadi et al., 2011). In addition, Kannadhasan et al. (2016) also argue that personality traits in an investor greatly influence his decision-making process. Each investor has a different strategy when investing in the stock exchange. Each investor has different personality traits that can influence investment patterns and decision-making. In other studies, it is said that personality traits also have a short-term and long-term influence on decision-making. Naturally, humans already have characteristics within themselves that consciously or unconsciously shape their personalities. Some common characteristics of individuals are extroverts or introverts, moody, caring, creative, helpful, rude, imaginative,

forgiving, and jealous. These individual characteristics and that is what makes one individual different from another, which is referred to as a specific personality (Ahmad & Maochun, 2019). It is important to know what personality traits an investor has that indicate the output taken by each individual is not the same. The psychological characteristics of individual investors can turn a reasonable investment strategy into a failure. This is why personality traits are an important factor influencing investors in determining their level of financial risk tolerance (Filbeck et al., 2005). Among the various personality models, "The Big Five Model" is the most well-known and widely accepted concept in management education and psychology literature (Buccioli & Zarri, 2015; Mayfield et al., 2008). The power of personality traits is used in behavioral prediction across scientific fields, such as consumer behavior and organizational behavior, but less so in finance. Personality traits have aspects that can cover a variety of behaviors from all domains of scientific fields, including finance. The dimensions of "The Big Five Model" are extraversion, intellect (openness to experience), agreeableness, conscientiousness, and emotional instability/neuroticism.

Extraversion personality shows a highly enthusiastic attitude towards other people and situations that are different from usual (Gambetti & Giusberti, 2019). Cooper (2003) also states that extraversion personalities generally have the characteristics of being ambitious, verbose, confident, and gregarious. Extraversion personalities generally can be a leader, dare to express their opinions, and have a positive attitude (Vazifehdost et al., 2012). Extraversion is a well-known personality trait often developed in research or study (Tauni, Fang, et al., 2017; Tauni, Rao, et al., 2017). Individuals with extraversion traits are sociable, sympathetic, open to cooperation, energetic, assertive, optimistic, seeking innovation, and like to be

involved in their external activities rather than anything related to the inner. Personality traits openness to experience is a trait of inquisitive, unique, creative, inventive, and sophisticated individuals (Kaufman, 2013). Vazifehdost et al. (2012) explained that individuals with openness to experience personality traits show interest in new experiences and accept change more quickly. Personality traits agreeableness is explained as a character who is easily socially liked. The characteristics possessed by this personality include being trustworthy, forgiving, and caring about the surroundings. The concept of agreeableness personality is naturally a pleasant person, non-violent, caring for others and also the environment around him.

Individuals with conscientious personality traits are characterized by vulnerability, anxiety, and uncertainty (Gambetti & Giusberti, 2019). Individuals with this personality involve precision, orderliness, responsibility, and perseverance. Cooper (2003) also argues that conscientious personalities have more responsible and systematic, determined, and organized traits. Adding that conscientiousness personality traits have properties that are disciplined, goal-oriented, careful, able to organize, and capable. Emotional instability/neuroticism refers to the characteristics of individuals who are always concerned, anxious and self-doubting (Cooper, 2003). Neuroticism traits are very close to emotional factors, which refer to the ability of individuals to control their passions, in other words, emotional stability (Vazifehdost et al., 2012). Individuals with personality traits that have emotional instability/neuroticism are very close to emotional factors that refer to the ability of individuals to control their passions. Individuals who have neuroticism personality traits have the potential to have negative emotions that make them emotionally unstable, anxious, fragile, shy, pessimistic, lacking confidence, and lack control over themselves (Pinjisakikool,

2018; Tauni, Fang, et al., 2017; Tauni, Rao, et al., 2017).

On the extraversion dimension, it is shown that this personality plays a vital role in investment decisions and financial preferences and influences investment performance and choices (Durand et al., 2008; Oehler et al., 2018). A similar study on the effect of personality traits on financial risk tolerance shows that a positive correlation is created between extraversion and high risk-taking (Filbeck et al., 2005). In a study conducted on 330 respondents found that investors who have extraversion characteristics significantly affect investment decision-making behavior (Oehler et al., 2018). Furthermore, it is said that in a downturn situation, investors with an extraversion personality will try to obtain additional for their financial assets. An extraversion personality is also considered more ready to spend money to buy expensive financial assets. H1 Personality traits extraversion has a positive effect on the level of financial risk tolerance.

Individuals with high scores on intellect personality (openness to experience) are generally shown with positive characteristics. People with the openness to experience personality type are more likely to pay attention to their feelings and respect the values of others (Gambetti & Giusberti, 2019). These characteristics include imaginative, intellectual, open-minded, intelligent, creative, knowledgeable, and always want to innovate (Akhtar & Batool, 2012; Becker et al., 2012); while other studies have found that personality traits openness to experience has a positive effect on long-term investment intentions in a sample of retail investors in the US (Pinjisakikool, 2018; Tauni, Fang, et al., 2017; Tauni, Rao, et al., 2017). There are also findings that personality traits of openness to experience are associated with loans and acquisitions of financial assets (Brown & Taylor, 2014). Investors with personality traits of openness to experience

significantly influence investment decision-making in the stock market (Rizvi & Fatima, 2015).

H2. The intellect/Openness to experience positively affect the level of financial risk tolerance.

Nicholson et al. (2005) research found a negative relationship between personality agreeableness and risk tolerance. Agreeableness personality is one of the pleasant characteristics, more often avoiding conflict, arguments, violence, and disagreements so often in risk-taking, individuals with agreeableness personality choose to make decisions with a low level of risk (Terracciano et al., 2008).

H3. Personality traits of agreeableness have a negative effect on financial risk tolerance.

Ksendzova et al. (2017) state that the research results on the relationship between money management and personality conscientiousness show positive results following competence, carefulness, and high self-discipline. Other research states that investors with conscientious personality traits significantly influence investment decisions on the stock exchange (Rizvi & Fatima, 2015).

H4. Conscientiousness has a positive effect on financial risk tolerance.

In the context of perceptions about investors' investment predictions, it was revealed that emotional instability/neuroticism personality traits have high anxiety characteristics that tend to be uncertain, vulnerable, and unstable. Other studies prove that individuals with high anxiety are prone to high risk and choose to invest in assets with lower risk in their financial portfolio (Gambetti & Giusberti, 2019; Maner et al., 2007; Oehler et al., 2018; Van Winden et al., 2011). Emotional instability is closely related to one's emotions, which refers to an individual's inability to control their passions or low emotional stability (Vazifehdoost et al., 2012). In contrast to emotional instability,

Fenton-O’Creevy (2005) found that emotional stability correlates with a high level of risk. Investors with high emotional stability show good emotional control skills, are calm, and are considered professional in financial investment. Research by Rizvi & Fatima (2015) found that investors with personality traits of emotional instability/neuroticism significantly affect investment decisions on the stock exchange.

H5. emotional instability/neuroticism negatively affects the level of financial risk tolerance.

Financial risk tolerance is the maximum uncertainty investors are willing to accept when making financial decisions (Finke & Huston, 2003; Grable, 2000). FRT is considered an investor's attitude toward the risks that will be faced and is the other side of risk aversion (Hallahan et al., 2003). Each investor has a different level of tolerance, which is influenced not only by personal characteristics but also by situational factors that encourage risk tolerance to change over time (Murhadi et al., 2023). Financial risk tolerance is needed, especially for an investor, because it determines how much profit an investor will get. Investors with high financial risk tolerance will place more funds in high-

risk assets than those with low-risk tolerance (Murhadi et al., 2023; Wardani & Lutfi, 2017). This positive is also supported by the findings that those with a high tolerance will invest in stocks, while those who avoid investing in risk-free assets (Hariharan et al., 2000).

H6. Financial Risk tolerance has a positive effect on investment decisions.

Research Framework

The research framework depicted in Figure 1 is based on hypothesis development.

RESEARCH METHODS

The research is classified as basic research to develop a theory and improve science to find new theories and facts that can be tested for validity. This research examines the theory of personality traits that can influence investors' investment decisions during the COVID-19 pandemic. The approach taken in this study is to use a quantitative approach method which involves quantitative data when processing and processing data which is then distributed as information when filling out questionnaires by respondents to collect data. This research uses cross section data, with an experimental study.

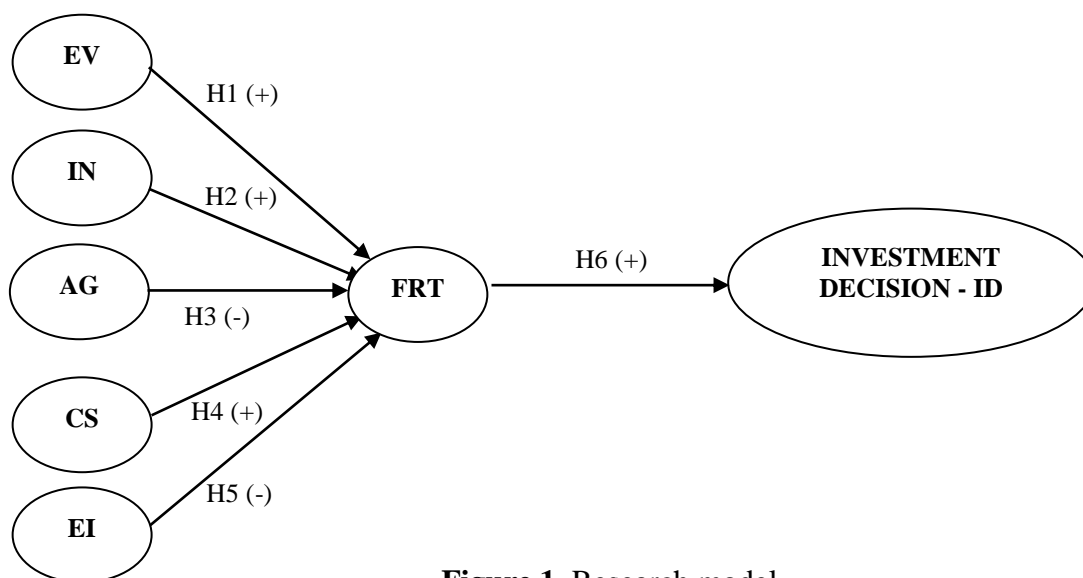


Figure 1. Research model

The variables contained in this study consist of one independent variable and five dependent variables. The dependent variable used in this study is financial risk tolerance (FRT). At the same time, five independent variables are used: personality traits, which include extraversion, intellect (openness to experience), agreeableness, conscientiousness, and emotional instability. Personality traits are defined as characteristics formed within an individual that can reflect personality/uniqueness.

Based on interactions with others or reactions to certain events. Personality traits extraversion is operationalized as how strong the characteristics of investors who have energetic, optimistic, active speaking, sociable, and friendly personality traits are. Personality traits intellect (openness to experience) is operationalized as how strong the characteristics of investors are who have creative, unique, like challenges, high curiosity, optimism, active speaking, easy to socialize, and friendly personality traits. Personality traits agreeableness is operationalized as how strong the characteristics of investors with pleasant personalities prefer to avoid arguments, disputes, and disagreements. Personality traits conscientiousness is operationalized as how strong the characteristics of investors who have highly responsible, organized, systematic, diligent, diligent personality traits have strong determination. Personality traits Emotional instability is operationalized as how strong the characteristics of investors with personality traits that are easily anxious, pessimistic, shy, emotionally unstable, and lack confidence. Financial Risk Tolerance (FRT) is the maximum uncertainty a person will accept when making financial decisions. The following are indicators used to determine the level of financial risk tolerance of an investor; questions will be given with a level selection mechanism from a scale of 1 strongly disagree to a scale of 7 strongly agree.

In the data collection process, this research will use non-probability sampling

techniques, especially convenience sampling, where the sample will be taken according to specific predetermined criteria. The criteria for respondents who will be used in this study are as follows: Individual investors over 18 years old and have invested in the Indonesian capital market for at least the last year. The use of convenience sampling is due to the ease of obtaining samples and costs, but the sample must still fulfil the specified criteria. The sample to be used is a minimum of 150 respondents. This research uses the structural equation modelling method, which is processed using JASP Software. A sample of 150 was obtained from the minimum criteria with seven constructs (Hair, 2010).

RESULT AND DISCUSSION

Result

The validity test for each item on the independent variable personality traits with dimensions including extraversion (EV), intellect (IN), agreeableness (AG), conscientiousness (CS), emotional instability (EI), as well as the dependent variable, financial risk tolerance (FRT) and investment decision (ID), is shown in Appendix 1. The results of the reliability test for the independent variable, the big five personality traits, and the dependent financial risk tolerance (FRT) can be seen in Appendix 2. The next stage in data processing with the SEM test is testing the structural model. The purpose of conducting a structural model is to test the hypothesis. The suitability of the structural model is measured through several goodness of fit indices. Table 1 is the goodness of fit value in the structural model analysis.

Table 1 shows that the Goodness of Fit generally follows the specified criteria. In the CMIN / DF index, it is stated that the results are classified as a good fit if the measurement results have a value ≤ 3 , while the results of the measurement model calculation show that CMIN / DF

has a value of 1.314 so that it is declared a good fit.

Furthermore, Table 2 presents the hypothesis results from the structural model test. Table 2 shows the results of the structural model hypothesis test, showing that all hypotheses are supported. Figure 1 shows the results of hypothesis testing, reflected in the standardized estimate value, which shows the magnitude of the influence between variables. Based on Table 2, it is shown that all hypothesis testing results of the influence of personality traits on financial risk tolerance are supported, except for emotional instability.

Discussion

Table 2 shows that testing the effect of extraversion on financial risk tolerance shows negative results. This result is consistent with the research of De Bortoli et al. (2019) and Rabbani et al. (2019). This negative result shows that investors in Indonesia with extraversion personalities decreased their financial risk tolerance during the pandemic. This result can be caused by the beginning of the pandemic,

which was marked by a significant decline in Indonesia's composite stock price index; young investors who tend to be extroverted end up demanding higher stock returns than normal conditions (lower risk tolerance). This argument is supported by the data that the sample in this study is dominantly under 22 years (51%), in line with data on the Exchange, where millennials dominate investors.

The results of testing the effect of personality traits in the form of intellect to the level of financial risk tolerance found positive results. It is said that investors who have an intellectual personality have more creative characteristics, have a broad imagination, and are full of innovation. Because investors with intelligent personalities tend to try new challenging experiences, investors with intelligent personality traits (openness to experience) can be categorized as having a high level of financial risk tolerance. Personality traits intellect in some studies is also called personality openness to experience. People with typical personality openness to experience are more likely to pay

Table 1. The Goodness of Fit Test Results Structural Model

No	Goodness of Fit	Test Result	Note
1	CMIN/DF	2.18	Good Fit
2	RMSEA	0.08	Good Fit
3	GFI	0.96	Good Fit
4	CFI	0.79	Good Fit
5	TLI	0.79	Good Fit
6	NFI	0.68	Marginal Fit
7	PNFI	0.62	Marginal Fit
8	CFI	0.79	Good Fit

Table 2. Hypothesis Test Results

Path	Std. estimate	p values
EV → FRT	- 0.23	0.09*
IN → FRT	0.55	0.00***
AG → FRT	- 0.56	0.00***
CS → FRT	0.29	0.05**
EI → FRT	- 0.02	0.76
FRT → ID	0.72	0.00***

Note: *** sig at $\alpha = 1\%$; ** sig at $\alpha = 5\%$; * sig at $\alpha = 10\%$;

attention to their feelings and respect the values of others (Gambetti & Giusberti, 2019). The characteristics of personality traits intellect include imagination, intellectual, open-minded, intelligence, creativity, knowledge, and always wanting to innovate (Durand et al., 2008). Personality traits openness to experience is more likely to pay attention to their feelings and respect the values of others. (Personality traits openness to experience positively affects long-term investment intentions in a sample of retail investors in the US (Mayfield et al., 2008). The supported research results prove that investors with intellect personality characteristics directly affect the level of risk tolerance, which can be categorized into moderate-aggressive investor types with moderate to high-risk tolerance preferences. In the investment decision-making process implications, investors with intellect personality traits are indicated as individuals who are associated with novelty and the search for new experiences. Traits including creativity, imagination, and innovation show the characteristics of investors with intellectual personalities. Meanwhile, investors with lower intellect are generally more narrow-minded and traditional. Concerning risk tolerance in the investment decision-making process, investors with intelligent personalities tend to choose new experiences closely related to causing experiments that can lead to greater risk-taking.

Testing the third hypothesis in this study shows a negative effect of personality traits agreeableness on financial risk tolerance. Investors with agreeable personalities tend to avoid negative risks and like certain things. The core of this agreeableness factor is naturally related to the concept of non-violence and caring for others and the environment. Pleasant people, individuals with agreeable personalities, prefer to avoid quarrels. People-pleasing individuals with agreeableness prefer to avoid arguments, disagreements, and violence (Terracciano et al., 2008).

This is because these negative behaviors are contrary to their agreeable personality; as a result, researchers can find a negative relationship between agreeableness and risk-taking. The more the presence of agreeable traits in the investor's personality, the lower the level of risk tolerance (Rabbani et al., 2019). The negatively supported research results from personality traits agreeableness on financial risk tolerance prove that investors with agreeableness personality characteristics tend to have a low level of risk tolerance and can be categorized into a conservative investor type. In the implications for the investment decision-making process, investors with agreeableness personality traits behave like to give in because they do not like disagreements, then have a high sense of empathy so that decision-making will be more straightforward, so these investors will tend to choose to avoid risk. Investors with prominent agreeableness personalities in making investment decisions often experience indecision and are very easily influenced by the opinions of those around them (Pak & Mahmood, 2015). Therefore, investors with agreeableness personality traits will generally choose low-risk investment products.

Table 2 also shows the test results show a positive influence of personality traits conscientiousness on financial risk tolerance. Investors with personality conscientiousness will take much time to make decisions; these investors try to avoid uncertainty and do not want to involve themselves in high-risk activities. Conscientious investors reflect competence, carefulness, and high self-discipline behavior to be classified as investors with a high level of financial risk tolerance (Ahmad & Maochun, 2019). This study uses a theoretical basis that is more relevant to the characteristics shown by conscientiousness personality traits, so there are differences in the results of this study with previous research from Pinjisakikool (2018). The personality characteristic of conscientiousness is a

personality trait that is actually very stable and has a strong stance or is not easily influenced. Investors with conscientious personality traits more prominent than others will be more rational in making investment decisions.

The fifth hypothesis testing in this study shows that emotional instability results in financial risk tolerance are insignificant. This insignificant result can be caused by the fact that most investors in Indonesia are early adults, especially in the sample. It also shows that 67% of respondents have at least a bachelor's education, so their emotions are relatively stable and will not affect their financial risk tolerance. Most respondents explained that risk tolerance is mostly influenced by the level of returns and the economic development conditions in Indonesia. If economic conditions are predicted to be positive, then tolerance to risk will be higher. It is different during a crisis, such as during the pandemic. The fear of closing down economic activities during the pandemic encourages investors to reduce the proportion of investment in high-risk securities.

The last thesis hypothesis that tests whether financial risk tolerance will positively affect investment decision-making are significant. High-risk tolerance will encourage investors to invest in risky assets such as stocks. At the beginning of the pandemic, there was a fear that the closure of social activities would impact many companies that had to close and lose money. This fear encouraged investors to reduce stock investment and divert it to safer assets such as deposits. However, this condition is only temporary because many investors with high intellectual and awareness characteristics have increased risk tolerance, and many are investing. This condition is based on the analysis that in the future, covid-19 will be successfully handled, and the economy will recover soon, thus encouraging investors to return to stock investment after seeing the pandemic begin to reduce its impact.

CONCLUSION AND RECOMMENDATION

Conclusion

This study proves that the personality traits of extraversion, intellect, agreeableness, and conscientiousness influence financial risk tolerance. While the emotional instability personality trait has an insignificant influence on the investor's financial risk tolerance level. Overall, financial risk tolerance will affect investment decisions.

This study provides implications that the covid-19 pandemic that occurred made investors more irrational. The fear of the closure of economic activities encourages investors who were initially brave enough to invest in stocks to divert assets to safer investments such as deposits. However, some investors use their rationality to believe that this condition is temporary so that they make additional investments when these stocks increase at the beginning of the pandemic. Investors like this have higher intellectual and conscientiousness characteristics than investors who dispose of shares. For this reason, investors are advised not to drag on the current pandemic. These conditions will harm investors because they become irrational in making investment decisions. Seeing the COVID-19 case, which shows a breath of fresh air with a decrease in the number of people infected and several regions currently implementing the new normal phase, it is also hoped that the Indonesian capital market can return to normal and much better.

Limitations & Recommendation

For the researcher, it is hoped that future research can find other models of personality traits that directly influence investors' financial risk tolerance and investment decision. This study conducted observations only focused on domiciled investors; on the other hand, researchers had experienced obstacles due to the COVID-19 pandemic, so in the process of getting respondents to be willing to fill out

questionnaires, researchers were limited to doing it online. The improvement in previous research lies in the word emotional stability, which should be revised using emotional instability or neuroticism. There are inconsistent words used in previous studies between the theory used and the term personality used as a variable, so that this research can improve.

REFERENCES

- Ahmad, M., & Maochun, Z. (2019). Personality traits and investor decisions. *Asian Journal of Economics, Finance and Management*, 19–34. <https://globalpresshub.com/index.php/AJEFM/article/view/744/693>
- Akhtar, M. N., & Batool, I. (2012). Psychological factors, information asymmetry and investment decision making. *Actual Problems of Economics*, 2(4), 200–205. <https://www.researchgate.net/publication/236950135>
- Bailey, J. J., & Kinerson, C. (2005). Regret avoidance and risk tolerance. *Journal of Financial Counseling & Planning*, 16(1).
- Baker, H. K., Kumar, S., & Goyal, N. (2021). Personality traits and investor sentiment. *Review of Behavioral Finance*, 13(4), 354–369. <https://doi.org/10.1108/RBF-082017-0077>
- Bannier, C. E., & Neubert, M. (2016). Gender differences in financial risk taking: The role of financial literacy and risk tolerance. *Economics Letters*, 145, 130–135. <https://doi.org/10.1016/j.econlet.2016.05.033>
- Becker, A., Deckers, T., Dohmen, T., Falk, A., & Kosse, F. (2012). The relationship between economic preferences and psychological personality measures. *Annu. Rev. Econ.*, 4(1), 453–478. <https://econpapers.repec.org/RePEc:anr:reveco:v:4:y:2012:p:453-478>
- Borghans, L., Duckworth, A. L., Heckman, J. J., & Ter Weel, B. (2008). The economics and psychology of personality traits. *Journal of Human Resources*, 43(4), 972–1059. <https://doi.org/10.3368/jhr.43.4.972>
- Buccioli, A., & Zarri, L. (2015). Does investors' personality influence their portfolios? *Netspar Discussion Paper*, 38. [https://doi.org/Buccioli,Alessandro and Zarri, Luca, Does Investors' Personality Influence Their Portfolios?](https://doi.org/Buccioli,Alessandro%20and%20Zarri,Luca,Does%20Investors'%20Personality%20Influence%20Their%20Portfolios?) (January 30, 2015). Netspar Discussion Paper No. 01/2015-006, Available at SSRN: <https://ssrn.com/abstract=2585374> or <http://dx.doi.org/10.2139/ssrn.2585374>
- Ceschi, A., Costantini, A., Sartori, R., Weller, J., & Di Fabio, A. (2019). Dimensions of decision-making: An evidence-based classification of heuristics and biases. *Personality and Individual Differences*, 146, 188–200. <https://doi.org/10.1016/j.paid.2018.07.033>
- Chang, C.-H. (2008). The Impact of Behavioral Pitfalls on Investors' Decisions: The Disposition Effect in The Taiwanese Warrant Market. *Social Behavior and Personality: An International Journal*, 36(5), 617–634. <https://doi.org/10.2224/sbp.2008.36.5.617>
- Cooper, D. (2003). Understanding how personality & perception can influence risk taking. *The Journal for Occupational Safety and Health Professionals*, 39–46.
- De Bondt, W., Mayoral, R. M., & Vallelado, E. (2013). Behavioral decision-making in finance: An overview and assessment of selected research. *Spanish Journal of Finance and Accounting/Revista Española de Financiación y Contabilidad*, 42(157), 99–118. <https://doi.org/10.1080/02102412.201>

- 3.10779742
- De Bortoli, D., da Costa Jr, N., Goulart, M., & Campara, J. (2019). Personality traits and investor profile analysis: A behavioral finance study. *PloS One*, *14*(3), e0214062. <https://doi.org/10.1371/journal.pone.0214062>
- Dole, C., & Schroeder, R. G. (2001). The impact of various factors on the personality, job satisfaction and turnover intentions of professional accountants. *Managerial Auditing Journal*, *16*(4), 234–245. <https://doi.org/10.1108/02686900110389188>
- Durand, R. B., Newby, R., & Sanghani, J. (2008). An intimate portrait of the individual investor. *The Journal of Behavioral Finance*, *9*(4), 193–208. <https://doi.org/10.1080/15427560802341020>
- Fama, E. F., & Laffer, A. B. (1971). Information and capital markets. *Journal of Business*, 289–298. <http://www.jstor.org/stable/2351342>
- Fama, E. F., & MacBeth, J. D. (1973). Risk, return, and equilibrium: Empirical tests. *Journal of Political Economy*, *81*(3), 607–636. <https://doi.org/10.1086/260061>
- Fenton-O’Creevy, M. (2005). *Traders: Risks, decisions, and management in financial markets*. Oxford University Press, USA.
- Ferreira, S. J. (2019). Is financial risk tolerance influenced by personality traits? *Proceedings of Economics and Finance Conferences*, *9511451*, 50–60. <https://doi.org/10.20472/efc.2019.012.005>
- Filbeck, G., Hatfield, P., & Horvath, P. (2005). Risk aversion and personality type. *The Journal of Behavioral Finance*, *6*(4), 170–180. https://doi.org/10.1207/s15427579jpfm0604_1
- Finke, M. S., & Huston, S. J. (2003). The brighter side of financial risk: Financial risk tolerance and wealth. *Journal of Family and Economic Issues*, *24*, 233–256. <https://doi.org/10.1023/A:1025443204681>
- Fridana, I. O., & Asandimitra, N. (2020). Analysis of Factors Affecting Investment Decisions (Study on Female Students in Surabaya). *Estuary Journal of Economics and Business*, *4*(2), 396. <https://doi.org/10.24912/jmie.v4i2.8729>
- Gambetti, E., & Giusberti, F. (2019). Personality, decision-making styles and investments. *Journal of Behavioral and Experimental Economics*, *80*, 14–24. <https://doi.org/10.1016/j.socec.2019.03.002>
- Grable, J. E. (2000). Financial risk tolerance and additional factors that affect risk taking in everyday money matters. *Journal of Business and Psychology*, *14*, 625–630. <https://doi.org/10.1023/A:1022994314982>
- Gutierrez, C., Åstebro, T., & Obloj, T. (2020). The impact of overconfidence and ambiguity attitude on market entry. *Organization Science*, *31*(2), 308–329. <https://doi.org/10.1287/orsc.2019.1300>
- Hair, J. F. (2010). *Black. WC, Babin. BJ; and Anderson. RE (2010), Multivariate Data Analysis*. Pearson Prentice Hall, New Jersey.
- Hallahan, T., Faff, R., & McKenzie, M. (2003). An exploratory investigation of the relation between risk tolerance scores and demographic characteristics. *Journal of Multinational Financial Management*, *13*(4–5), 483–502. [https://doi.org/10.1016/S1042-444X\(03\)00022-7](https://doi.org/10.1016/S1042-444X(03)00022-7)
- Hariharan, G., Chapman, K. S., & Domian, D. L. (2000). Risk tolerance and asset allocation for investors nearing

- retirement. *Financial Services Review*, 9(2), 159–170. [https://doi.org/10.1016/S1057-0810\(00\)00063-9](https://doi.org/10.1016/S1057-0810(00)00063-9)
- Hikmah, H., Siagian, M., & Siregar, P. (2020). Analisis Tingkat Literasi Keuangan, Experienced Regret, dan Risk Tolerance pada Keputusan Investasi di Batam. *Jesya (Jurnal Ekonomi Dan Ekonomi Syariah)*, 3(1), 138–146. <https://doi.org/10.36778/jesya.v3i1.142>
- Kahneman, D., & Tversky, A. (1972). Subjective probability: A judgment of representativeness. *Cognitive Psychology*, 3(3), 430–454. [https://doi.org/10.1016/0010-0285\(72\)90016-3](https://doi.org/10.1016/0010-0285(72)90016-3)
- Kannadhasan, M., Aramvalathan, S., Mitra, S. K., & Goyal, V. (2016). Relationship between biopsychosocial factors and financial risk tolerance: An empirical study. *Vikalpa*, 41(2), 117–131. <https://doi.org/10.1177/0256090916642685>
- Kaufman, S. B. (2013). Opening up openness to experience: A four-factor model and relations to creative achievement in the arts and sciences. *The Journal of Creative Behavior*, 47(4), 233–255. <https://doi.org/10.1002/jocb.33>
- Ksendzova, M., Donnelly, G. E., & Howell, R. T. (2017). A brief money management scale and its associations with personality, financial health, and hypothetical debt repayment. *Journal of Financial Counseling and Planning*, 28(1), 62–75. <https://doi.org/10.1891/1052-3073.28.1.62>
- Kumar, S., & Goyal, N. (2016). Evidence on rationality and behavioural biases in investment decision making. *Qualitative Research in Financial Markets*, 8(4), 270–287. <https://doi.org/10.1108/QRFM-05-2016-0016>
- Lee, C. J., & Andrade, E. B. (2015). Fear, excitement, and financial risk-taking. *Cognition and Emotion*, 29(1), 178–187. <https://doi.org/10.1080/02699931.2014.898611>
- Maner, J. K., Richey, J. A., Cromer, K., Mallott, M., Lejuez, C. W., Joiner, T. E., & Schmidt, N. B. (2007). Dispositional anxiety and risk-avoidant decision-making. *Personality and Individual Differences*, 42(4), 665–675. <https://doi.org/10.1016/j.paid.2006.08.016>
- Matthews, G., Deary, I. J., & Whiteman, M. C. (2009). *Personality Traits* (Third Edit). Cambridge University Press. www.cambridge.org/9780521887786
- Mayfield, C., Perdue, G., & Wooten, K. (2008). Investment management and personality type. *Financial Services Review*, 17(3), 219–236. <http://csinvesting.org/wp-content/uploads/2014/06/Investing-and-Personality-Type.pdf>
- Murhadi, W. R., Kencanasari, F. R., & Sutejo, B. S. (2023). The Influence of Financial Literacy and Financial Interest on The Financial risk Tolerance of Investor in Indonesia. *Journal of Law and Sustainable Development*, 11(2), 1–16. <https://doi.org/10.55908/sdgs.v11i2.310>
- Nicholson, N., Soane, E., Fenton-O’Creevy, M., & Willman, P. (2005). Personality and domain-specific risk taking. *Journal of Risk Research*, 8(2), 157–176. <https://doi.org/10.1080/136698703200123856>
- Oehler, A., Wendt, S., Wedlich, F., & Horn, M. (2018). Investors’ personality influences investment decisions: Experimental evidence on extraversion and neuroticism. *Journal of Behavioral Finance*, 19(1), 30–48. <https://doi.org/10.1080/15427560.201>

- 7.1366495
- Pak, O., & Mahmood, M. (2015). Impact of personality on risk tolerance and investment decisions: A study on potential investors of Kazakhstan. *International Journal of Commerce and Management*, 25(4), 370–384. <https://doi.org/10.1108/IJCoMA-01-2013-0002>
- Pinjisakikool, T. (2018). The influence of personality traits on households' financial risk tolerance and financial behaviour. *Journal of Interdisciplinary Economics*, 30(1), 32–54. <https://doi.org/10.1177/0260107917731034>
- Pradikasari, E., & Isbanah, Y. (2018). The Influence of Financial literacy, Illusion of Control, Overconfidence, Risk Tolerance, and Risk Perception on Investment Decisions of Students in the City of Surabaya. *Journal of Management Science*, 6. <https://ejournal.unesa.ac.id/index.php/jim/article/view/24408>
- Rabbani, A. G., Yao, Z., & Wang, C. (2019). Does personality predict financial risk tolerance of pre-retiree baby boomers? *Journal of Behavioral and Experimental Finance*, 23, 124–132. <https://doi.org/10.1016/j.jbef.2019.06.001>
- Rizvi, S., & Fatima, A. (2015). Behavioral finance: A study of correlation between personality traits with the investment patterns in the stock market. *Managing in Recovering Markets*, 143–155. https://doi.org/10.1007/978-81-322-1979-8_11
- Roberts, B. W., & Mroczek, D. (2008). Personality trait change in adulthood. *Current Directions in Psychological Science*, 17(1), 31–35. <https://doi.org/10.1111/j.1467-8721.2008.00543.x>
- Sadi, R., Asl, H. G., Rostami, M. R., Gholipour, A., & Gholipour, F. (2011). Behavioral finance: The explanation of investors' personality and perceptual biases effects on financial decisions. *International Journal of Economics and Finance*, 3(5), 234–241. <https://www.researchgate.net/publication/265071384>
- Sewell, M. (2007). *Behavioral finance*. University of Cambridge. <http://www.behaviouralfinance.net/behaviouralfinance.pdf>
- Shefrin, H., & Statman, M. (1985). The disposition to sell winners too early and ride losers too long: Theory and evidence. *The Journal of Finance*, 40(3), 777–790. <https://doi.org/10.1111/j.1540-6261.1985.tb05002.x>
- Simon, H. A. (2000). Bounded rationality in social science: Today and tomorrow. *Mind & Society*, 1, 25–39. <https://doi.org/10.1007/BF02512227>
- Tauni, M. Z., Fang, H., Mirza, S. S., Memon, Z. A., & Jebran, K. (2017). Do investor's big five personality traits influence the association between information acquisition and stock trading behavior? *China Finance Review International*, 7(4), 450–477.
- Tauni, M. Z., Rao, Z.-R., Fang, H.-X., & Gao, M. (2017). Does investor personality moderate the relationship between information sources and trading behavior? Evidence from Chinese stock market. *Managerial Finance*, 43(5), 545–566.
- Terracciano, A., Löckenhoff, C. E., Zonderman, A. B., Ferrucci, L., & Costa Jr, P. T. (2008). Personality predictors of longevity: activity, emotional stability, and conscientiousness. *Psychosomatic Medicine*, 70(6), 621. <https://doi.org/10.1097%2FPSY.0b013e31817b9371>
- Van Winden, F., Krawczyk, M., & Hopfensitz, A. (2011). Investment, resolution of risk, and the role of

affect. *Journal of Economic Psychology*, 32(6), 918–939.
<https://doi.org/10.1016/j.joep.2011.07.007>

Vazifehdooost, H., Akbari, M., & Charsted, P. (2012). The role of psychological traits in market mavensim using big five model. *International Journal of Management and Business Research*, 2(3), 243–252.
https://ijmbr.srbiau.ac.ir/article_563_3da2bbec62633f10a998f24b5f1466b5.pdf

Wardani, A. K., & Lutfi, L. (2017). Pengaruh literasi keuangan, experienced regret, risk tolerance, dan motivasi pada keputusan investasi keluarga dalam perspektif masyarakat Bali. *Journal of Business & Banking*, 6(2), 195–214.
<https://doi.org/10.14414/jbb.v6i2.996>

Wulandari, D. A., & Iramani, R. (2014). Experienced Regret Study, Risk Tolerance, Overconfidence, and Risk Perception in Investment Decision Making. *Journal of Business and Banking*, 4(1), 55.
<https://doi.org/10.14414/jbb.v4i1.293>