

# Investigation Of Investment Decisions In Indonesian Capital Market Based On Investor Characteristics In West Nusa Tenggara

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## ABSTRACT

Investment in the capital market is a form of investment or money in a company within a certain period of time to earn a profit—factors of differences in individual characteristics such as age, gender, education, and religion. The aims of this study are (1) to investigate investment decisions in the regular and sharia capital markets by stock investors in West Nusa Tenggara in terms of gender, age, education, and religion. (2) To investigate the perceptions and profits of stock investors in West Nusa Tenggara regarding gender, age, occupation, and religion. The type of research used is comparative research. The sample in this study were stock investors in West Nusa Tenggara, as many as 149 people. The hypothesis test used in this study is using nonparametric statistical methods. This non-parametric statistical method is often also called the distribution-free method because the statistical test model does not specify certain conditions regarding the shape of the distribution of the population parameters. The test used is Uji Mann-Whitney U dan Kruskal-Wallis H. The results showed that (1) There are significant differences in investment decisions in the regular and sharia capital markets by stock investors in West Nusa Tenggara in terms of gender, age, education, and religion. (2) There is a significant difference in the perception of risk and return of stock investors in West Nusa Tenggara regarding gender, age, occupation, and religion.

Keywords: Investment, Risk, Profit, Demographic

## INTRODUCTION

Investment in the capital market is a form of investment or money in a company within a certain period of time to earn a profit. Investment can be defined as delaying current consumption inefficient production for a certain period of time (Jogiyanto, 2010). From the issuer's point of view, the capital market is a means to get capital from investors (the public), while from the investor's side, the capital market is a means to invest in making a profit. Profits (realized returns) that investors can obtain include capital gains and dividends from products such as stocks, bonds, and other derivative products (Jogiyanto, 2010).

Nowadays, investor behavior in investment decision behavior, including in the capital market, is not only explained by traditional financial theory (traditional finance). In fact, apart from considering fundamental and technical factors in making investment decisions in the capital market, another factor, namely psychology, is also very influential in making these decisions. Thus, the development of behavioral finance was pioneered by the existence of a person's behavior in decision-making (Ida and Dwinta, 2010).

Investment decision behavior can be influenced by several factors: the environment, associations, socializing methods, control from parents, habit factors, and locus of control (Joo et al., 2003). Joo and Grable (2000) assert that various factors determine investment decision-making. Factors of differences in individual characteristics such as age, gender, ethnicity, marital status, education and income, environmental and psychological influences greatly influence investment decisions. Nofsinger (2001) defines behavioral finance as studying how humans actually behave in a financial setting. Nofsinger (2001) also said that

financial finance studies psychological factors that will influence financial decision-making, companies, and financial markets.

This study investigates the behavior of investment decisions in the Indonesian Capital Market based on the characteristics of investors in West Nusa Tenggara. The characteristics used as variables in this study were age, gender, education, and religion. The variables of age, gender, and education are according to research conducted by Joo and Grable (2000), while the religion variable was also tested by considering West Nusa Tenggara as one of the provinces with a strong religion Indonesia. Investment decisions in the capital market are proxied by decisions to choose investments in the regular and sharia capital markets and perceptions of risks and benefits.

According to Suteja and Gunardi (2016), determining investment decisions starts from setting investment objectives, followed by selecting investment assets based on risk and profit considerations. Research related to investment decisions based on the characteristics of stock investors in Mataram with variables of gender, age, education, and ethnicity has been conducted by Utami (2018). This study intends to expand on previous research in the context of West Nusa Tenggara and the addition of religious variables, both of which have not been studied before.

Empirically, research related to investor characteristics such as gender in investment decision-making behavior in the capital market has been carried out by several researchers. Research Cooper (2001) states that women tend to be more careful in investing than men, with the catalyst that women feel comfortable with their style. Putri and Rahyuda (2017) show that there are differences between men and women in the behavior of individual investment decisions.

Christanti and Mahastanti (2011) examined investment decisions on investors in Salatiga and Semarang. It found that the demographic aspect of research on investment decisions in considering all economic, behavioral, and demographic factors is that the female gender considers various factors more than the male gender. This is not following research from Kristanti (2012) and Iramani and Bagus (2008) that there is no significant difference in the behavior-forming factors between the behavior of male investors and female investors in conducting stock transactions. However, Utami's research (2018) which examines the investment behavior of stock investors in Mataram, finds that gender differences affect investment decisions in the capital market.

According to Endang (2008) in Situmorang (2014), several things affect a person's desire to invest in the capital market, including age. In terms of age, Bardwick in Situmorang (2014) says there are four basic stages of human life. These stages are the transitional stage of early maturity (17-28 years), the stage of the establishment (30-40 years), mid-maturity (40-45 years), and the age stage of 50 years or more. The difference in the transition stages will affect emotions and ways of thinking in decision making. Van Roij et al. (2011) researched in the Netherlands and found that in facing retirement, people in the Netherlands have a tendency to invest in the capital market, and this is interesting to study in the context of West Nusa Tenggara,

Hogart et al. (2002) stated that people with a higher level of financial literacy tend to be better at managing finances, including investing in various financial products. A well-literate person in financial products will find it easier to understand and perceive the risks and benefits of an investment product. Research conducted by Ida and Dwinta (2010) stated that there is an influence of financial knowledge on financial management behavior. The research conducted by Andrew and Linawati (2014) states a relationship between knowledge and financial behavior.

In addition to characteristic factors such as gender, age, and education. This is related to the profile of West Nusa Tenggara as a religious area and has a heterogeneous population with the majority being Muslim, and is known as the area of a thousand mosques. Furthermore, the inclusion of the religious variable in this study follows the results of the OJK survey on public belief in Islamic financial institutions, which found religious considerations so that researchers believe that religious factors also determine investment considerations, including in the capital market.

The selected sample will also include non-Muslim religions from stock investors in West Nusa Tenggara to provide comprehensive results. The capital market for some people views it as a gambling medium, which is related to something that is prohibited by religion, regardless of religion. Some investors also consider the concept of Halal and Haram for investment in the capital market. Based on the results of research by Agustin and Mawardi (2014), who examined the behavior of Muslim investors in transacting shares in the capital market, they found investment decisions related to the understanding of their religion.

Rahmawati and Fitriyah (2017) examined the interest of Mataram city investors in investing in the Islamic capital market and found that halal income from these investments was of interest to investors. In the context of West Nusa Tenggara, which is known as the Thousand Mosques with a majority Muslim population, it is interesting to study more deeply the investment decisions taken. In addition, investment decisions will also study coz beliefs outside of Islam is in the regular capital market or the Islamic capital market.

Based on previous research, this study will further examine decisions in the choice of investment in the capital market, namely in the regular capital market and the Islamic capital market, as well as the perception of risks and benefits in terms of the demographic characteristics of the population in Nusa Tenggara, namely gender, age, education, and religion. The objectives of this research include:

1. Investigate investment decisions in the regular and sharia capital markets by stock investors in West Nusa Tenggara regarding gender, age, education, and religion.
2. Investigate the perception of risk and return of stock investors in West Nusa Tenggara regarding gender, age, occupation, and religion.

## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Currently, the Indonesian Capital Market, although there is only one place for carrying out transaction activities, namely the Indonesia Stock Exchange, but in the regulations and provisions based on the type of market, is divided into the regular capital market and the Islamic capital market. Based on the Financial Services Authority (OJK) definition, the Islamic capital market is a market in which the activities and provisions for transactions are based on the concept of sharia or refer to the teachings of the Islamic religion. Compared, the regular conventional capital market does not include this and refers to the Capital Market Law no. 8 of 1995. The things that make the difference for the regular and sharia capital markets are, among others, the parties involved, how to transact, and the products that are traded.

Perception of risk and profit is the ability of investors to anticipate the risks and returns that exist in the investment. Matters related to the perception of risk and return such as the ability to measure investment security, predict risk factors, predict potential returns, understand the growth of investments, including investment liquidity.

According to Suteja and Gunardi (2016), determining investment decisions are determined by determining investment objectives. The investment objectives of an investor can vary, depending on individual characteristics. For the context of West Nusa Tenggara until January 2021, the number of male investors is higher than the number of female investors. Research Cooper (2001) states that women tend to be more careful in investing than men. Putri and Rahyuda (2017) show that there are differences between men and women in the behavior of individual investment decisions. Christanti and Mahastanti (2011) examined investment decisions on investors in Salatiga and Semarang. It found that the demographic aspects of research on investment decisions in considering all economic factors, Behavior, and demographics are that the female gender considers various factors more than the male gender. This is not following research from Kristanti (2012) and Iramani and Bagus (2008) that there is no significant difference in behavior-forming factors between the behavior of male investors. Male and female investors in conducting stock transactions. Utami's research (2018) which examines the investment behavior of stock investors in Mataram, finds that gender differences affect investment decisions in the capital market. Male and female investors in conducting stock transactions. Utami's research (2018) which examines the investment behavior of stock investors in Mataram, finds that gender differences affect investment decisions in the capital market. Male and female investors in conducting stock transactions. Utami's research (2018) which examines the investment behavior of stock investors in Mataram, finds that gender differences affect investment decisions in the capital market.

H1: Gender differences make significant differences in investment decisions in the regular and Islamic capital markets

Age determines a person's maturity and maturity in decision-making. Joo and Grable, 2000, revealed several factors that influence a person's psychology in making investment decisions, including age, gender, ethnicity, marital status, environmental influences. According to Endang (2008) in Situmorang (2014), several things affect a person's desire to invest in the capital market, including age. Van Roij et al. (2011)

conducted a study in the Netherlands and found that people in the Netherlands who tend to invest in the capital market face retirement. 18-25 years.

H2: Age differences make significant differences in investment decisions in the regular and Islamic capital markets

The condition of a person who works with various levels of education or does not work (at home) will determine the different characteristics of what is shown. Hogart et al. (2002) stated that people with a higher level of financial literacy tend to be better at managing finances, including investing in various financial products. Opportunities to work are associated with being educated and having income as a means of investment. Kiran and Rao (2004) state that the education of investors determines the behavior of investors in investing. The results of Fitriarianti's research (2018) mention a significant relationship between income and investment decisions.

H3: Differences in education make significant differences in investment decisions in the regular and Islamic capital markets

As a person's belief in the context of a relationship with God Almighty, religion will shape a person's mindset and actions in various ways, including investment decision-making. The decision taken will confirm whether it is following the religious teachings that are believed or not. Based on the results of research by Agustin and Mawardi (2014), who examined the behavior of Muslim investors in transacting shares in the capital market, they found investment decisions related to the understanding of their religion. Wiwik Lestasi (2014) states that there is a positive relationship between religion and investment decisions. Different results were obtained by Fauziah (2019) that religion had no significant effect on investment decisions. In the context of West Nusa Tenggara with a Muslim majority population,

H4: Religious differences make significant differences in investment decisions in the regular and sharia conventional capital markets

He, Xin, J, tested the effect of gender on investment decisions related to risk perception. Jeffrey Inman, and Vikas Mittal (2008). The results show that gender strengthens the influence of capabilities on risky decisions, where compatibility depends on the context of the decisions. If the context is related to investment, men's tendency to risk is more strongly influenced by their capabilities when making decisions. Meanwhile, in the context of avoiding risk, women's capabilities are more sensitive than men's in influencing risk perceptions. Putri and Rahyuda (2017) researched the differences between men and women in making investment decisions. Cooper (2001) states that women tend to be more careful in investing than men.

H5: Gender differences make significant differences in perceptions of risk and benefit

Age determines the character of an investor; matters relating to investment, including in the capital market is age affects the risk profile of an investor, namely, aggressive, moderate, or conservative. A stock investor will choose comfort for himself in transacting in the capital market, whether he tends to be an investor (investing for the long term) or as a trader (investing for the short term). Van Roij et al. (2011) conducted a study in the Netherlands and found that people in the Netherlands who tend to invest in the capital market face retirement.

H6: The difference in age makes a significant difference in the perception of risk and benefit.

Kiran and Rao (2004) stated that the education of investors determines the behavior of investors in investing. In the context of education, which is also associated with education, Bhandari and Deaves, in a study in Canada, concluded that the higher the level of education, the higher the risk tolerance. Another thing that concerns work is income, where Barber and Odean (2001) state that income harms stock turnover, so investors with high incomes do not like investments in a fixed state. Meanwhile, low-income investors are more likely to feel comfortable with their investments and do not want to change.

H7: Differences in education make significant differences in perceptions of risk and benefit

A person believes religion on something that is allowed and prohibited by religion by linking how the perception of risk and profit is inherent in each investment instrument to shape the investor's perception. For example, Rahmawati and Fitriyah (2017) examined the interest of Mataram city investors in investing in the Islamic capital market. They found that halal income from these investments was of interest to investors. However, different results were obtained by Rosyidah (2013) and Fauziah (2019) that religion had no significant effect on investment decisions.

H8: Religious differences make significant differences in perceptions of risk and benefit

## METHODS

The types of research used are comparative research. Comparative research compares the state of a variable or more in two or more different samples (Sugiyono, 2014). the sample in this study were stock investors in West Nusa Tenggara, as many as 149 people. The data collection technique used in this research is a questionnaire. The hypothesis test used in this study is using nonparametric statistical methods. This non-parametric statistical method is often also called the distribution-free method because the statistical test model does not specify certain conditions regarding the shape of the distribution of the population parameters. The test used is the TestMann-Whitney U and Kruskal-Wallis H.

## RESULTS

### Hypothesis Testing Results

The test was carried out by Mann-Whitney U and Kruskal-Wallis H using SPSS 25 software to test the hypothesis.

Table 1. Test Results for Investor Transaction Frequency Differences

Demographic Factors	Investment Perception			
	Regular	Sharia	Risk	Advantage
Gender	Mann-Whitney 1,000 asyp. Sig. (0.000)	Mann-Whitney 1282,500 asyp. Sig. (0.000)	Mann-Whitney 0.000 asyp. Sig. (0.000)	Mann-Whitney 1,500 asyp. Sig. (0.000)
Religion	Mann-Whitney -12.166 asyp. Sig. (0.000)	Mann-Whitney -12.166 asyp. Sig.(0.000)	Mann-Whitney -12.166 asyp. Sig. (0.000)	Mann-Whitney -12.166 asyp. Sig. (0.000)
Age	Kruskal-Wallis 957,737 asyp. Sig. (0.000)	Kruskal-Wallis 101,061 asyp. Sig.(0.000)	Kruskal-Wallis H 108,184 asyp. Sig. (0.000)	Kruskal-Wallis 118.843 asyp. Sig. (0.000)
Education	Kruskal-Wallis 139,421 asyp. Sig. (0.000)	Kruskal-Wallis 137.384 asyp. Sig. (0.000)	Kruskal-Wallis H 136.394 asyp. Sig. (0.000)	Kruskal-Wallis 132.192 asyp. Sig. (0.000)

Based on the table, it can be seen on the perception of the Sharia Regular and the risk of profit that all test results Mann-Whitney and Kruskal-Wallis Have an asymp sigs less than 5% (0.050=0.05) then it can be declared significant. This finding indicates a significant difference in the perception of sharia regular investment decisions and the perception of risk-return in terms of the demographic characteristics of investors.

## DISCUSSION

### Gender Differences on Investment Decisions in the Regular and Sharia Capital Markets

The study results indicate that there is no significant difference in investment decisions in the regular and sharia capital markets in terms of Investor Gender.

According to Suteja and Gunardi (2016), determining investment decisions are determined by determining investment objectives. The investment objectives of an investor can vary, depending on individual characteristics. For the context of West Nusa Tenggara until January 2021, the number of male investors is higher than the number of female investors. Research Cooper (2001) states that women tend to be more careful in investing than men. Putri and Rahyuda (2017) show that there are differences between men and women in the behavior of individual investment decisions.

Christanti and Mahastanti (2011) examined investment decisions on investors in Salatiga and Semarang. It found that the demographic aspect of research on investment decisions in considering all economic, behavioral, and demographic factors is that the female gender considers various factors more than men. This is not following research from Kristanti (2012) and Iramani and Bagus (2008) that there is no significant difference in behavior-forming factors between the behavior of male investors. Male and female investors in conducting stock transactions. Utami's research (2018) which examines the investment behavior of stock investors in Mataram, finds that gender differences affect investment decisions in the capital market.

### **Age Differences on Investment Decisions in The Regular and Sharia Capital Markets**

The study results indicate that there is no significant difference in Investment Decisions in the regular and Islamic capital markets in terms of Investor Age. Conceptually Age determines the maturity and maturity of a person in decision making. Joo and Grable, 2000, revealed several factors that influence a person's psychology in making investment decisions, including age, gender, ethnicity, marital status, environmental influences. According to Endang (2008) in Situmorang (2014), several things affect a person's desire to invest in the capital market, including age. Van Roij et al. (2011) conducted a study in the Netherlands and found that in facing retirement, people in the Netherlands tend to invest in the capital market.

### **Education Differences on Investment Decisions in the Regular and Sharia Capital Market**

The study results indicate that there is no significant difference in investment decisions in the regular and sharia capital markets in terms of investor education level.

The condition of a person who works with various levels of education or does not work (at home) will determine the different characteristics of what is shown. Hogart et al. (2002) stated that people with a higher level of financial literacy tend to be better at managing finances, including investing in various financial products. Opportunities to work are associated with being educated and having income as a means of investment. Kiran and Rao (2004) state that the education of investors determines the behavior of investors in investing. The results of Fitriarianti's research (2018) mention a significant relationship between income and investment decisions.

### **Religious Differences on Investment Decisions in The Regular and Sharia Capital Markets**

The study results indicate that there is no significant difference in investment decisions in the regular and sharia capital markets in terms of investor religious differences.

As a person's belief in the context of a relationship with God Almighty, religion will shape a person's mindset and actions in various ways, including investment decision-making. The decision taken will confirm whether it is following the religious teachings that are believed or not. Based on the results of research by Agustin and Mawardi (2014), who examined the behavior of Muslim investors in transacting shares in the capital market, they found investment decisions related to the understanding of their religion. Wiwik Lestasi (2014) states that there is a positive relationship between religion and investment decisions. Different results were obtained by Fauziah (2019) that religion had no significant effect on investment decisions. In the context of West Nusa Tenggara with a Muslim majority population,

### **Gender Differences in Perception of Risk and Benefits**

The study results indicate that there are significant differences in the perception of risk and profit in the regular and sharia capital markets in terms of investor gender.

He, Xin, J, tested the effect of gender on investment decisions related to risk perception. Jeffrey Inman, and Vikas Mittal (2008). The results show that gender strengthens the influence of capabilities on risky decisions, where compatibility depends on the context of the decisions. If the context is related to investment, men's tendency to risk is more strongly influenced by their capabilities when making decisions. Meanwhile, in the context of avoiding risk, women's capabilities are more sensitive than men's in influencing

risk perceptions. Putri and Rahyuda (2017) researched the differences between men and women in making investment decisions. Cooper (2001) states that women tend to be more careful in investing than men.

### **Age Differences in Perception of Risk and Benefits**

The results showed no significant difference in the perception of risk and profit in the regular and sharia capital markets in terms of investor age.

Age determines the character of an investor; matters relating to investment, including in the capital market is age affects the risk profile of an investor, namely, aggressive, moderate, or conservative. A stock investor will choose comfort for himself in transacting in the capital market, whether he tends to be an investor (investing for the long term) or as a trader (investing for the short term). Kiran and Rao (2004) suggest that the age factor strongly influences the risk taken in investing. Whereat the age of 41-50 years, people will avoid risk. Van Roij et al. (2011) conducted a study in the Netherlands. They found that people in the Netherlands who tend to invest in the capital market face retirement, people in the Netherlands tend to invest in the capital market.

### **Differences in Education on Perceptions of Risk and Benefits**

The results showed no significant difference in the perception of risk and profit in the regular and sharia capital markets in terms of investor education level.

Kiran and Rao (2004) stated that the education of investors determines the behavior of investors in investing. In the context of education, which is also associated with education, Bhandari and Deaves, in a study in Canada, concluded that the higher the level of education, the higher the risk tolerance. Another thing that concerns work is income, where Barber and Odean (2001) state that income harms stock turnover, so investors with high incomes do not like investments in a fixed state. Meanwhile, low-income investors are more likely to feel comfortable with their investments and do not want to change.

### **Religious Differences in Perceptions of Risk and Profit**

The results showed no significant difference in the perception of risk and profit in the regular and sharia capital markets in terms of investor religion.

A person believes religion on something that is allowed and prohibited by religion by linking how the perception of risk and profit is inherent in each investment instrument to shape the investor's perception. For example, Rahmawati and Fitriyah (2017) examined the interest of Mataram city investors in investing in the Islamic capital market. They found that halal income from these investments was of interest to investors. However, different results were obtained by Rosyidah (2013) and Fauziah (2019) that religion had no significant effect on investment decisions.

## **CONCLUSION**

Based on the results of research From the discussion that has been carried out, several conclusions can be drawn, namely:

1. There are significant differences in investment decisions in the regular and sharia capital markets by stock investors in West Nusa Tenggara regarding gender, age, education, and religion.
2. There are significant differences in the perception of risk and return of stock investors in West Nusa Tenggara regarding gender, age, occupation, and religion.

## **LIMITATION AND FUTURE RESEARCH DIRECTION**

This research is inseparable from limitations and weaknesses that need to be improved, including:

1. As already stated, the dominant hypothesis submission is rejected. This happens because the measurement is based on respondents' perceptions who fill in subjectively and use a scale of 1-5. Although therefore, this research has implications for further research; to assess the extent to which their perceptions are related to investing in regular and Islamic investments by considering risk and profit aspects, it is necessary to use a scale of 1-10. This will be very useful when comparing to show a much more varied range of numbers compared to a scale of 1-5.
2. The limitation of this research is that the object of research is only investors domiciled in the West Nusa Tenggara region who invest in the IDX for the 2016-2019 period. Therefore, it is necessary to consider

the characteristics of respondents from other regions so that the results are indeed possible to be more varied and better.

## REFERENCES

- Andrew, V., & Linawati, N., (2014). "Relationship of Demographic Factors and Financial Knowledge with Financial Behavior of Private Employees. *FINESTA*, Vol. 02, No. 02:35-3
- Agustin, P., & Mawardi, I., (2014). "The Behavior of Muslim Investors in Stock Transactions in the Capital Market." *JETT* Vol. 1 No. 12 December 2014
- Barber, B., and Odean, T., 2001. Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment. *The Quarterly Journal of Economics*, 261-292.
- Bhandari, G., and Richard, D., 2006. The Demographics of Overconfidence, *The Journal of Behavioral Finance*, Vol. 7(1): 5-11.
- Bodie, Z., Kane, A., & Marcus. A., (2016). *Portfolio and Investment Management*. Edition 9. Jakarta : Salemba Empat.
- Christanti, N., & Mahastanti, L. A., (2011). Factors Considering Investors in Making Investments. *Journal of Theoretical and Applied Management*. Year 4, No. 3, 37-51
- Cooper, Christine. (2001). "From Women Liberation to Feminism: Reflection in Accounting Academy," *Accounting Forum*: 25.
- Cooper, Christine. (2001). "From Women Liberation to Feminism: Reflections in Accounting Academy," *Accounting Forum* : 25
- Daniel, Craig E and Janet Daniel. (1991). "Factors Affecting The Decision to Accept of Refect a Golden Handshake," *Quarterly Journal of Economic*: 7
- Emory, C. W., and Cooper, D. R., (1992), *Business Research Methods*, 4th ed., Richard D. Irwin, Homewood, IL.
- Fitriarianti, B., (2018). "The Influence of Financial Literacy, Financial Behavior and Income on Investment Decisions." *National Seminar I Pamulang University*
- Gani, I., and Amalia, S., (2018), "Statistical Application Data Analysis Tool for Economic and Social Research, Yogyakarta: Andi Offset
- Haming, M., & Salim, B. (2010). *Feasibility Study on Project and Business Investment*, Jakarta: Bumi Aksara
- Halim, A. (2005), *Investment Analysis*, Jakarta: Salemba Empat.
- He, X., Jeffrey, J. I., and Mittal, V., (2008), "Gender Jeopardy in Financial Risk-Taking," *Journal of Marketing Research*, Vol. XLV (August) 414-424.
- Hogart, J. M., & Hilgert, M. A., (2002). "Financial Knowledge, Experience and Learning Preferences: Preliminary Result from a New Survey on Financial Literacy." *Consumer Interest Annual*.
- Iramani, R. R., and Bagus, D., 2008, "Factors of Investor Behavior in Stock Transactions in Surabaya," *Journal of Management Applications*, Vol.6, No.3: 255-3=262.
- Irianto, A., 2009, "Statistics: Basic Concepts and Applications"; Kencana Publisher, Jakarta
- Jogiyanto, (2010), *Portfolio Theory and Investment Analysis*. 7th Edition. Yogyakarta: BPFE



- Joo, S. H., Grable, J. E., and Bagwell, D. C., (2003). "Credit Card Attitudes and Behaviors of College Students." *College Student Journal*, 37(3), 405-419
- Joo, S., & Grable, J. E., (2000). "A retirement investment savings decision model: Influencing factors and outcomes." *Consumer Interests Annual*, 46.43-48
- Kiran D., and Rao, U. S., 2004. Identifying Investors Group Segments Based on Demographic and Psychographic Characteristics, MBA Project Report, Sri Sathya Sai Institute of Higher Learning.
- Kristanti, E. W., (2012), "Relationship of Demographic Factors with Convenience and Safety Factors of Capital Market Investors." *Journal of Business and Banking*, Vol.II, No. I: 71-84.
- Mike, (2008), "Behavioral Finance: Theories and Evidence." The Research Foundation of the CFA Institute.
- Putri, N. M., & Rahyuda, H., (2017), "The Effect of Financial Literacy Level and Sociodemographic Factors on Individual Investment Decision Behavior." *E-Journal of Economics and Business*, Udayana University, Vol.6.9, 3407-3434.
- Situmorang, M., Andreas & Natariasari, R., "The Influence of Motivation on Interest in Investing in the Capital Market with an Understanding of Investment and Age as Moderate Variables." *JOM FEKON* Vol. 1 No. October 2, 2014.
- Utami, N., Hermanto, & Surasni, N. K., (2018). "Investment Decision Behavior Reviewed in Characteristics of Investors in Mataram City." *International Journal of Science and Research (IJSR)*.
- Van Rooij, M. C. J, Lusardi, A., and Alessie, R. J. M., (2011). "Financial Literacy and Stock Market Participation." *Journal of Financial Economics*, Vol. 101. No. 2, p. 449-472
- Rahmawati, N., & Fitriyah, A. T., (2017). "Mataram City Investor Interest Analysis on Investment in the Sharia Capital Market. *Iqtishaduna, Journal of Islamic Economics*
- Ricciardi, V., & Simon, K. H., (2000), "What is Behavior in Finance?". *Business, Education, and Technology Journal*, 1-9.
- Kahnema, D., & Tversky, A., (1979). "Prospect Theory: An Analysis of Decisions Under Risk." *Journal of the Econometric Society* 47(2):263-91
- Lusardi, A., Olivia S. M., & Curto, V., (2010). "Financial Literacy Among The Young." *Journal of Consumer Affairs*. Vol. 44, Issue 2 Pages 358-380
- Nofsinger, J. R., (2001), "Investment Madness: How psychology affects your investing and what to do about it." Prentice-Hall.
- Nugeraha et al. (2016). "Comparative Analysis of Financial Performance Before and After the Implementation of the First Period of Tax Amnesty on Property and Real Estate Sub-Sector Companies listed on the IDX." *Journal of Distribution: Journal of Management and Business Science* Vo. IV(1) : 1-20
- Walpole, R. E., & Myers, R. H., (1990), "Probability and Statistics for Engineers and Scientists," MacMillan Publishing Company, New York
- Wulandari, D. A., & Iramani, R. R., (2014). "Study of Experienced Regret, Risk Tolerance, Overconfidence and Risk Perception in Economic Lecturer Investment Decision Making." *Journal of Business and Banking* 4910:55-66
- Puspitasari, P. N., (2014). "The Influence of Demographic and Psychological Factors on Investment Decisions in Mutual Funds".. Surabaya: Perbanas College of Economics

- Puspaningtyas, Z., and Kurniawan, A. W., (2012), Prediction of Return on Investment in the form of Dividend Yield Based on Financial Ratio Analysis. EKONOMI Magazine: Management, Accounting, and Business Studies, 16 (1):88-98.
- Setyawan, F. B., (2017). Introduction to Research Methodology (Practical Statistics). Sidoarjo: Zifatama Jawara.
- Sisbintari, I., (2017), "A Brief About Behavioral Finance." Scientific Journal of Business Administration and Innovation, Vol. I, .88-101.
- Wirartha, I., (2006). Socio-Economic Research Methods. Yogyakarta: Andi Offset.
- Wiryaningtyas, D. P., (2016), "Behavioral Finance in Decision Making." Proceedings of the 17 December 2016 National Seminar (pp. 339-344). Jember: FEB UNEJ.