

The effect of financial behavior, financial literacy, and macroeconomics on stock investment decision-making in East Nusa Tenggara

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Abstract

Purpose: This study discusses the influence of financial behavior, financial literacy, and macroeconomics on stock investment decision-making in East Nusa Tenggara.

Research Methodology: This research is associative research with a quantitative approach. Distributing questionnaires to 225 investors who were used as research samples collected research data. The data obtained were analyzed by multiple linear regression analysis.

Results: Partially or simultaneously independent variables affect the dependent variable in the form of investment decisions positively and significantly. Only financial literacy does not have a significant influence on investment decisions

Limitations: This research was conducted during the Covid-19 pandemic, where everything that was done in this research was done without meeting directly with the informants. In addition, the variables studied in this study are dynamic and complex in which the results and thoughts can change at any time according to existing conditions.

Contribution: This research becomes scientific information about investor behavior in making investment decisions specifically in the East Nusa Tenggara region.

Keywords: Behavioral Finance, Financial Literacy, Macroeconomics, Investment Decisions

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1. Introduction

The capital market has a strategic role in the economic development of a country. With the capital market, individuals or communities have the opportunity to transfer funds from those who have excess funds to those who need them ([Hartono, 2013](#)). The capital market is also a source of funding for companies through the sale of securities. Investors will respond to securities traded in the capital market by looking at various aspects to be considered for investment decisions ([Ahyyaruddin, Widiarsih, & Winarso, 2017](#)).

The rapid development of investment in the capital market makes financial behavior very important in an investor's decision-making. Investment decision-making for investors will be greatly influenced by

the information obtained and the knowledge of investors about the investment. An investor's investment decisions have been viewed from two sides, namely the extent to which the decision can maximize wealth (economic factors) and behavioral motivation, which is investment decisions based on the psychological aspects of investors ([Christanti & Mahastant, 2011](#)).

An investor in investing should have rational thinking with a tendency to think of increasing wealth from the investments made. An investor will be very active in seeking as much information as possible to add references and develop ideas. The information needed includes company reports, whether financial reports or changes in the composition of the board of directors and so on as well as performance, risk, state of the country's economy, inflation, interest rate conditions, and so on. ([Atmaja, 2008](#)).

A rational investor is an investor who expects a maximum possible profit with a certain risk or a certain profit with a minimum possible risk. Investors' tolerance for risk varies, as stated in several studies that have been conducted, including the research on psychological factors that also affect, where men tend to be overconfident compared to female investors ([Nofsinger, 2005](#)). Investors do not all think rationally in making decisions. Investors in the capital market often show irrational behavior and take actions based on judgment that far deviates from the assumption of rationality ([Suryawijaya, 2003](#)). Therefore, a new concept commonly called behavioral finance emerged.

The behavioral finance concept considers various types of investors in viewing the risks associated with investment decisions. This group tends to be careful in making investment decisions and is more risk-averse. This group is sometimes risk-averse and sometimes risk-takers. Based on the various types of investors, many studies have attempted to investigate the behavior of investors in making investment decisions. Most successful investors often curb their emotions, overcome their behavioral biases, and avoid making the same mistakes ([Baker & Ricciardi, 2014](#)).

An investor's behavior in investing is influenced by factors, such as proximity and experience, comfort, greed, realistic thought, self-confidence, and security as well as profit orientation and emotional factors. Even in making decisions, each of the female and male investors has no different decision-making tendencies ([Lestari & Prayono, 2015](#)).

Overconfidence and rational expectation take a considerable influence on an investor's investment decisions in addition to the economic aspect. However, according to Ahyaruddin and other researchers, other psychological factors also play a role in the decision-making of an investor ([Ahyaruddin et al., 2017](#)).

Does self-control predict financial behavior and financial well-being? According to Camilla Stromback et al, financial behavior and individual well-being have positive values. People who have self-control in investing, for example, saving from the salary they get every month, usually have safe and comfortable thoughts about their future ([Stromback et al, 2017](#)). Investments made in the future may continue to increase over time. It is because investors who are smart in financial management usually have a bright future.

This knowledge of finance is called financial literacy. Financial literacy is knowledge of the basic concepts of finance to be managed so that it can be used as a reference in making effective decisions to obtain financial prosperity in the future ([Budiarto & Susanti, 2017](#)).

Research conducted by several researchers from STIE Perbanas Surabaya regarding the effect of financial literacy, experienced regret, and risk tolerance on the choice of investment type involving 185 respondents states that experienced regret has an influence on the choice of investment type, while financial literacy and risk tolerance have no impact on the choice of investment type ([Putra et al., 2016](#)).

Research conducted by several researchers from the State University of Surabaya regarding the influence of financial literacy, overconfidence, regret aversion bias, and risk tolerance on investment decisions involving 42 respondents with a questionnaire consisting of tests and questions as the measuring instrument states that financial literacy does not have an influence on investment decisions due to financial advice and the category of respondents who are classified as overconfident so that they tend to ignore their knowledge. Meanwhile, overconfidence, regret aversion bias, and risk tolerance variables influence investment decisions ([Budiarto & Susanti, 2017](#)).

Financial behavior is one of the most noticed things but financial literacy is certainly also a matter that must be of special concern to investors, and economic conditions play a role in determining investors' investment decisions. The economic condition of a country must be stable and in prime condition to enable investors to continue to invest in accordance with the type of investment desired.

Macroeconomics, especially inflation and interest rates, has an important role in an investor's investment decisions. Stable or low inflation will help investors in making investments, and so will interest rates, which directly affect people's lives, and they of course have an impact on investment decisions. Several researchers from Mitra Indonesia University in their research entitled "The Effect of Inflation and Interest Rates on Investment in Lampung Province for the 1980-2015 Period" by taking a sample of the last 36 years found that inflation and interest rates had no effect on the investments made. They also mentioned that in their analysis of the determinants, they found evidence that there was only a 36.6 percent of influence on inflation and interest rates, while the rest could be influenced by other economic factors ([Bakti & Alie, 2018](#)).

In terms of making investment decisions, some investors ignore the understanding of real finance. This condition even forced the Capital Market to close earlier than usual. After March 13, 2020, when the Covid-19 pandemic first entered Indonesia, the market was closed quickly due to fears of the spread of the Covid-19 pandemic. This unstable condition tends to make investors afraid in making investment decisions

[Handayani \(2020\)](#) did research on the stock market reaction to the Covid-19 pandemic in Indonesia. Wherein, this research analyzed the market reaction in Indonesia to the Covid-19 pandemic as well as found significant differences in abnormal returns before and after the announcement of the first Covid-19 case in Indonesia. In addition, there were also significant negative cumulative abnormal returns in the tourism, hotel, and restaurant sub-sectors, but there were no significant differences in the pharmaceutical, telecommunications, and food and beverage sub-sectors before and after the announcement of the first Covid-19 case in Indonesia ([Handayani, Hadi, Isbaniah, Burhan, & Agustin, 2020](#)). This, of course, illustrates that trading conditions in several business fields have been affected by the Covid-19 pandemic.

[Junaedi and Salista \(2020\)](#) did research on the impact of the Covid-19 pandemic on the capital market in Indonesia where it aimed to examine the effect of the pandemic on the development of the capital market in Indonesia. The results of the study conclude: The movement of the composite stock index on the Jakarta Stock Exchange is influenced by internal and external conditions. Externally, the Covid-19 pandemic in China and Spain also affected the dynamics of the capital market in Indonesia as well as the dynamics of the stock market in Hong Kong, London, and New York. Meanwhile, the Covid-19 pandemic in Spain as well as the dynamics of the capital markets in Hong Kong and London actually had a positive impact on capital market conditions in Indonesia ([Junaedi & Salista, 2020](#)).

East Nusa Tenggara, in this condition in terms of increasing stock investors for regions that have Stock Exchange Representative Offices, is at number 26 out of 30 provinces. This growth is much better than in Southeast Sulawesi, Central Sulawesi, and Maluku. The Head of the East Nusa Tenggara Indonesian Stock Exchange Representative, Adevi Sabbath Sofani, conveyed this in a short interview conducted by the researchers through the zoom application, which was conducted on February 24, 2021. The Head of the NTT IDX Representative stated that even in the current

conditions, growth did not only occur in NTT but also nationally where the regions of other areas also experienced an increase in stock investors. The following is a graph of the increase in stock investors in NTT from 2019 to 2021:

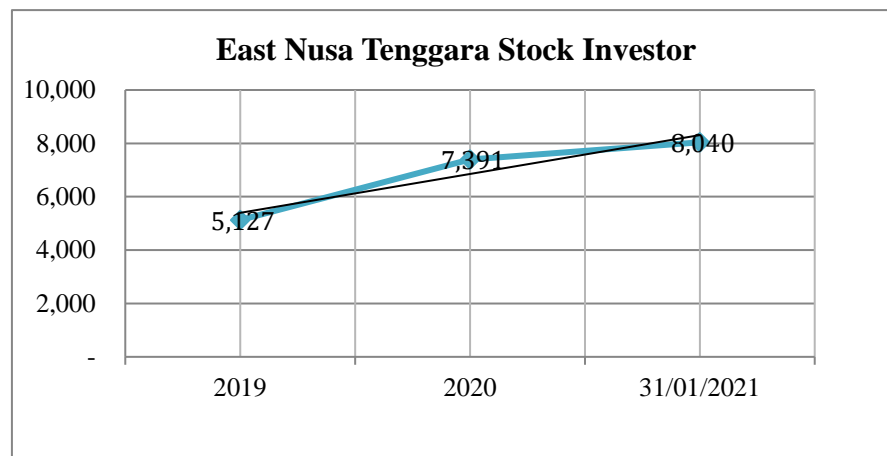


Figure 1. East Nusa Tenggara Stock Investor Growth
Source: East Nusa Tenggara IDX (2021)

Based on the graph, it can be seen that from 2019 until now, investors in East Nusa Tenggara have experienced a very significant increase of 2,913 investors who have joined and this brings the total number of investors in East Nusa Tenggara to 8,040 people. This certainly proves that in this case, the Covid-19 pandemic has no impact on investors' desire to stay and continue to invest in East Nusa Tenggara. This is of course a concern for researchers because this is inversely proportional to many articles related to Indonesia's investment conditions at this time.

However, this is in contrast to the conditions in East Nusa Tenggara where during the current pandemic, local investors have shown a significant increase. In addition, basically, investors, especially investors who avoid risks or even a moderate type of investors in this condition, should change their behavior towards their investment decision-making. So, through this study, the authors wish to conduct research entitled "The Effect of Financial Behavior, Financial Literacy, and Macroeconomics on Stock Investment Decision Making in East Nusa Tenggara".

2. Literature review

Investment decision

Investment is the placement of funds in the present market with the hope of generating profits in the future. In investing, investors need information, which is an important factor as the basis for determining investment choices ([Lubis et al., 2013](#)). Some investors make investments and this depends on each individual. The reason people invest is for a more decent life in the future, to reduce inflationary pressures, and to encourage tax savings ([Tandelilin, 2010a](#)).

Investment decisions are decisions to buy, sell, or maintain share ownership ([Puspitaningtyas, 2012](#)). Every investor who will make investment decisions must go through several previous processes. In general, the investment process includes five steps, namely determining investment objectives, revising portfolio performance, evaluating portfolio performance, conducting analysis, and forming portfolios ([Halim, 2005](#)). Investment decisions are policies taken on two or more investment alternatives in the hope of getting profits in the future ([Tandelilin, 2010a](#)).

Investors in making investment decisions need information, which is an important factor as the basis for determining investment choices. From the available information, a decision-making model in the form of investment appraisal criteria to allow investors to choose the best investment among the available investment alternatives is formed ([Lubis et al., 2013](#)). There are other factors that can

influence investment decisions that can be seen from demographic variables, such as gender, age, income level, and education level ([Lewellen et al., 1977](#)).

Stock

Shares or stocks are proof of owning a company whose owners are also called shareholders or stockholders. Evidence that a person or a party can be considered as a shareholder is if he/she is already registered as a shareholder in a book called the Register of Shareholders and can also be seen on the back of the share sheet that whether his/her name has been registered by the company (issuer) or not. In general, the Register of Shareholders is presented a few days before the General Meeting of Shareholders is held and each party can view the Register of Shareholders.

Types of stocks are divided into 2 types based on the receipt of rights ([Samsul, 2006](#)):

- a. Preferred Stock
Type of stock that has a pre-emptive right to receive cumulative profits. Cumulative rights are rights to get profits that are not distributed in a year that experiences a loss but will be paid in a year that experiences a profit so that the preferred stock will receive twice the profit. This privilege will be granted to preferred stockholders because they are the ones who supply funds to the company when it is experiencing financial difficulties.
- b. Common Stock
Type of stock that will receive profits after the preference share profits are paid. If the company goes bankrupt, it is the common stockholders who suffer first. The calculation of the stock price index is based on the price of the common stock.

Financial behavior

Financial behavior is a behavior related to financial applications. Behavioral finance is a discipline in which the interaction of various disciplines is embedded and continuously integrated so that the discussion is not isolated. Someone who wants to study financial behavior must have an understanding of aspects of psychology, sociology, and finance ([Ricciardi, 2000](#)).

Behavioral finance is also defined as a study that studies how psychological phenomena affect financial behavior ([Shefrin, 2000](#)). In this case, financial behavior is also defined as studying how humans actually behave in a financial setting. In particular, it is about studying how psychology affects financial decisions, companies, and financial markets ([Nofsinger, 2001](#)).

A research that has been done by several experts states that a person's financial behavior will be seen by how well a person manages savings and other expenses. Meanwhile, related savings have regular savings or not, emergency funds or not, and many others ([Hilgert et al., 2003](#)). It is stated that the indicators of financial behavior are a) paying bills on time, b) making expense and expenditure budgets, c) recording expenses and expenditures (daily, monthly, etc.), d) providing funds for unexpected expenses, e) Saving periodically, and f) comparing prices between shops or supermarkets before deciding to make a purchase ([Nababan, 2012](#)).

The behavioral finance concept states that investment decisions made by investors consider non-economic aspects, especially psychological aspects that can influence investor behavior. This is because investors in reality often take actions based on judgment and contradict the theory that has been put forward in the capital market regarding the assumption of rationality. The market may react quickly to information (as required in the Efficient Market Hypothesis), but the effect of this reaction may be more influenced by elements of subjectivity, emotion, and various other psychological factors ([Suryawijaya, 2003](#)).

The behavioral finance concept considers various types of investors in viewing the risks associated with investment decisions. This group tends to be careful in making investment decisions and is more risk-averse. This group is sometimes risk-averse and sometimes risk-takers. Based on the various types of investors, many studies have attempted to investigate the behavior of investors in making investment decisions. This is what was later revealed in the behavioral finance concept that many

investors tend to deviate from the assumption of rationality and consider non-economic aspects (psychological aspects) in making investment decisions ([Suryawijaya, 2003](#)).

Behavioral finance was also discussed by [Tilson \(2005\)](#), which is a theory based on psychology that seeks to understand how emotions and cognitive deviations affect investor behavior. [Ritter \(2003\)](#) argued that behavioral finance was behavior based on psychology that influenced the decision process that was subject to some cognitive illusions. These illusions are divided into two groups, namely illusions caused by heuristic decision processes and illusions adopted from mental frames in prospect theory ([Waweru et al., 2008](#)). Other financial behaviors that also emerge and influence investors' decisions related to investment performance are herding and market factors ([Luong and Ha, 2011](#)).

Financial literacy

Financial literacy is knowledge of basic financial concepts and financial products to be managed so that they can be used as a reference in making effective decisions to obtain financial prosperity in the future ([Angga, 2017](#)). Financial literacy in this case is closely related to financial management individually or personally, which includes investment decisions, funding, and good asset management. Financial knowledge is very important to improve living standards and behavior patterns in order to have good planning for the future. Choosing a variety of general investments, such as stocks, bonds, houses, and various other alternatives do invest sources of income earned by individuals.

Financial knowledge has an additional application dimension, which means that one must have the ability and confidence to use financial knowledge to make financial decisions. When developing tools to measure financial knowledge, it is important to determine not only if one knows the information but also if he/she can apply it appropriately ([Huston, 2010](#)). Sufficient financial literacy will have a positive influence on a person's financial behavior, such as managing or allocating his/her finances appropriately ([Robb and Woodyard, 2011](#)).

Financial literacy helps in providing an understanding of managing finances and opportunities to achieve a more prosperous life in the future. Financial literacy is very important for someone in making decisions, especially those related to daily activities, such as making decisions to save or invest to achieve predetermined goals. There are still many people who do not realize the importance of having financial management in their personal lives because people still think that people who have high incomes only do personal financial investment planning. However, on the other hand, there are also individuals who have high incomes but do not have investment plans for their personal finances ([Pritazahara & Sriwidodo, 2015](#)).

Shockey himself stated that financial literacy could be seen from the three-dimensional score commonly called ABK, namely financial attitude, financial behavior, and financial knowledge ([Shockey, 2002](#)). When someone has a good level of financial literacy, he/she is able to make better financial decisions, is confident in making investment decisions, is able to change investment strategies appropriately, and has an improving financial situation ([Garman, Kim, Kratzer, Brunson, & Joo, 1999](#)). Meanwhile, poor financial literacy makes a person have the wrong opinion and make wrong decisions in basic knowledge, saving, and borrowing as well as in investment ([Chen & Volpe, 1998](#)).

Macroeconomics

Economics comes from the Greek word *oikos*, which means family (household), and *nomos*, which means regulation, rule, or law. In general, the word economy is defined as the rules of the household or the management of the household or state. Xenophon first introduced the term or word economics in 427 BC and the term he put forward in his work was entitled *Oikonomikus* ([Nazir, 2009](#)).

According to Samuelson, economics is a study of how people and society make choices, with or without the use of money, by using limited resources but can be used in various ways to produce various types of goods and services and distribute them for consumption, now and then in the future,

to various people and community groups ([Putong, 2013](#)). Mankiw said that economics was the study of how people managed resources that were always limited or scarce ([Putong, 2013](#)).

Economics is divided into two fields of science, namely macroeconomics and microeconomics. The difference between the two types of economics lies in the discussion carried out by each economics science. In Microeconomics, it discusses more price theories in which there are companies and industry, production theory, cost theory, revenue theory, profits and benefits, market theory, wage theory, and factors of production. It contains Aggregate National Income, Economic Growth, Inflation and Unemployment, Balance of Payments, Employment Opportunities, and Overall/Total Investment ([Putong, 2013](#)).

Macroeconomics, according to Mankiw's view, is a study of the economy as a whole, trying to answer questions related to income growth, poverty, inflation, price stability, recession, depression, unemployment, and others. The relationship studied in macroeconomics is a causal relationship between aggregative (overall) variables. Among the variables in question are the level of national income, household consumption, national investment (government and private), savings rate, government spending, general price levels, the balance of payments (exports and imports), and others ([Putong, 2013](#)).

The purpose of this science is to understand economic events or phenomena and to improve economic policies. Here, we can get an idea that macroeconomics is a useful method to help develop ideas about how to work and improve economic conditions ([Putong, 2013](#)). The macroeconomic environment is an environment that can affect a company's day-to-day operations. The ability of investors to understand and predict changes in macroeconomic conditions in the future will be useful for making investment decisions that will be made ([Tandelilin, 2010b](#)). Several macroeconomic factors that have an influence on investment in a country are GDP, inflation, interest rates, the rupiah exchange rate, budget deficit, private investment, and the balance of trade and payments ([Artaya, Purbawangsa, & Artini, 2014](#)).

Covid-19 Pandemic

The Covid-19 outbreak started in Wuhan, China. On December 31, 2019, the WHO's Country Office in China reported a case of pneumonia of unknown etiology in Wuhan City, Hubei Province, China. On January 7, 2020, China identified pneumonia of unknown etiology as a new type of coronavirus (coronavirus disease, or Covid-19). On January 30, 2020, WHO declared it a Public Health Emergency of International Concern (KKMMD/PHEIC). The increase in the number of Covid-19 cases was happening quite quickly and had spread between countries ([CDC, 2020](#)).

On May 8, 2020, Worldometer reported a total of more than 4.09 million confirmed cases and 276,000 deaths (CFR 6.9 percent) of which cases were reported in 212 countries/regions. The main world epicenters are the United State of America, Spain, Italy, France, Germany, the UK, Iran, Turkey, China, Russia, Brazil, and Belgium. Among these cases, there have been thousands of health workers who were reported to be infected and died. As of April 30, the Covid-19 Pandemic again showed an easing in the growth of deaths. Meanwhile, the case growth has increased again. The number of affected countries also increased from 210 to 212 countries.

Sources of information compiled by Worldometer until Friday (5/1) morning reported that globally, there were 3,303,850 cases and 233,813 deaths. The daily number of cases increased from 81,678 to 85,272. So, in the case of Covid-19, there was a growth of 3,594 new cases per day. Meanwhile, the daily death rate fell again from 6,593 to 5,793 people. The rate of decline in deaths was about 800 people per day. Worldometer statistics showed a significant increase in cases in the US, UK, Russia, Japan, Chile, Czech Republic, Ghana, Portugal, Peru, France, Qatar, Maldives, Kazakhstan, Belgium, Netherlands, Panama, Afghanistan, Sweden, Indonesia, Ukraine, and Dominica. Meanwhile, the decrease in cases was significant in Spain, Belarus, Bangladesh, Brazil, Turkey, Italy, Poland, Tanzania, Mexico, Singapore, Ecuador, Germany, Nigeria, Romania, Bosnia, Iran, Colombia, Finland, Oman, South Africa, Argentina, Algeria, and Malaysia.

Cumulatively, the 10 epicenter countries of the Covid-19 pandemic are the US (1,095,019 cases and 63,656 deaths), Spain (239,639 cases and 24,543 deaths), Italy (205,463 cases and 27,967 deaths), the UK (171,253 cases and 26,771 deaths), France (167,178 cases and 24 376 deaths), Germany (163,009 cases and 6,623 deaths), Turkey (120,204 cases and 3,174 deaths), Russia (106,498 cases and 1,073 deaths), Iran (94,640 cases and 6,028 deaths), Brazil (85,380 cases and 5,901 deaths), and China (82,862 cases and 4,633 deaths). Below China, there are Canada, Belgium, the Netherlands, India, Peru, and Switzerland with a range of 30-55 thousand cases ([Junaedi 2020](#)).

As reported by the media, both inside and outside were horrified; the Covid-19 outbreak became a pandemic towards the end of February. Rapid transmission occurred in early March. In two weeks, the number of cases soared from tens of thousands on March 14 to 70 thousand cases per day at the end of March. During April to early May 2020 period, the number of cases increased every day, never less than 75 thousand cases. It reached its peak on April 24, 2020, with more than 105,000 cases. Then, it slowly dropped all the way down to 90,000, 80,000, and started to slope down to 75,000 cases. Although it was still fluctuating, there was a downward trend in the number of cases entering May 2020, along with the arrival of the fasting month of Ramadan 1441 H for Muslims. The number of daily deaths also began to increase rapidly into the second half of March 2020. More than 600 deaths as of March 15 shot up to around 5,000 deaths as of early April. Throughout April, the death toll continued to rise until it peaked on April 17 with 8,341 deaths.

The death toll then fell again to the level of 7,000 deaths in the 4th week of April and in early May, it was already at the level of 5,000 deaths, which was similar to the conditions in early April. Like daily cases, the largest daily deaths generally occur in the main epicenters of the Covid-19 pandemic, including the US, Spain, Italy, France, Britain, Germany, Iran, Turkey, China, Russia, and Brazil. Russia and Brazil are among the countries that have recently become epicenters of Covid-19 transmission.

Research frameworks and hypothesis

Of course, the decisions taken in investing are largely determined by the psychological conditions at the time where this phenomenon affects the financial behavior of the investors themselves, so, based on this study, the researchers want to see financial behavior based on 6 indicators, including Representativeness, Availability Bias, Overconfidence, Regret Aversion, Loss Aversion, and Mental Aversion. Financial behavior is not the only thing that is considered to be able to influence investor decision-making. Financial literacy or what is commonly known as individual financial understanding regarding existing financial institutions is also important in making an investor's decision. Of course, external factors from investors themselves are also important things to consider, such as macroeconomics, which also needs to be considered in making investors' investment decisions, especially in the conditions of inflation, interest rates, and the rupiah exchange rate. The moderating variable itself is referred to as another variable that may affect the independent variable with the dependent variable. Therefore, the moderating variable is also called the contingency variable ([Indriantoro et al., 2018](#)). The variables in this study are illustrated in the framework of thinking that is formed as follows:

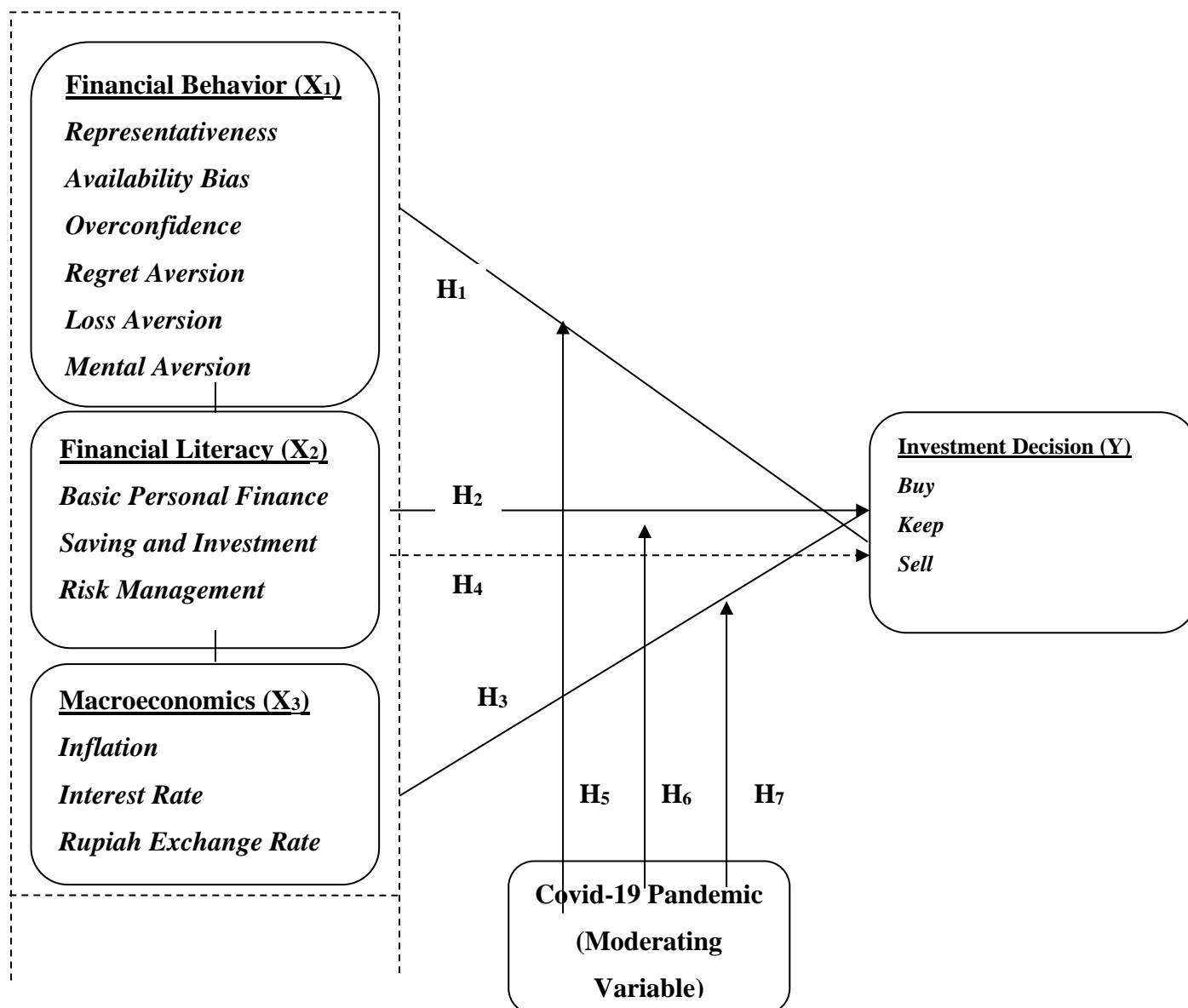


Figure 1. Framework

3. Research methodology

This type of research is associative research with a quantitative approach. It means that this research examines the causal relationship between several variables by measuring the research data in the form of numbers. The population in this study is the people of East Nusa Tenggara who are registered as investors on the East Nusa Tenggara IDX (Indonesia Stock Exchange) as many as 8,040 people. The sampling technique used in this study is probability sampling. Non-probability sampling is a sampling technique that provides equal opportunities for each element (member) of the population selected to be a member of the sample. Meanwhile, the technique used is a purposive sampling technique, namely a sampling technique with certain considerations ([Sugiyono, 2010](#)). The category used in this study for the purposive sampling technique is a heterogeneous or maximum sample, where sampling varies depending on the assessment of researchers with diverse characteristics. The number of samples is also highly dependent on other factors, such as costs, facilities, available time, existing or willing population to be sampled, and research objectives ([Soeratno and Lincoln, 2003](#)). In this study,

the total number of samples taken by the study was 225 investors, taking into account the number of questionnaires that had been returned to the researcher until the final day of distributing the questionnaires. The distribution of questionnaires to pre-defined respondents was carried out for data collection. The data obtained were then processed and analyzed by the multiple linear regression method.

4. Results and discussions

Descriptive analysis

The tabulated data correspond to the responses in the research questionnaire. In managing the research data, the questions were scored from one to five with information that one meant strongly disagree (SD), two meant disagree (D), three meant somewhat disagree (SMD), four meant agree (A), and five meant strongly agree (SA). The descriptive analysis for each variable is described as follows.

Financial Behavior Variable (X1)

The measurement of the Financial Behavior variable used six indicators, where each indicator was proxied into questions so that they could be recapitulated and tabulated. The results are as follows:

Table 1. Distribution of Respondents' Answers East Nusa Tenggara Stock Investors on Financial Behavior 2021

No.	Indicator	Questions	Answer					Mean	Standard Deviation	Indicator Achievement (%)
			SA	A	SMD	D	SD			
1	X1.1	X1.1.1	165	54	5	1	0	4.7	0.53	83.91
2		X1.1.2	105	94	22	3	1	4.33	0.743	
3		X1.1.3	42	81	73	18	11	3.56	1.038	
4	X1.2	X1.2.1	120	86	13	4	2	4.41	0.758	78.25
5		X1.2.2	61	69	55	28	12	3.62	1.163	
6		X1.2.3	54	73	79	16	3	3.71	0.956	
7	X1.3	X1.3.1	97	98	22	6	2	4.25	0.809	80.15
8		X1.3.2	85	74	45	13	8	3.96	1.064	
9		X1.3.3	56	87	67	14	1	3.81	0.897	
10	X1.4	X1.4.1	77	81	43	17	7	3.91	1.054	71.26
11		X1.4.2	46	48	66	42	23	3.23	1.257	
12		X1.4.3	52	65	77	17	14	3.55	1.113	
13	X1.5	X1.5.1	42	77	85	14	7	3.59	0.965	79.08
14		X1.5.2	62	98	53	11	1	3.93	0.863	
15		X1.5.3	114	83	20	7	1	4.34	0.804	
16	X1.6	X1.6.1	169	45	9	2	0	4.69	0.589	89.16
17		X1.6.2	139	73	8	5	0	4.54	0.675	
18		X1.6.3	80	108	29	5	3	4.14	0.822	

Source: Primary Data (2021)

The table above shows that the respondents' answers to financial behavior are proxied into 5 rating scales with a total of 18 question items, most of which indicate that they agreed with the indicators listed in this study. The standard deviation of the financial behavior variable for all questions shows a value that is smaller than the mean value, which means that all of them can be used as a representation of the overall data in this study. The achievement indicators owned by each variable show a good presentation, where the indicator for the question of representativeness (X1.1) has an achievement value of 83.91 percent, the availability bias indicator (X1.2) has an achievement value of 78.25

percent, over confidence indicator (X1.3) has an achievement value of 80.15 percent, regret aversion indicator (X1.4) has an achievement value of 71.26 percent, loss aversion indicator (X1.5) has an achievement value of 79.08 percent, and mental aversion indicator (X1.6) has an achievement value of 89.16 percent.

Financial Literacy Variable (X2)

The measurement of the financial literacy variable used three indicators, where each indicator was proxied into questions so that they could be recapitulated and tabulated. The results are as follows:

Table 2. Distribution of Respondents' Answers East Nusa Tenggara Stock Investors on Financial Literacy 2021

No.	Indicator	Questions	Answer					Mean	Standard Deviation	Indicator Achievement (%)
			SA	A	SMD	D	SD			
1	X2.1	X2.1.1	128	85	10	1	1	4.50	0.649	89.07
2		X2.1.2	119	76	23	7	0	4.36	0.791	
3		X2.1.3	129	79	16	1	0	4.49	0.649	
4	X2.2	X2.2.1	103	82	29	5	6	4.20	0.937	86.04
5		X2.2.2	103	96	18	5	3	4.29	0.815	
6		X2.2.3	118	87	16	2	2	4.41	0.739	
7	X2.3	X2.3.1	136	79	7	2	1	4.54	0.647	87.91
8		X2.3.2	100	98	23	4	0	4.31	0.725	
9		X2.3.3	109	90	20	5	1	4.34	0.769	

Source: Primary Data (2021)

Table 2 shows that the respondents' answers to financial literacy are proxied into 5 rating scales with a total of 9 question items, most of which indicate that they agreed with the indicators listed in this study. The standard deviation of the financial literacy variable for all questions shows a value that is smaller than the mean value, which means that all of them can be used as a representation of the overall data in this study. The achievement indicators owned by each variable show a good presentation, where for the Basic Personal Finance question indicator (X2.1), the achievement value is 89.07 percent, the next, saving & investment indicator (X2.2) is 86.04 percent, and the risk management indicator (X2.3) is 87.91 percent.

Macroeconomics Variable (X3)

The measurement of macroeconomics variable used three indicators, where each indicator was proxied into questions so that they could be recapitulated and tabulated. The results are as follows:

Table 3. Distribution of Respondents' Answers East Nusa Tenggara Stock Investors on Macroeconomics 2021

No.	Indicator	Questions	Answer					Mean	Standard Deviation	Indicator Achievement (%)
			SA	A	SMD	D	SD			
1	X3.1	X3.1.1	67	113	36	5	4	4.04	0.842	77.1
2		X3.1.2	64	97	52	9	3	3.93	0.891	
3		X3.1.3	40	85	74	20	6	3.59	0.969	
4	X3.2	X3.2.1	63	120	31	11	0	4.04	0.784	76.65
5		X3.2.2	53	84	68	18	2	3.75	0.973	
6		X3.2.3	43	91	74	16	1	3.71	0.873	

7	X3.3	X3.3.1	58	108	50	8	1	3.95	0.814	78.96
8		X3.3.2	57	108	50	9	1	3.94	0.821	
9		X3.3.3	64	101	47	12	1	3.96	0.865	

Source: Primary Data (2021)

Table 3 shows that the respondents' answers to macroeconomics are proxied into 5 rating scales with a total of 9 question items, most of which indicate that they agreed with the indicators listed in this study. The standard deviation of macroeconomics variable for all questions shows a value that is smaller than the mean value, which means that all of them can be used as a representation of the overall data in this study. The achievement of indicators owned by each variable shows a good presentation, where for the Inflation question indicator (X3.1), the achievement value is 77.10 percent, then the interest rates indicator (X3.2) is 76.65 percent, and the rupiah exchange rate indicator (X3.3) is 78.96 percent.

Investment Decision Variable (Y)

The measurement of the investment decision variable used three indicators, where each indicator was proxied into questions so that they could be recapitulated and tabulated. The results are as follows:

Table 4. Distribution of Respondents' Answers East Nusa Tenggara Stock Investors on Investment Decision 2021

No.	Indicator	Question	Answer					Mean	Standard Deviation	Indicator Achievement (%)
			SA	A	SMD	D	SD			
1	Y.1	Y.1.1	55	67	60	33	10	3.55	1.141	81.24
2		Y.1.2	107	92	22	3	1	4.34	0.745	
3		Y.1.3	101	96	23	4	1	4.30	0.759	
4	Y.2	Y.2.1	37	73	84	26	5	3.49	0.973	67.44
5		Y.2.2	33	62	75	45	10	3.28	1.080	
6		Y.2.3	34	68	76	35	12	3.34	1.079	
7	Y.3	Y.3.1	83	72	48	18	4	3.94	1.031	74.46
8		Y.3.2	36	81	70	27	11	3.46	1.052	
9		Y.3.3	64	85	50	19	7	3.80	1.044	

Source: Primary Data (2021)

Table 4 shows that respondents' answers to investment decisions are proxied into 5 rating scales with a total of 9 question items, most of which indicate that they agreed with the indicators listed in this study. The standard deviation of the investment decision variables for all questions shows a value that is smaller than the mean value, which means that all of them can be used as a representation of the overall data in this study. The achievement of indicators owned by each variable shows a good presentation, where for the question Buy indicator (Y.1), the achievement value is 81.24 percent, then keep indicator (Y.2) is 67.44 percent, and sell indicator (Y.3) is 74.46 percent.

Covid-19 Pandemic Variable (Z)

The measurement of the Covid-19 pandemic variable is a moderating variable, which does not use indicators. This variable was proxied into questions so that it could be recapitulated and tabulated. The results are as follows:

Table 5. Distribution of Respondents' Answers East Nusa Tenggara Stock Investors on the Covid-19 Pandemic 2021

No.	Indicator	Question	Answer					Mean	Standard Deviation	Indicator Achievement (%)
			SA	A	SMD	D	SD			
1	Z	Z.1	79	87	45	10	4	4.01	0.945	74.7
2		Z.2	77	90	48	6	4	4.02	0.909	
3		Z.3	41	78	86	16	4	3.6	0.925	

Source: Primary Data (2021)

Table 5 shows that the respondents' answers to the Covid-19 pandemic are proxied into 5 rating scales with a total of 3 question items, most of which indicate that they agreed with the indicators listed in this study. The standard deviation of the Covid-19 pandemic variable for all questions shows a value that is smaller than the mean value, which means that all of them can be used as a representation of the overall data in this study. The achievement indicator owned by this variable shows a good value where the value is 74.70 percent.

Multiple Linear Regression Analysis

The effect of financial behavior, financial literacy, and macroeconomics on stock investment decisions in East Nusa Tenggara was analyzed using the SPSS version 25 program with the results of multiple linear regression equations as follows:

Table 6. Multiple Linear Regression Analysis Results

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	3.268	3.094	0	1.056	0.292
	TOTAL_X1	0.195	0.044	0.292	4.386	0.000
	TOTAL_X2	0.138	0.079	0.109	1.741	0.083
	TOTAL_X3	0.308	0.062	0.322	4.979	0.000

a. Dependent Variable: TOTAL_Y (Investment Decision)

b. TOTAL_X1:Financial Behavior

c. TOTAL_X2:Financial Literacy

d. TOTAL_X3:Macroeconomics

Source: Data processed with SPSS

$$Y = 3.268 + 0.195X_1 + 0.138X_2 + 0.308X_3$$

This equation has the meaning:

1) Constant = 3.268

If the variables of financial behavior, financial literacy, and macroeconomics are equal to zero, then the investor's decision variable is 3.268.

2) Coefficient X1 = 0.195

If the financial behavior variable increases by one point (unit), while financial literacy and macroeconomics remain constant, then it can be said that investment decisions will increase by 0.195.

3) Coefficient X2 = 0.138

If the financial literacy variable increases by one point (unit), while financial behavior and macroeconomics remain constant, then it can be said that investment decisions will increase by 0.138.

4) Coefficient X3 = 0.308

If the macroeconomics variable increases by one point (unit), while financial behavior and financial literacy remain constant, then it can be said that investment decisions will increase by 0.308.

Hypothesis testing

T-test (Partial Test) on X_1 , X_2 , and X_3

The variables tested in this study were X_1 (Financial Behavior), X_2 (Financial Literacy), and X_3 (Macroeconomics). From testing using SPSS, the output that appears is listed in Table 6 with the results for the t-test as follows:

- 1) The Effect of Financial Behavior on Investment Decisions
The results of statistical testing with SPSS on the Financial Behavior variable (X_1) obtained a t-count of 4.386 with a significance level of 0.000. Meanwhile, the value of t-table is 1.96 (df = 225-3-1). If it is seen that the significance level of X_1 is $0.000 < 0.05$ and the t-count is $4.386 > 1.96$, then it can be said that partially, financial behavior has a positive and significant effect on investor decisions. So, hypothesis 1 is **accepted**.
- 2) The Effect of Financial Literacy on Investment Decisions
The results of statistical testing with SPSS on the Financial Literacy variable (X_2) obtained a t-count of 1.741 with a significance level of 0.083. Meanwhile, the value of t-table is 1.96 (df = 225-3-1). If it is seen that the significance level of X_2 is $0.083 > 0.05$ and the t-count is $1.741 < 1.96$, then it can be said that partially, financial literacy does not have a positive and significant effect on investor decisions. So, hypothesis 2 is **rejected**.
- 3) The Effect of Macroeconomics on Investment Decisions
The results of statistical testing with SPSS on the Macroeconomics variable (X_3) obtained a t-count of 4.979 with a significance level of 0.000. Meanwhile, the value of t-table is 1.96 (df = 225-3-1). If it is seen that the significance level of X_3 is $0.000 < 0.05$ and the t-count is $4.979 > 1.96$, then it can be said that partially, macroeconomics has a positive and significant effect on investor decisions. So, hypothesis 3 is **accepted**.

F-test (simultaneous test) on X_1 , X_2 , and X_3 against Y

The F-test was conducted to test the three X variables, namely financial behavior, financial literacy, and macroeconomics that simultaneously affect investment decisions. The F-test is carried out with criteria that if the hypothesis is accepted if F-count is greater than F-table, or the significance level is less than $p < \alpha$, and vice versa. From testing using SPSS, the output that appears is as follows:

Table 7. F-test results on X_1 , X_2 , and X_3 against Y

Model		Sum of Square	Df	Mean Square	f	Sig.
1	Regression	2.236.144	3	745.381	41.038	0.000
	Residual	4014.096	221	19.163		
	Total	6250.240	224			

a. Dependent Variable: TOTAL_Y (Investment Decision)

b. Predictors: (Constant), TOTAL_X3, TOTAL_X2, TOTAL_X1

Source: Data processed with SPSS

The results of calculations using the SPSS program in table 7 show the F-count value of 41.038 with a significance value of 0.000. Meanwhile, the value of F-table is 1.32 (df₁ = 4-1 = 3; df_N = 225-3 = 222) with alpha of 5 percent or 0.05. So, F-count > F-table is $41.038 > 1.32$ with a significance value of $0.000 < 0.05$. So, it can be said that the variables of financial behavior, financial literacy, and macroeconomics have a positive and significant impact on investment decisions. Thus, hypothesis 4 is simultaneously **accepted**.

T-test (Partial Test) on X₁Z, X₂Z, and X₃Z

This t-test was conducted to test each of the variables X₁Z, X₂Z, and X₃Z. From testing using SPSS, the output that appears is as follows:

Table 8. T-test of moderated variable X₁Z

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	36.227	12.921	0	2.804	0.006
	TOTAL_X1	-0.128	0.179	-0.191	-0.715	0.476
	TOTAL_Z	2.014	1.081	-0.812	-1.863	0.064
	X1Z	0.035	0.015	1.381	2.405	0.017

a. Dependent Variable: TOTAL_Y (Investment Decision)

b. TOTAL_X1: Financial Behavior

c. TOTAL_Z: Covid-19 pandemic

Source: Data processed with SPSS

The results of statistical testing with SPSS on the variable X₁Z (Financial Behavior) with Covid-19 as the moderator variable obtained a t-count value of 2.405 with a significance level of 0.017. Meanwhile, the value of t-table is 1.96 (df = 225-3-1). If we look at the X₁Z significance level of X₁Z of $0.017 < 0.05$ and the t-count value of $2.405 > 1.96$, then it can be said that partially, financial behavior moderated by the Covid-19 pandemic has a positive and significant effect on investment decisions. So, it means that hypothesis 5 is **accepted**.

Table 9. T-test of the moderated variable X₂Z

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	36.395	13.964	0	2.606	0.010
	TOTAL_X2	-0.269	0.350	-0.214	-0.766	0.444
	TOTAL_Z	-1.669	1.255	-0.673	-1.330	0.185
	X2Z	0.059	0.031	1.211	1.891	0.060

a. Dependent Variable: TOTAL_Y (Investment Decision)

b. TOTAL_X2: Financial Literacy

c. TOTAL_Z: Covid-19 pandemic

Source: Data processed with SPSS

The results of statistical testing with SPSS on the variable X₂Z (Financial Literacy) with Covid-19 as the moderator variable obtained a t-count value of 1.891 with a significance level of 0.060. Meanwhile, the value of t-table is 1.96 (df = 225-3-1). If we look at the X₂Z significance level of X₂Z of $0.060 > 0.05$ and the t-count value of $1.891 > 1.96$, then it can be said that partially, financial literacy moderated by the Covid-19 pandemic does not have a positive and significant effect on investment decisions. So, it means that hypothesis 6 is **rejected**.

Table 10. T-test of Moderated variable X3Z

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	27.470	8.456	0	3.249	0.001
	TOTAL_X3	-0.001	0.253	0.001	0.003	0.997
	TOTAL_Z	-0.713	0.698	-0.288	-1.022	0.308
	X2Z	0.035	0.020	0.774	1.722	0.087

a. Dependent Variable: TOTAL_Y (Investment Decision)

b. TOTAL_X3: Macroeconomics

c. TOTAL_Z: Covid-19 pandemic

Source: Data processed with SPSS

The results of statistical testing with SPSS on the variable X3Z (Macroeconomics) with Covid-19 as the moderator variable obtained a t-count value of 1.722 with a significance level of 0.087. Meanwhile, the value of t-table is 1.96 (df = 225-3-1). If we look at the X3Z significance level of $0.087 > 0.05$ and the t-count value of $1.722 < 1.96$, then it can be said that partially, the macroeconomics moderated by the Covid-19 pandemic has no positive and significant effect on investment decisions. So, it means that Hypothesis 7 is **rejected**.

Determinant Coefficient (R^2)

The determinant coefficient is used to see how much effect the variables of financial behavior, financial literacy, and macroeconomics have on the investment decision variable. The measurement results can be seen as follows:

Table 11. The Effect of X1, X2, and X3 on Y

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.598	0.358	0.349	04.262

a. Predictors: (Constant), TOTAL_X3, TOTAL_X2, TOTAL_X1

Source: Data processed with SPSS

The result of the analysis of the determinant coefficient in this study is to produce an R Square value of 0.358, so it can be said that the relationship between financial behavior, financial literacy, and macroeconomics variables has a fairly weak relationship to investment decision variable.

In table 13, the R Square value is $0.358 = 35.8$ percent. This means that the magnitude of the effect of financial behavior, financial literacy, and macroeconomics variables on investment decision variables is 35.8 percent, while the remaining 64.2 percent is influenced by other factors outside Research Model.

Discussion on the Effect of Financial Behavior on Investment Decisions

Investors think more about the image of the company where they invest; this good company image makes them think that their funds will be safe with the company. Investors tend to sell their shares if in the future there are problems that affect the image of the company where they place their funds. Investors before placing their funds will see the condition of the company's portfolio, whether the company has good reporting and is in accordance with the public image they have or not. Investors

tend to also perform analysis by estimating future profits using the portfolio data; they will assume future profits from the company, which will certainly affect their stock position. This of course also has the effect that investors with high confidence will be more daring in making decisions while investors with low confidence tend to be cautious in their decisions. Investors will show their regret if they experience losses and they sometimes refuse to sell stocks that are experiencing a decline and wait for them to go up (regret aversion). Investors will feel that if they sell a stock at its current low value and find that the next day, the value of the stock increases, then their loss will be huge. In this case, investors will maintain their shares which have decreased if the company is included in the blue-chip ranks because investors believe that even though the company's condition is declining today, the next day this company will bring big profits. Investors will do careful calculations and will not hesitate to take a selling decision on the company.

Discussion on the Effect of Financial Literacy on Investment Decisions

Financial literacy itself is closely related to financial management personally and this includes good investment decisions, funding, and asset management. A good financial understanding will have a positive influence on what people will do about their money, such as managing and allocating their money appropriately ([Robb & Woodyard, 2011](#)).

The existing theory is related to financial literacy where the indicators used in this research are basic personal finance, saving and investment, and risk management. Individual investors sometimes lack an understanding of the existing financial conditions. They tend to only see the profit position of the company without understanding the condition of the company's asset value and so on. Investors usually use funds that should be used as funds for their daily consumption as funds that will be used to invest in the hope that this investment will become one of their livelihoods to survive amid the existing economic conditions. Investors are vulnerable in managing their individual financial risks; investors are rarely interested in controlling this risk, which should be done. Most investors only understand about risk management for the company, but individual risk management can actually help them in making investments with good returns in the future

Discussion on the Effect of Macroeconomics on Investment Decisions

Macroeconomics is a comprehensive study of income growth, poverty, inflation, price stability, recession, depression, unemployment, interest rates, rupiah exchange rates, and so on ([Putong, 2013](#)). The ability of investors to understand and predict changes in macroeconomic conditions in the future will be useful in making investment decisions that they will make ([Tandelilin, 2010a](#)).

In this study, investors as a whole agree that inflation conditions affect investors' decisions to invest. Investors believe that inflation that arises will affect the condition of the company, whether the company where they invest is ready for these conditions or not. Rising inflation rates can affect economic stability, including threatening company finances which will eventually cause "stuttering" in the company and will end in losses. Changes in interest rates made by Bank Indonesia also have an influence on investment decisions where if the interest rate declines due to declining economic growth, then this will increase existing investment.

Discussion on the Effect of Financial Behavior, Financial Literacy, and Macroeconomics on Investment Decisions

Simultaneous test results in this study indicate that financial behavior, financial literacy, and macroeconomics have a positive effect on investors' investment decisions with an F-count of 41.038 where the effect value is 35.8 percent and the rest is influenced by other variables not examined in this study. Financial behavior variables not examined in this study include anchoring, gambler's fallacy, herding theory, and other indicators of financial behavior. Financial literacy variables not examined in this study are money management, credit and debt management, and other financial literacy indicators. Then, macroeconomics variables themselves include infrastructure, government policies, taxation, and other indicators.

Discussion on the Effect of Financial Behavior on Investment Decisions Moderated by the Covid-19 Pandemic

The results of statistical testing with SPSS on the variable X1Z (Financial Behavior variable with Covid-19 as the moderator variable) obtained a t-count of 2.405. Partially, the financial behavior variable moderated by the Covid-19 pandemic has a positive and significant effect on investor decisions. This is due to the circumstances and thoughts of investors who in the midst of this pandemic have less stable thoughts in their decision-making because the situation is fluctuating and uncertain every day by holding on to all of the new policies that are formed.

Discussion on the Effect of Financial Literacy on Investment Decisions Moderated by the Covid-19 Pandemic

Based on the results of statistical testing with SPSS on the variable X2Z (Financial Literacy variable with Covid-19 as the moderator variable), the t-count value is 1.891. Partially, the financial literacy variable moderated by the Covid-19 pandemic does not have a positive and significant effect on investor decisions. Wherein, it can be said that even during the Covid-19 pandemic, the understanding of financial literacy does not change according to existing conditions. Investors still tend to be indifferent to their understanding of personal money management.

Discussion on the Effect of Macroeconomics on Investment Decisions Moderated by the Covid-19 Pandemic

Based on the results of statistical testing with SPSS on the variable X3Z (Macroeconomics variable with Covid-19 as the moderator variable), the t-count value is 1.722. Partially, macroeconomics variable moderated by the Covid-19 pandemic has no positive and significant effect on investor decisions. This means that the presence or absence of the Covid-19 pandemic does not change investors' decisions regarding macroeconomics involvement in their decision-making. Investors will continue to make decisions by looking at the current state of the country's economy and predicting future conditions.

This result is in line with the results of a brief interview conducted by the researchers with the Head of Representative of the East Nusa Tenggara Indonesia Stock Exchange, Adevi Sabbath Sofani, where according to him, the Covid-19 pandemic does not dampen the enthusiasm of investors in East Nusa Tenggara to continue to join the Indonesia Stock Exchange in conducting investment transaction. Investors in East Nusa Tenggara in particular are increasing every day and this is certainly a positive thing for East Nusa Tenggara.

5. Conclusion

The conclusions of this study are: 1) Financial behavior with indicators of representativeness, availability bias, overconfidence, regret aversion, loss aversion, and mental aversion has a significant influence on investment decisions of stock investors in East Nusa Tenggara, 2) Financial literacy with basic indicators of personal finance, saving and investment, and risk management has no significant effect on investment decisions of stock investors in East Nusa Tenggara, 3) Macroeconomics with indicators of inflation, interest rates, and the rupiah exchange rate has a significant influence on the investment decisions of stock investors in East Nusa Tenggara, 4) Financial behavior, financial literacy, and macroeconomics simultaneously have a significant effect on the investment decisions of stock investors in East Nusa Tenggara, 5) Financial behavior on investment decisions moderated by the Covid-19 pandemic has a significant effect on the investment decisions of stock investors in East Nusa Tenggara, 6) Financial literacy on investment decisions moderated by the Covid-19 pandemic has no significant effect on the investment decisions of stock investors in East Nusa Tenggara, and 7) Macroeconomics on investment decisions moderated by the Covid-19 pandemic does not significantly affect the investment decisions of stock investors in East Nusa Tenggara.

Limitations and future research

This research was conducted during the covid-19 pandemic, where everything that was done in this research was done without meeting directly with the informants. In addition, the variables studied in

this study are dynamic and complex in that the results and thoughts can change at any time according to existing conditions.

References

- Ahyaruddin, M., Widiarsih, D., & Winarso, D. (2017). Pengaruh Psikologi Investor Terhadap Volume Perdagangan Saham. *Jurnal Akuntansi dan Ekonomika*, 7(2), 121-131.
- Angga, B. (2020). *Ekonomi Digital dan Ketimpangan Literasi Teknologi*. Dikutip dari <https://news.detik.com/kolom/d-4859789/ekonomi-digital-dan-ketimpanganliterasi-teknologi>. Diakses pada tanggal 6 Juli 2021.
- Artaya, M., Purbawangsa, I. B. A., & Artini, L. G. S. (2014). Pengaruh Faktor Ekonomi Makro, Risiko Investasi Dan Kinerja Keuangan Terhadap Return Saham Perusahaan Di Bursa Efek Indonesia (Bei). *E-Jurnal Ekonomi dan Bisnis Universitas Udayana*, 3(12), 689-701.
- Atmaja, L. S. (2008). *Teori dan Praktik Manajemen Keuangan*. Yogyakarta: Andi.
- Baker, H. K., & Ricciardi, V. (2014). *Investor behavior: The psychology of financial planning and investing*. John Wiley & Sons.
- Bakti, U., & Alie, M. S. (2018). Pengaruh Inflasi dan Suku Bunga Terhadap Investasi di Provinsi Lampung Periode 1980-2015. *Jurnal Ekonomi*, 20(3), 275-285.
- Budiarto, A., dan Susanti. (2017). Pengaruh Financial Literacy, Overconfidence, Regret Aversion Bias, Dan Risk Tolerance terhadap Keputusan Investasi. *Jurnal Universitas Negeri Surabaya*.
- Center For Diades Control and Prevention (CDC). (2020). *Coronavirus Disease 2019 (COVID-19)*. <https://www.cdc.gov/media/dpk/diseases-andconditions/coronavirus/coronavirus-2020.html>. Diakses tanggal 06 Juli 2021.
- Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, 7(2), 107-128.
- Christanti, N., & Mahastanti, L. A. (2011). *Faktor-Faktor Yang Dipertimbangkan Investor Dalam Melakukan Investasi*: Universitas Kristen SatyaWacana.
- Garman, E. T., Kim, J., Kratzer, C. Y., Brunson, B. H., & Joo, S. H. (1999). Workplace financial education improves personal financial wellness. *Financial Counseling and Planning*, 10(1), 79-88.
- Halim, A. (2005). *Analisis Investasi (Kedua)*. Jakarta: Salemba Empat.
- Handayani, D., Hadi, D. R., Isbaniah, F., Burhan, E., & Agustin, H. (2020). Corona virus disease 2019. *Jurnal Respirologi Indonesia*, 40(2), 119-129.
- Hartono, J. (2013). *Teori Portofolio dan Analisis Investasi*. Edisi Ketujuh. BPFE, Yogyakarta.
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Fed. Res. Bull.*, 89, 309.
- Hindayani, N. (2020). Analisis Reaksi Pasar Saham Atas Peristiwa Covid-19 Di Indonesia. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi)*, 4(3), 1645-1661.
- Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, 44(2), 296-316.
- Indriantoro, Nur, dkk. (2018). *Metodologi Penelitian Bisnis*. Yogyakarta: BPFE
- Junaedi, D., & Salistia, F. (2020). Dampak Pandemi Covid-19 Terhadap Pasar Modal di Indonesia. Al-Kharaj: *Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 2(2), 109-131.
- Junaedi, D. 2020. Pandemi Covid-19: 3,91 Juta Kasus dan 270 Ribu Kematian. <https://gontornews.com/pandemi-covid-19-391-juta-kasus-dan-270-ribu-kematian/>. Dilihat Desmber 2021.
- Le Luong, P., & Thi Thu Ha, D. (2011). Behavioral factors influencing individual investors' decision-making and performance.: A survey at the Ho Chi Minh Stock Exchange.
- Lestari, W, R., dan Prayono, E. (2015). Faktor Psikologi Membentuk Perilaku Keuangan (Behavioral Finance) Investor dalam Transaksi Sahampada Pasar Modal di Lampung. *Jurnal Institute Darmajaya, Bandar Lampung*.
- Lewellen, W. G., Lease, R. C., & Schlarbaum, G. G. (1977). Patterns of investment strategy and behavior among individual investors. *The Journal of Business*, 50(3), 296-333.
- Lubis, Arlina, N., dkk. (2013). *Perilaku Investor Keuangan*. Medan: USU Press.
- Nababan, D., & Sadalia, I. (2012). Analisis Personal Financial Literacy Dan Financial Behavior. *Jurnal Universitas Sumatera Utara*.
- Nazir, M. 2009. *Ekonomi Moneter dan Perbankan Sentral*. Jakarta: Mitra Wacana Media.

- Nofsinger, J. R. (2001). *Investment Madness: How Psychology Affects Your Investing and What to Do About It*. Prentice Hall.
- Nofsinger, J. R.. (2005). *Psychologi of Investing*. Edisi Kedua. Prentice-Hall Inc, New Jersey.
- Pritazahara, R., dan Sriwidodo, U. (2015). Pengaruh Pengetahuan Keuangandan Pengalaman Keuangan Terhadap Perilaku Perencanaan Investasi Dengan Self Control Sebagai Variabel Moderating. *Jurnal Ekonomi dan Kewirausahaan*.
- Puspitaningtyas, Z. (2012). *Perilaku Investor dalam Pengambilan Keputusan Investasi di Pasar Modal*. Universitas Jember.
- Putong, I. (2013). *Economics Pengantar Mikro dan Makro*. Jakarta: Mitra Wacana Media.
- Putra, I. P. S., Ananingsiyas, H., Sari, D. R., Dewi, A. S., & Silvy, M. (2016). Pengaruh tingkat literasi keuangan, experienced regret, dan risk tolerance pada pemilihan jenis investasi. *Journal of Business and Banking*, 5(2), 271-282.
- Ricciardi, V., dan Helen K. Simon. (2000). *What is Behavioral Finance?*. Universitas Florida, Florida.
- Ritter, J. R. (2003). Behavioral finance. *Pacific-Basin finance journal*, 11(4), 429-437.
- Robb, C. A., dan Woodyard, A. S. (2011). Financial Knowledge And Best Practice Behaviour. *Journal of Financial Counseling and Planning*.
- Samsul, M. (2006). *Pasar Modal dan Manajemen Portofolio*. Surabaya: Erlangga.
- Shefrin, H. (2002). *Beyond greed and fear: Understanding behavioral finance and the psychology of investing*. Oxford University Press on Demand.
- Shockey, S. S. (2002). *Low-wealth adults' financial literacy, money management behaviors, and associated factors, including critical thinking*. The Ohio State University.
- Soeratno., dan Lincolin, A. (2003). *Metodologi Penelitian Untuk Ekonomi*. UPP, AMP UKPN, Jakarta.
- Strömbäck, C., Lind, T., Skagerlund, K., Västfjäll, D., & Tinghög, G. (2017). Does self-control predict financial behavior and financial well-being?. *Journal of Behavioral and Experimental Finance*, 14, 30-38.
- Sugiyono. (2010). *Metode Penelitian Administrasi*. Bandung: Alfabeta.
- Suryawijaya, M. A. (2003). *Ketidak rasionalan Investor di Pasar Modal*. Pidato Pengukuhan Jabatan Guru Besar pada Fakultas Ekonomi Universitas Gadjah Mada, 1-39.
- Tandelilin, E. (2010a). *Portofolio dan Investasi: Teori dan Aplikasi (Pertama)*. Yogyakarta: Kanisius.
- Tandelilin, E. (2010b). *Analisis Investasidan Manajemen Portofolio (Pertama)*. Yogyakarta: BPFE-Yogyakarta.
- Tilson, W. (2005). *Applying behavioral finance to value investing*. Artikel T2 Partner LLC ([http://www. T2 PartnersLLC. com](http://www.T2PartnersLLC.com), diakses 27 april 2007).
- Waweru, N. M., Munyoki, E., & Uliana, E. (2008). The effects of behavioural factors in investment decision-making: a survey of institutional investors operating at the Nairobi Stock Exchange. *International Journal of Business and Emerging Markets*, 1(1), 24-41.