



AN ANALYSIS OF FACTORS INFLUENCING INVESTMENT DECISION MAKING IN INDONESIA'S CAPITAL MARKET

Annisa Rachmah Syawiyanti 

Gunadarma University, Depok, West Java, Indonesia
rachma.sy28@gmail.com

Adi Kuswanto

Gunadarma University, Depok, West Java, Indonesia
kuswanto@staff.gunadarma.ac.id

Abstract

This study aims to analyze the impact of factors influencing investment decision making in capital markets. The factors being analyzed include fundamental analysis, return on investment, and investment education toward investment decision making. The population of this study was individual investors from communities and college students who have invested in Indonesia's capital market, with a total number of 1.360.000 investors. The sample size was based on Isaac and Michael table, with an error rate of 5 percent, so that 349 samples were obtained but only 260 samples were able to meet the requirements. The results indicated that fundamental analysis and investment education had a significant positive impact toward investment decision making, meanwhile return on investment had no significant effect on it. It was discovered that fundamental analysis, return on investment, and education investment simultaneously influence investment decision making.

Keywords: Fundamental Analysis, Investment Education, Return on Investment, Investment Decision Making



INTRODUCTION

Capital markets hold a crucial role in the economic development of a country. Individual investors or business entities may channel and invest their excess funds into capital markets and then entrepreneurs may get additional capital to expand their business network from the investors in capital markets (Yuliana, 2010: 34).

The growth of investors in Indonesia's capital market as one of alternatives for investment among society is considered quite good. In 2015, the number of investors in capital market reaches 433.607. It increased 19 percent compared to 2014, in which only 364.465 investors were recorded (Maharani: 2015). In 2018, Indonesia Stock Exchange has recorded that there were 1.6 million investors up to July 2018 and it had increased to 33.59 percent. Indonesia Stock Exchange also noted that the frequency of daily stock trading reaches 392 thousand per day and becomes the highest in Southeast Asia.

Each individual has different objectives in investing. Not everyone is interested in investing since it is basically an act of suspending a will into the future. No one will ever know how good or bad the economic condition will be in the future. Hence, investing becomes one of alternatives to earn income in the future in the midst of uncertain economic situation. Investing in capital market is one of many kinds of investment that can be done. The growth of investors in Indonesia Stock Exchange indicates that the awareness of investing is increasing, especially in capital market. Although the number of investors in Indonesia Stock Exchange has been rising, investment activity seems as a new activity for Indonesian society. Compared to other countries, the willingness of Indonesian society in investment decision making is still lacking. Low interest in investing among Indonesian society is due to lack of knowledge or education related to investment in capital market. Basic knowledge about investment is needed in investment activity to avoid irrational investment practices. This basic knowledge can cover some topics, such as what investment analysis is used, the rate of return from an investment, and investment education itself.

Capital market provides an alternative for investors to invest whether in short or long term, in which it usually draws the investors to invest their money. Stock is one of the most popular commodity finance traded in capital market. Stock is an instrument of *Equity*, which is a sign of participation or ownership of a person or business entity in a company or limited company (Hadi, 2013: 67).

Based on the elaboration above, the researcher then conducted a research study entitled "An Analysis of Factors Influencing Investment Decision Making in Indonesia's Capital Market".

Research Purpose

The purpose of this research is to analyze how the factors of investigation, viz. fundamental analysis, return on investment, and investment education, influence investment decision making in capital markets.

LITERATURE REVIEW

Fundamental Analysis Method

Fundamental Analysis states that every stock investment has a foundation called intrinsic value that can be determined through a very careful analysis of the current condition of a company and its prospects in the future. Intrinsic value is a function of company factors that are combined to earn an expected return with a risk attached to that stock. This value is estimated by investors or analysts, and the result of this estimation is compared with the current market price. Thus, it can be known which stocks are overpriced or underprice (Shahib Natarsyah: 2000).

Research on fundamental analysis and its effect on investment decision making is in line with a research conducted by Natarsyah (2000). The research result indicated that fundamental analysis using asset variables has a significant and positive impact toward investment decision making. On the other hand, a research conducted by Gede (2009) showed that fundamental analysis with the asset calculation has no significant effect on investment decision making and stock prices. In accordance with a research conducted by Nainggolan (2008), economic factors and fundamental analysis can influence stock prices in which it may affect investment decision making.

H1: Fundamental Analysis influences investment decision making

Return on Investment

According to Brigham, et al (1999) in his book entitled *Financial Management Theory and Practice*, stock returns are an instrument to measure financial performances of a company based on the stock of the company itself. Corrado and Jordan (2000) assume that stock returns are profits obtained from investors for their stock investment and securities. It can be in the form of profits from dividend distribution or profits from capital gain/loss. Jogiyanto (2010) states that stock returns can be divided into two categories namely realized return and expected return.

a) Realized return is a return that has occurred. It is calculated by using historical data. Realized return is important as it is used as one of tools to measure a company's performance. Realized return or historical return is also useful as a fundamental in determining expected return and risks in the future.

b) Expected return is a return that is expected to be obtained by investors in the future. Unlike realized return that has already occurred, expected return has not yet occurred. Expected return is a return that is used for investment decision making.

Previous research conducted by Yuwono (2011) and Raditya (2013) prove that perceptions of return and risk were significant positive toward interest and decision making in investing. This finding indicated that it is necessary to have sufficient knowledge, experience, and business sense to invest in a capital market. On the contrary, Hermanto (2017) discovered that variable return has a significant but negative impact. It was due to the investors looked through how return would be obtained, but that is not merely the standard if investors want to invest in capital markets.

H2: Return on investment influences investment decision making

Investment Education

Investment Knowledge or Investment Education is the basic knowledge to make investments. The size of the variables used in investment knowledge is a comprehension about investment condition, basic knowledge about stock valuation, level of risks, and return on investment (Kusmawati, 2011). This knowledge will make people easier to make decision in investment since the knowledge is a basic in forming a power to do something they want (Efferin, 2006). The statement is in accordance with Halim (2005:4) who states that to make investment in capital markets, having sufficient knowledge, experience, and business instinct are needed in order to analyze the effects that will be purchased. Adequate knowledge is highly needed to avoid losses when investing in capital markets, such as in stock investment.

Having knowledge about investment will make the investors tend to become more confidence in doing stock trades, and then it leads them to make greater investment decision. The research has the same opinion with the study conducted by Graham et al. (2009) that states when investors tend to feel competent, they will trade stocks more often, which eventually leads to higher frequency in transaction. Chandra (2009) also shows that investors with high level of competency will often do stock trades and able to make upright decisions.

H3: Investment Education influences investment decision making.

Investment Decision

According to Bodie, et al (2014:01), investment is a current commitment toward money or other resources in hope of gaining profits in the future. Pujiati and Widanar (2009) state that investment decision is a decision issued by companies related to the company's activities to release funds at the present time in hope to earn flow of funds in the future with a great amount

compared to the previous investment. Hence, a company's expectation to always grow and develop will be more clearly planned. From these definitions, it can be seen that investment decision is a planned activities for allocating funds or assets owned by a company and other assets to obtain profits in the future. Investment decision is a tough decision since it involves company's assets and expectations.

Research on investment decision is in line with the research conducted by Timotius (2016) in which the results of the research indicate that knowledge and return on investment have significant impact on investment decision making. In addition, a research conducted by Waiqotul and Sri (2017) show the influence of understanding fundamental analysis to investment decision, in which this understanding has a considerable influence to the results from investment.

However, this research result is incompatible with the research conducted by Ellen and Yuyun (2018) in which fundamental analysis and financial literacy have no influence on investment decision. They assume that although the investors have invested in a long term and have used fundamental analysis, the investors are more likely to make investment by getting advice from the people who they think are an expert. They will follow the suggestions and ignore their own capability and analysis.

H4: Fundamental Analysis, Return on Investment, and Education Investment influence investment decision making

RESEARCH METHOD

The population of this research was all individual investors who have stock investment in Indonesia Stock Exchange. The range was limited until July 2018, with the total number of 1.360.000 investors. The sampling technique used in this research was based on the table developed by Isaac and Michael and used random sampling which is the sample is based on the investors individual and investor community in university with google form survey .The error rate is 5%, so there were 349 investors contributed in this research (Sugiyono, 2009). After going through the evaluation based on certain criteria, there were only 260 investors who could be the respondent for this research. This research used SEM (Structural Equational Model) technique to analyze the collected data.

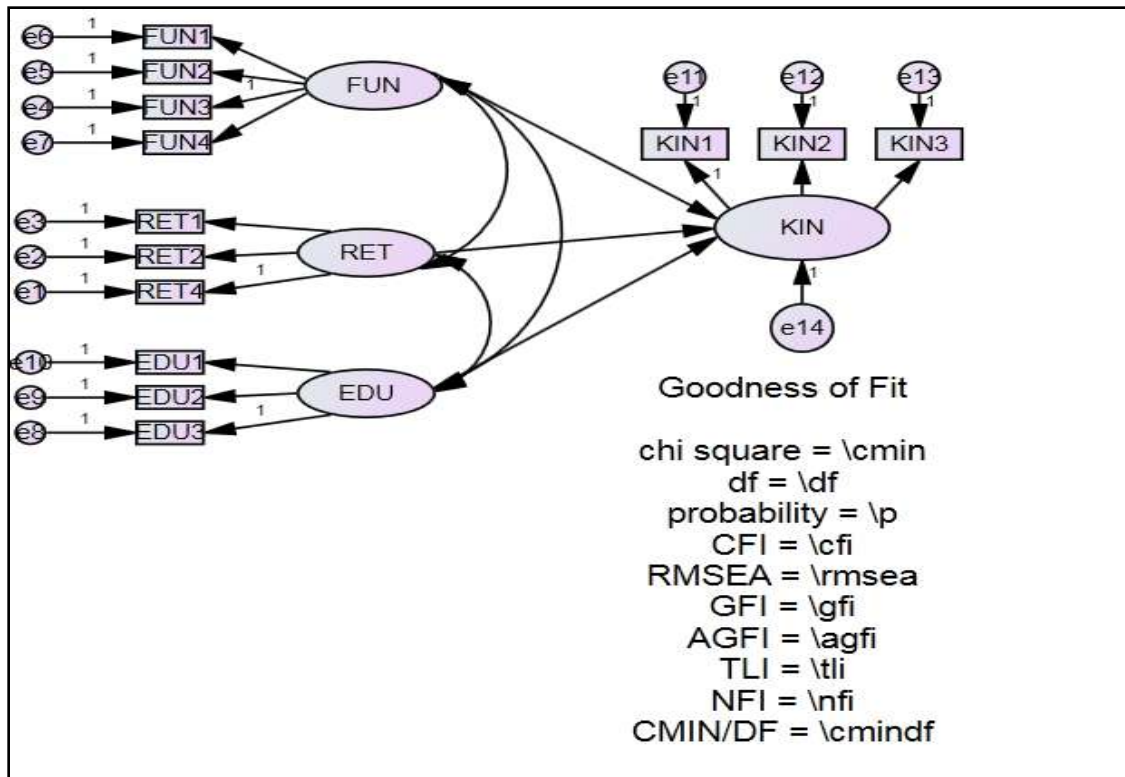


Figure 1 Research Model

Method of Data Analysis

Below is the statistical procedure for Investment Decision:

$$KIN = \rho_{KIN.FUN} \cdot FUN + \rho_{KIN.RET} \cdot RET + \rho_{KIN.EDU} \cdot EDU + e1$$

Note

FUN = Fundamental Analysis

RET = Return on Investment

EDU = Education Investment

KIN = Investment Decision

e1 = Error 1

RESULT AND DISCUSSION

The Respondent Characteristic

Table 1 presents the data of descriptive analysis based on the age of the respondents. The average age of the respondents is in range 17 – 30 years old. In this age, the investors are in the productive age and in the phase of career development. Hence, investment decision making becomes one of factors that is needed to be considered for future life.

Table 1 Respondents' Age

Age	Frequency	Percent	Valid Percent	Cumulative Percent
17	2	2,0	2,0	1,0
17 – 30	219	219,0	219,0	84,0
30 – 50	37	37,0	37,0	14,0
> 50	2	2,0	1,0	1,0
Total	260,0	260,0	260,0	100

Based on the data presented in Table 2, it can be concluded that the number of male respondents is higher than female respondents since more than half of all respondent was male. There were 157 male respondents out of 260 respondents. This can happen due to many females are still hesitate to have investment in capital markets because women are more afraid in taking risk compared to men.

Table 2 Gender

Frequency	Percent	Valid Percent	Cumulative Percent
Male	157	157,0	157,0
Female	103	103,0	103,0
Total	260,0	260,0	260,0

The data in Table 3 shows that the level of education of the respondents is dominated by undergraduate degree. This degree is considered as a fairly high level of education. This level of education can be classified at the age of 17 – 30 years old. Hence, the investors already have knowledge and thought for better investment, in which they are quite good in analyzing and making investment decision.

Table 3 Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Senior high school	81	81,0	81,0	31,0
Diploma III	11	11,0	11,0	4,0
Undergraduate	155	155,0	155,0	60,0
Graduate	12	12,0	12,0	5,0
Postgraduate	1	1,0	1,0	0,0
Total	260,0	260,0	260,0	100,0

Hypothesis Testing

The process of hypothesis testing was done by using the suitability test from Goodness of Fit model to find out whether the model has passed the criteria. Then, the testing was done partially and simultaneously to discover the effect among the research variables.

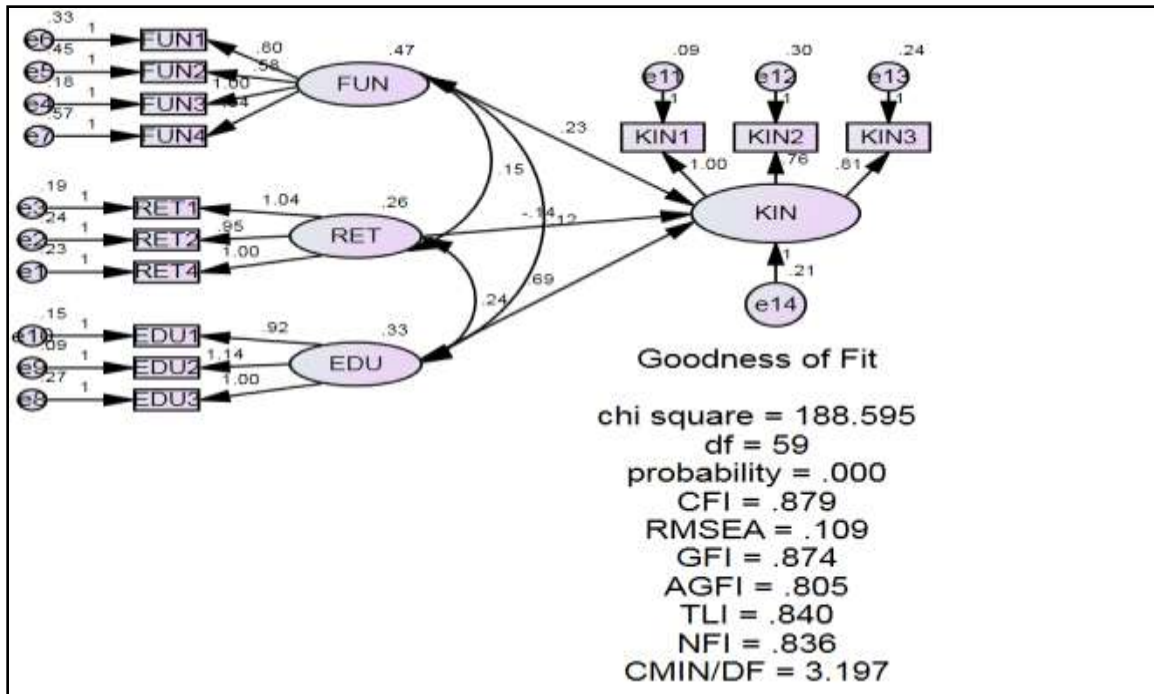


Figure 2 SEM Model

Table 4 Structural Equational Model (SEM)

Goodness of Fit Index	Cut Off Value	Result	Note
Chi Square	Expected to be low	188.595	Poor
Probability	≥ 0.05	0.000	Poor
CFI	≥ 0.95	0.879	Poor
RMSEA	≤0.05 - 0.08	0.109	Marginal
GFI	≥ 0.90	0.874	Marginal
AGFI	≥ 0.80	0.805	Good
TLI	≥ 0.90	0.840	Marginal
NFI	≥ 0.90	0.836	Poor
CMIN/DF	≤ 2.00 or ≤ 5.00	3.197	Good

The test of model suitability by using the criteria of goodness of fit indicated that this model is in accordance with the data or fit with the data used in this research. The result of the comparison

between goodness of fit criteria and the result of full structural equation model is presented in Table 4. It shows that chi square criteria, probability, and CFI have poor results and RMSEA, GFI, and TLI only qualify marginally. Meanwhile, AGFI and CMIN/DF show good results.

However, Hair et al (1998) in Haryono et al (2002) assume that from several feasibility tests, the model is categorized feasible if at least one of testing method is fulfilled. It implies that all SEM construct models are eligible and accepted.

Table 5 Partial Test

		Estimate	S.E.	C.R.	P	Label
KIN <---	FUN	.233	.080	2.913	.004	
KIN <---	RET	-.141	.210	-.670	.503	
KIN <---	EDU	.686	.174	3.934	***	

The process of hypothesis testing was done by analyzing the value of Critical Ratio (CR) and probability (P), and then compared to the implied statistical constraints by Ferdinan (2006), namely higher than 2 for CR and below 0.05 for P.

Table 6 Simultan Test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	5.219	3	1.740	6.854	.000 ^b
1	Residual	64.986	256	.254		
	Total	70.205	259			

a. Dependent Variable: KIN b. Predictors: (Constant), EDU, FUN, RET

Simultaneous testing of hypothesis is counted as influential if the significance value is less than 0.05.

After several procedures of data analysis using covariant SEM technique by utilizing AMOS 20, the results have to be interpreted to prove the research hypotheses that have been proposed. The conclusions of the hypotheses are presented below as the result of the analysis of relationship between constructs in research model.

H1 : Fundamental Analysis Influences Investment Decision Making

Ho₁: Fundamental Analysis influences investment decision making

Ha₁: Fundamental Analysis has no influence on investment decision making

Based on the result of the data processing, it states that the value of CR is 2.913 and the P value is 0.004. The results of these two provide the information that FUN (Fundamental Analysis) impacts KIN (Investment Decision). In conclusion, H_{01} is accepted.

H2 : Return on Investment Influences Investment Decision Making

H_{02} : Return on investment influences investment decision making

H_{a2} : Return on investment has no influence on investment decision making

From the research result, it is known that the CR value is -0.670 and the P value is 0.503. The results of these two values indicate that RET (Return on Investment) has no effect to KIN (Investment Decision). As a result, H_{02} is rejected.

H3 : Investment Education Influences Investment Decision Making

H_{03} : Investment education influences investment decision making

H_{a3} : Investment education has no influence on investment decision making

Based on the result of data processing, it is known that the CR value is 3.934 and the P value is 0.00. The results of these data indicate that EDU (Investment Education) influences KIN (Investment Decision). As a result, H_{03} is accepted.

H4 : Fundamental Analysis, Return on Investment, and Investment Education Simultaneously Influence Investment Decision Making

H_{04} : Fundamental analysis, return on investment, and investment education simultaneously influence investment decision making

H_{a4} : Fundamental analysis, return on investment, and investment education simultaneously have no influence on investment decision making

From Table 6 above, it can be interpreted that the significance value is 0.000. Hence, H_{04} is accepted. It shows that FUN, RET, and EDU simultaneously influence KIN.

CONCLUSION AND RECOMMENDATIONS

Based on the research results, it can be concluded that Fundamental Analysis, Return on Investment, and Investment Education have influenced investment decision making. On the other hand, Return on Investment has no influence toward investment decision making. Fundamental Analysis, Return on Investment, and Investment Education simultaneously affect Investment Decision Making significantly. It is discovered that Fundamental Analysis and Investment Education partially have an impact on investment decision making. It is due to the analytical skill and knowledge about investment that are important factors in making investment decision. Based on the research conclusion, the researcher has suggestions that there is a need to know the right model or analysis method to avoid statistic phenomenon or invalid

processing results. The ability of Fundamental Analysis and Investment Education are also the important things that impact investment decision making.

REFERENCES

- Alan, J., Bodie, Z., Alex, K. (2014). *Manajemen Portofolio dan Investasi [Portfolio and Investment Management]*. Salemba Empat: Jakarta
- Brigham, Eugene F., Gapenski, Louis C., & Ehmart, Michael C. (1999). *Financial Management Theory and Practice*. Orlando : The Dryden Press.
- Chandra, A. (2009). Individual Investor's Trading Behavior and the Competence Effect *Journal of Behavioral Finance*, Vol 6, No.1, pp. 56-70
- Corrado, Charles, J., & Jordan, Bradford D., (2000). *Fundamentals of Investment Analysis*. Fourth Edition. Singapore: Mc Graw- Hill.
- Eduardus, T.(2001). *Analisis Investasi dan Manajemen Portofolio Edisi Pertama [Investment Analysis and Portfolio Management First Edition]*, Yogyakarta: BPFY-Yogyakarta
- Ellen, P., Yuyun, I. (2018). Pengaruh Financial Literacy, Illusion of Control, Overconfidence, Risk Tolerance, dan Risk Perception terhadap Keputusan Investasi pada Mahasiswa di Kota Surabaya [The Effects of Financial Literacy, Illusion of Control, Overconfidence, Risk Tolerance, and Risk Perception toward Investment Decision Making on Students in Surabaya]. *Jurnal Ilmu Manajemen*. Vol 6, No.4
- Francis, Jack Clark. (1988). *Management of investments*, Second Edition, Singapore : McGraw-Hill, Inter-national Editions Financial Series.
- Graham, J., Harvey, C., Huang, H. (2009). Investor Competence, Trading Frequency, and Home Bias. NBER Working Paper. Pp 1094 -1106
- Halim, A. (2005), *Analisis Investasi*. Edisi ke-2 [Investment Analysis. Second Edition]. Salemba Empat : Jakarta
- Hermanto. (2017). Perilaku Mahasiswa Ekonomi di Universitas Esa Unggul dalam melakukan Investasi di Pasar Modal [The Behaviors of Economic Students in Esa Unggul University in Investing in Capital Markets], *Jurnal Ekonomi*, Vol 8, No.2, hlm 15.
- Jogiyanto, H. (2010). *Teori Portofolio dan Analisis Investasi [Portfolio Theory and Investment Analysis]*. Edisi ke tujuh. Yogyakarta : BPFY.
- Khairani, R., Putri, D. (2009). Perbedaan Kematangan Emosi pada Pria dan Wanita yang Menikah Muda [The Differences in Emotional Maturity between Young Married Men and Women]. *Proceeding PESAT (Psikologi, Ekonomi, Sastra, Arsitektur & Sipil) Universitas Gunadarma*. Vol.3. pp. A1-A6
- Kusmawati. (2011). Pengaruh Motivasi Terhadap Minat Berinvestasi Di Pasar Modal Dengan Pemahaman Investasi Dan Usia Sebagai Variabel Moderat [The Effects of Motivation on the Interest in Investing in Capital Markets with Investment Understanding and Age as Moderate Variables]. *Jurnal Ekonomi dan Informasi Akuntansi*. Vol 1 No. 2.
- Nainggolan, S. (2008). Pengaruh Variabel Fundamental Terhadap Harga Saham Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia [The Effects of Fundamental Variable on Stock Prices of Manufacturing Companies Listed in Indonesia Stock Exchange]. Tesis. Medan : Universitas Sumatera Utara
- Nataryah, S. (2000). Analisis Pengaruh Beberapa Faktor Fundamental dan Resiko Sistemik Terhadap Harga Saham : Kasus Industri Barang Konsumsi yang Go Public di Pasar Modal Indonesia [An Analysis of Fundamental Factors and Systematic Risks on Stock Prices]. *Jurnal Ekonomi dan Bisnis Indonesia*. Vol. 15, No. 3 : pp. 294-312
- Pujiati, D., Erman, W., (2007). Pengaruh Struktur Kepemilikan terhadap Nilai Perusahaan: Keputusan Keuangan sebagai Variabel Intervening [The Effect of Ownership toward the Value of the Company: Financial Decisions as Intervening Variable]. *Jurnal Perbanas*, pp. 1- 24.
- Raditya, D. (2013). Pengaruh Modal Investasi Minimal di BNI Sekuritas, Return dan Persepsi Terhadap Resiko pada Minat Investasi Mahasiswa dengan Penghasilan sebagai Variabel Moderasi [The Effect of Minimal Capital Investment in BNI Securities, Return, and Perception on Risks in Students' Investment Interest with the Income as Moderating Variable]. Tesis. Program Studi Magister Akuntansi Universitas Udayana.
- Rodoni, A., Herni, Ali,. (2014). *Manajemen Keuangan Modern [Modern Financial Management]*. Jakarta : Mitra Wacana Media.

Sugiyono. (2009). Metode Penelitian Kuantitatif, Kualitatif dan R & D [Quantitative, Qualitative, and R & D Methods]. Bandung : Alfabeta.

Senjani., Yuyu, P. (2015), Analisis Faktor-Faktor yang Mempengaruhi Keputusan Investasi Pada Perusahaan BUMN [An Analysis of Factors Influencing Investment Decision Making in Indonesia State-Owned Enterprises]. Simposium Nasional Akuntansi 18. Universitas Sumatera Utara.

Timotius, T., A.A.G.P, W. (2016). Pengaruh Pelatihan Pasar Modal, Return, Persepsi, Risiko, Gender, dan Kemajuan Teknologi pada Minat Investasi Mahasiswa [The Effect of Capital Market, Return, Perception, Risk, Gender, and Technology Advance Training on Students' Investment Interest]. E-Jurnal Akuntansi Universitas Udayana. Vol 16, No.3

Waiqotul, J., Sri, U. (2017). Analisis Fundamental, Suku Bunga, dan Overconfidence terhadap Pengambilan Keputusan Investasi pada Investor di Surabaya [Fundamental Analysis, Interest Rates, and Overconfidence toward Investment Decision Making by Investors in Surabaya]. Jurnal Bisnis dan Manajemen, Vol.1, No.2, Hal 138-155.

Yuwono, Supriyatna. (2011). Pengaruh Karakteristik Investor Terhadap Besaran Minat Investasi Saham di Pasar Modal [The Effect of the Investors Characteristics toward the Amount of Interest in Stock Investment in Capital Markets]. Tesis. Program Studi Magister Manajemen Universitas Indonesia

Yuliana, I. (2010). Investasi Produk Keuangan Syariah [Investment in Islamic Financial Products]. Malang : UIN-Maliki Press.