

Effect of Financial Literacy, Motivation, and Perceived Risk on Students Investment Interest

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Abstract

The number of student investors tends to increase every year in Indonesia, but the level of investment still low compared to other countries. The Indonesia Stock Exchange continues to encourage the increase of student investment interest by cooperating with establishing investment galleries in various universities. The purpose of this study is to analyze the effect of financial literacy, investment motivation, and perceived risk on the student's investment interest. This study unit analysis is an active student of Widyatama University with the total sample are 145 respondents by using a nonprobability sampling technique with Tabachnick and Fidell formula. This research uses multiple linear regression to find out variables that have a powerful effect on the student's investment interest. The study result shows that investment motivation and perceived risk have a positive effect on the student's investment interest in Widyatama University, but financial literacy does not affect the Widyatama student's investment interest. Strong motivation and a high understanding of risks can actually increase student investment interest.

Keywords: *Financial literacy, motivation, perceived risk, investment interest.*

Introduction

The changing times have caused changes in investor trends. In the past, the dominant investors in various world capital markets came from baby boomers, because they had wealth and were able to invest, but in recent years, millennials, in which there are many students, have begun to dominate the world capital market. The Pew research center estimated that stock market investors from the millennial generation will experience an increase to 73 million, while baby boomers will experience a decline of 72 million in 2019 (Finance.yahoo.com, 2019). One of the stimulus factors is that improvements in information technology have changed the way of investing with the emergence of online & mobile investment services developed by securities companies that make it easier for investors to learn and try investing, including student investors (Saudi, 2018).

The number of student investors is also indicating an increasing trend, but still low compared to other countries. Indonesia's capital market continues to encourage the increase of student investment interest by cooperating with establishing investment galleries in various universities including Widyatama Universities. Investment galleries will help students in gaining knowledge through financial literacy and collaborating with securities companies to make it easier for students to invest and campaign for "Let's Save Stock". Financial literacy has an important role because it is related to various factors, including the development of new financial products, the complexity of financial markets, changes in politics,

demographics, and economics. Student as a new player with limited experience has the same investment objectives as investors in general, which is expecting a return on investment in the form of dividends and/or capital gains (Croushore, 2006). Therefore, students need better knowledge and understanding of the products offered, before making investment decisions to minimize investment risk. Financial literacy can affect the psychological aspects of students and increase student investment interest. Hidayat et al. (2019) prove that knowledge of investment profit levels and basic knowledge of stock valuation has a positive effect on student investment interest. Amhalmad and Irianto (2019) also show that investment knowledge affects student investment interest.

Another factor that is predicted to affect the student investment interest is investment motivation. Motivation is a form of behavior characterized by forms of activity through psychological processes, both those influenced by intrinsic and extrinsic factors that can direct a person to achieve his/her goals (Yuliati, 2011). An important motivation for an investor is a motivation that comes from intrinsic that can change his/her views by knowing new things to have a better life in the future. The motivation of students to invest is quite diverse, one of which is to make a profit. Motivation to get profit in the future is a factor that can influence students' investment interest (Syahyunan, 2013). Nandar et al. (2018) adduce that motivation influence student's investment interest in Islamic capital market IAIN investment gallery stock Zawiyah Cot Kala Langsa. Amhalmad and Irianto (2019) mention that motivation affects the student's investment interest in the state university of Padang. Even though the student already has information, knowledge, and investment motivation, many students discourage their investment. One of the reasons is their perceived risk. Perceived risk shows a person's judgment (belief and opinion) on taking or avoiding risk when making investment decisions under uncertainty (Western Sydney University Library, 2018). Victor (2008) argues that risk perception is how people perceive or believe a potential threat or danger will arise. The perceived risk depends on the level of risk that is acceptable to investors (risk-averse, risk-neutral, and risk-lover) which will affect student investment interest. In the financial field, perceived risk is measured by attitudes toward risk, such as attitudes to accept and avoid risk (Kahneman & Tversky, 1974; Barberis & Huang, 2001; Mayfield et al., 2008).

The purpose of this study is to explain the effect of financial literacy, investment motivation, and perceived risk on the student's investment interest in Widyatama University. This research is different from other studies because it uses financial literacy, motivation, and perceived risk, which are still rarely studied in Indonesia, especially for students. This study result expected can contribute to the development of investor behavior literature.

Literature review and hypothesis development

Investment Interest

Interest describes a person's liking for a specific object from an event or thing. Measurement of this interesting aspect can be done by using a number of questions (Nandar et al., 2018). This interest shows how someone tries and shows an effort to achieve something. Interest is often seen as an intermediary for several factors that have a particular impact (Salim & Salim, 1996). Interest develops as a result of an activity and will become a cause for reuse in the same activity. Interests have an influence on the activities carried out. Investment interest influence by a number of factors such as financial literacy. For example, a desire to find out about investing in financial assets, which encourages you to learn everything, related to investing in stocks, bonds, mutual funds and etc. by attending classes and/or seminars. The knowledge they have will encourage interest in trying to put it into practice. In addition, investment interest can also be influenced by the motivation to invest and perceived risk.

Financial Literacy and Investment Interest

Financial literacy has an important role in making investment decisions. Financial literacy shows a person's ability to understand money and finances and to apply this understanding with confidence to assist in making effective financial decisions (Coskuner, 2016). Financial literacy can increase a person's knowledge, skills, and confidence in order to be able to carry out financial management well. Every person who has good financial literacy has better financial responsibility (Hilgert et al., 2003). The level of financial literacy of each person will not only determine their current financial condition, they can even determine their financial form in the future. Someone who knows and understands about investing both in terms of benefits, risks, and losses tends to have an interest in investing (Sidiq & Niati, 2020). Audini, et al. (2020) show that the higher a person's literacy, then the higher the desire to invest.

Some of the research shows that there is the relationship between financial literacy and investment interest such as study perform by Deviyanti, et al. (2017) mention that financial literacy has a significant effect on the investment interest. Pangestika and Rusliati (2019) indicate that financial literacy has a very strong relationship with investment interest. Hidayat, et al. (2019) state that knowledge of investment profit levels and basic knowledge of stock valuation has a positive effect on the student investment interest. Amhalmad and Irianto (2019) also adduce that investment knowledge affects the student investment interest. Refer to the above illustrations and theories, the first hypothesis can be formulated as follows:

Hypothesis 1: Financial literacy has a positive effect on the student's investment interest.

Investment Motivation and Investment Interest

One of the factors that influence investment interest is motivation. Some people understand and have knowledge about investing but do not apply it, so it needs a motivation to carry out these investment activities. Motivation describes the process of giving encouragement that can determine the intensity, direction, and persistence of a person in achieving goals (Robbin, 2006). The motivation needed by investors is motivation from within themselves, where someone wants to know something new, then the urge arises from him/herself and the changes that are obtained will provide a better life in the future. The higher a person's investment motivation gets, then the higher the investing interest, and the higher of the motivation, then the stronger and greater the desire to invest (Amhalmad & Irianto, 2019). Nandar et al. (2018) mention that investment motivation depends on the strength of the investor's motive for investing. The motive is sometimes interpreted as an impulse and intuition in a person. Pajar (2017) states that investment motivation has an effect on the investment interest. Lubis (2019) in his research suggests that investment motivation has a positive effect on investment interest which means that more investment motivation increases, then the investment interest will also increase. Amhalmad and Irianto (2019) mention that motivation affects the student's investment interest in the economic faculty, state university of Padang. Nandar et al. (2018) bring up the motivation effect of student's investment interest in the Islamic capital market IAIN investment gallery. Based on the above explanation, this study second hypothesis is:

Hypothesis 2: Investment motivation has a positive effect on the student's investment interest.

Perceived Risk and Investment Interest

Perceived risk is addressed to someone's judgment (trust and opinion) on taking or avoiding risk when making investment decisions under uncertainty (Western Sydney University Library, 2018). Investment activities are certainly risky and investors routinely have to make

investment decisions under conditions of uncertainty due to incomplete information obtained. Perceived risk is a belief about questionable results or possible negative results from a service transaction (Yen, 2015). Perceived risk is a person's perception of the uncertainty that might be received when the purchase of a product or service. In investing, there must be an element of uncertainty or risk and each investor has a different level of courage in dealing with these risks. Perceptions of risk describe as public beliefs, thoughts, and opinions on losses that may occur as a result of investing in the capital market and generate a sense of alertness and doubt to invest (Fahreza & Surip, 2018). Perceived risk includes psychological and emotional aspects, which will guide investment appraisal and decision making. This condition makes investors' perceived risk more subjective than objective towards risky situations. Victor (2008) states that perceived risk is the way people perceive or believe about potential threats or danger.

Perceived risk has two components, namely influence, and cognition. Influence is an emotional component, while cognition is a mental process involved in gaining knowledge and understanding, including thinking, knowing, remembering, assessing, and solving problems (Western Sydney University Library, 2018). Elster (1989) defines emotion as a physiological state of arousal that is triggered by beliefs about something. Emotions can also be seen as a perceived tendency towards anything that is intuitively judged as good/useful, or away from anything that is intuitively judged as bad/dangerous (Arnold, 1960). Solomon (2000) describes emotion as a complex influence that combines cognitive, physiological, social, and behavioral aspects of an individual. Peter (2003) explains that emotional elements such as control of feelings, fear, and knowledge imply risk and always contain emotional or affective bias. The perceived risk depends on the level of risk that is acceptable to investors (risk-averse, risk-neutral, and risk lover) which will influence and become a determining factor for investor investment interest. Minh et al. (2017) examined the effect of perceived risk on investment performance and investment objectives of individual investors. The results show that perceived risk has a direct and indirect effect on investment performance and investment intentions. Aini et al. (2019) mention that perceived risk has a positive effect on the investment interest. Different study results show that perceived risk has a negative effect on investment interest. Referring to the explanation and above theory, the third hypothesis in this study can be formulated as follows:

Hypothesis 3: Perceived risk has a positive effect on the student's investment interest

Methodology

This type of research is basic research with a quantitative approach. The data used in this study is primary data gathered from the results of filling out questionnaires by respondents that are active students of Widyatama University who are the population in this study. The sample selection technique used in this study is a non-probability sampling technique. Because the number and characteristics of the population are not known with certainty, the formula used to take samples is the Tabachnick and Fidell formula: $N \geq 104 + m$, where N = number of samples and m = number of variables. Refer to the formula, this study sample size is $104 + 4 = 108$ respondents, thus the minimum sample size in this research was 108 samples. To make the sample used to be representative, it is better if the number of samples is more than the minimum sample, and so in this study, the number of samples is increased to 145 respondents. The data measurement method used in this study is a Likert scale with a score range of 1 to 5, where 1 indicates the lowest value and 5 indicates the highest value. The Likert scale is generally treated as an interval scale although many argue between ordinal or interval (Sekaran & Bougie, 2016).

This study will analyze the effect of financial literacy, investment motivation, and perceived risk on student investment interest. The variables used in this study consisted of independent variables, namely financial literacy, investment motivation, and perceived risk, and the dependent variable, namely student investment interest as measured by several indicators. The indicators used to measure each variable in this study will be outlined in the form of questions. Each item of question will be tested using validity and reliability tests. The validity test is used to measure whether a questionnaire is valid or not. The validity test was carried out using the Pearson correlation technique (Pearson Correlation Product Moment) with the criteria for each item or question item if r (the correlation coefficient between the score of the question items and the total score) > 0.4 then the item or item was declared valid. While the reliability test is used to determine the reliability level of the questionnaire. A questionnaire is declared reliable or reliable if a person's answer to the statement is consistent or stable over time (Ghozali, 2016; Sekaran & Bougie, 2016). Reliability measurement is done by looking at the correlation between the answers to the questions. Reliability measurement was performed using the Cronbach Alpha (α) statistical test. A construct or variable is said to be reliable if it gives a Cronbach Alpha value > 0.70 .

In the way to answer the research hypothesis proposed in this study, the data analysis method used is multiple linear regression with the following structural equation:

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

where a is a constant, $\beta_1, \beta_2, \beta_3$ are parameters, and Y is student investment interest as a dependent variable, X_1 is financial literacy, X_2 is investment motivation and X_3 is perceived risk as independent variables.

Multiple linear regression testing started with the classic assumption test, consists of normality and multicollinearity test with the aim are to ensure that the formed regression equation model has accuracy in estimation, unbiased, and consistent. Then the regression model test by using the F test and the coefficient of determination test. The last test is the hypothesis test (t-test) to find out the effect of each independent variable use in this study towards the dependent variable.

Results and Discussion

Research Results

Respondent profile

Students who were used as respondents in this study were active students of Widyatama University with a total of 145 respondents who were grouped by gender and age.

Table 1. Research Respondents Data

No.	Explanation	Amount	%
1	Gender		
	• Male	63	43.45
	• Female	82	56.55
2	Age		
	• 16 – 20 years	17	11.72
	• 21 – 25 years	86	59.31
	• 26 – 30 years	37	25.52
	• > 30 years	5	3.45

Source: Questionnaire, processed data

The results of the respondent's identity as shown in table 1 above show that there are more female respondents than male respondents with the highest age range between 21-25 years.

Validity and Reliability Test

The validity test result for each question item used in measuring financial literacy, investment motivation, perceived risk, and investment interest variables with the Pearson correlation test, indicate that the correlation value of each statement item with a total score obtained was greater than 0.4, so it can be concluded that the items used in this study are valid and can be used for further data analysis.

Table 2. Validity Test Result

Financial Literacy	Investment Motivation	Perceived Risk	Investment Interest	Conclusion
,510	,756	,546	,707	Valid
,442	,673	,563	,740	Valid
,610	,703	,628	,781	Valid
,632	,409	,404	,608	Valid
,684	,664	,560	,734	Valid
,519	,661		,644	Valid
,610	,712		,611	Valid
,568	,696		,694	Valid
,479	,671		,528	Valid

Source: Questionnaire, processed data

The results of the reliability test for all question items used in measuring financial literacy, investment motivation, perceived risk, and investment interest variables indicate that all items are reliable because the reliability coefficient value of Cronbach's Alpha is > 0.70, so that it can be used for the next analysis.

Table 3. Reliability Test Result

Variables	Cronbach's Alpha	N of Items	Conclusion
Financial literacy	,831	9	Reliable
Investment Motivation	,893	9	Reliable
Perceived Risk	,768	5	Reliable
Investment Interest	,902	9	Reliable

Source: Questionnaire, processed data

Classical Assumption Test

The normality test result using the One-Sample Kolmogorov Smirnov method indicates that the data is normally distributed with a significance value of 0.070 more than 0.05 ($p > 0.05$). Multicollinearity test results by using the variance inflation factor (VIF) show that VIF value for all independent variable use in this study less than 10 ($VIF < 10$). It can be concluded that there is no multicollinearity problem in the regression model.

Table 4. Research Model Test and Hypotheses Testing

Variables	Regression Coefficient	t	Sig. t	F	Sig. F	R ²
Financial Literacy	0,024	0,184	0,854	35.453	0,000	0,418

Investment Motivation	0,518	5,704	0,000			
Perceived Risk	0,528	3,043	0,003			

Source: Questionnaire, processed data

The results of the model test as shown in Table 4 above indicate that the regression model formed is fixed with the sig value. $F < 0.05$. Coefficient of determination (R^2) as shown in table 4 above is 0.418. This mean that 41.8% student investment interest may be affected by financial literacy, investment motivation, and perceived risk, while the remaining of 58.2% may affected by other variables not included in this regression model. Hypotheses test result as shown in table 4, denotes that financial literacy does not affect student investment interest, while investment motivation and perceived risk have a positive effect on student investment interest.

Discussion

The hypothesis test result shows that financial literacy has no effect on student investment interest. This condition describes that high or low student financial literacy levels do not influence student investment interest. Someone who has a high level of financial literacy will have greater consideration in investing, and conversely, someone who has a low level of financial literacy has no interest in investing. Increasing knowledge makes students not dare to make investment decisions because there is a sense of anxiety about the possibility of investment risks that will be faced. Even though high financial literacy can prevent investors from being influenced by biased behavior. This research result not in line with the study performed by Deviyanti et al. (2017); Pangestika and Rusliati (2019); Hidayat et al. (2019); Amhalmad and Irianto (2019).

Motivation has an important role in encouraging investment interest, especially motivation from within oneself. The hypothesis test result denotes that investment motivation has a positive effect on student investment interest. Motivation can also arise due to the influence of the surrounding environment from family, relatives, and the media, as well as the interest in information about the investment benefits that will be obtained. Robbin (2006) describes that motivation is used as an impetus that can determine the direction to achieve goals. The stronger and higher the level of motivation obtained, then the stronger the student's interest in investing, and otherwise, the lower level of motivation obtained, then the lower the student's interest in investing. This study result in line with Nandar et al. (2018); Pajar (2017); Lubis (2019); Amhalmad and Irianto (2019) states that investment motivation has a strong effect on the investment interest.

Perceived risk is related to taking or avoiding risk when making investment decisions under uncertainty. Perceived risk involves psychological and emotional aspects, which will guide investment appraisal and decision making. Hypothesis test results show that perceived risk has a positive effect on the student investment interest. This condition shows that students already fully understand the risks they will face when deciding to start investing in the capital market. Proper risks assessment that will be faced when carrying out investment activities can ensure that students are able to make the right investment decisions, thereby increasing student investment interest. This research result suitable with study conduct by Minh et al. (2017) and Aini et al. (2019).

Conclusion

The purpose of this study was to determine the effect of financial literacy, investment motivation, and perceived risk on student investment interest. The data used in the study is primary data obtained from filling out questionnaires to the respondents, that is active

students of Widyatama University. This study used a sample of 145 students who were willing to fill out the distributed questionnaires. The sampling technique used is a non-probability sampling. Hypothesis test results indicate that only investment motivation and perceived risk have a positive effect on the student investment interest, meanwhile, financial literacy has no effect on the student investment interest in Widyatama University. Strong motivation and a high understanding of risks can actually increase student investment interest.

This research still has a number of limitations that might have an impact on the research results. First, this research only using students of Widyatama University as a sample with a limited number of respondents. Second, this study still uses limited independent variables in explaining the factors that influence student investment interest. Therefore, suggest to the other researchers to use a wider sample and more independent variables in accordance with the theory and previous research.

References

1. Aini, Nur, dkk. 2019. The Influence of Investment Knowledge and Understanding, Minimum Investment Capital, Return, Risk and Investment Motivation on Student Interest in Investing in the Capital Market [Pengaruh Pengetahuan dan Pemahaman Investasi, Modal Minimum Investasi, Return, Risiko dan Motivasi Investasi Terhadap Minat Mahasiswa Berinvestasi di Pasar Modal (Studi pada Mahasiswa Fakultas Ekonomi dan Bisnis Kota Malang)]. *E-JRA*, 8(5), 38 – 52.
2. Amhalmad, Iqbal, dan Agus Irianto. 2019. The Effect of Investment Knowledge and Investment Motivation on Investment Interest of Economics Education Students, Faculty of Economics, State University of Padang [Pengaruh Pengetahuan Investasi dan Motivasi Investasi Terhadap Minat Berinvestasi Mahasiswa Pendidikan Ekonomi Fakultas Ekonomi Universitas Negeri Padang]. *EcoGen Journal*, 2(4), 734 – 746.
3. Arnold, M. B. (1960). *Emotion and Personality. Psychological Aspects*. New York: Columbia University Press.
4. Audini, Adilla Fakrian. 2020. The Effect of Financial Literacy on Investment Decisions with Financial Behavior as a Moderation Variable [Pengaruh Literasi Keuangan terhadap Keputusan Investasi dengan Perilaku Keuangan Sebagai Variabel Moderasi]. *Niagawan Journal*, 9(2), 102 – 107.
5. Barberis, N., Huang, M. 2001. Mental accounting, loss aversion, and individual stock returns. *Journal of Finance*, 56(4), 1247 – 1292.
6. Coskuner, Selda. 2016. Understanding Factors Affecting Financial satisfaction. The Influence of Financial Behavior, Financial Knowledge and Demographics. *Imperial Journal of Interdisciplinary Research*, Vol. 2 No. 5, pp 377-385
7. Croushore, Dean. (2006). *Money and Banking: A Policy Oriented Approach*. New York: Cengage Learning.
8. Deviyanti, L., P., A., E., Purnamawati, I., G., A., & Yasa, I, N., P. 2017. The Influence of Subjective Norms, Perceptions of Return, Financial Literacy on Student Interest in Investing in Stocks in the Capital Market [Pengaruh Norma Subjektif, Persepsi Return, Literasi Keuangan terhadap Minat Mahasiswa untuk Berinvestasi Saham di Pasar Modal]. *E-Journal Akuntansi Program S1 Universitas Pendidikan Ganesha*, 18(2), 1 – 12.
9. Elster, Jon. 1989. Social Norms and Economic Theory. *Journal of Economic Perspectives*, 3(4), 99 – 117.
10. Fahreza, Muhammad, dan Surip, Ngadino. 2018. The Influence of Investment, Perceptions of Risk and Perceptions of Behavior Control on Interest in Stock Investment

- [Pengaruh Investasi, Persepsi Risiko dan Persepsi Kontrol Perilaku Terhadap Minat Investasi Saham]. *SWOT: Jurnal Ilmiah Ilmu Manajemen*, 8(2), 346 – 361.
11. Ghozali, Imam. 2016. *Multivariate Analysis Applications with Programs [Aplikasi Analisis Multivariate dengan Program]*. IBM SPSS 23. Semarang: Badan Penerbit.
 12. Hidayat, L., Muktiadji, N., & Supriadi, Y. (2019). Influence of Knowledge Investment on Student Investing Interest in Higher Education Investment Galleries [Pengaruh Pengetahuan Investasi Terhadap Minat Mahasiswa Berinvestasi di Galeri Investasi Perguruan Tinggi]. *Jurnal Analisis Sistem Pendidikan Tinggi*, 3(2), 63 – 70.
 13. Hilgert, Marianne, Jeanne Hogarth, dan Sondra Beverly. 2003. *Household Financial Management: The Connection between Knowledge and Behavior*. *Federal Reserve Bulletin*. 89 (7), 300- 322.
 14. Kahneman, D., & Tversky, A. 1974. Judgment under Uncertainty: Heuristics and Biases. *Science*, 185(4157), 1124 – 1131.
 15. Lubis, Putri K.D. 2019. Influence of Knowledge Investment and Investment Motivation Against the Interest of Investing in the Stock Market on Economic Education Status of Students of State University of Medan. *Journal of Physics: Conference Series*, Vol. 1387, No. 1, p. 012064.
 16. Mayfield, C., Perdue, G., Wooten, K. 2008. Investment management and personality type. *Financial Services Review*, 17(3), 219-228.
 17. Minh, Phung Thai Trang, Tho, Nguyen Huu. 2017. Perceived Risk, Investment Performance and Intentions in Emerging Stock Markets. *International Journal of Economics and Financial Issues*, 7 (1), 269 – 278.
 18. Nandar, H., Rokan, M. K., & Ridwan, M. 2018. Factors Affecting Student Interest in Investing in the Islamic Capital Market through the Investment Gallery IAIN Zawiyah Cot Kala Langsa [Faktor yang Mempengaruhi Minat Mahasiswa Berinvestasi di Pasar Modal Syariah Melalui Galeri Investasi IAIN Zawiyah Cot Kala Langsa]. *KITABAH: Jurnal Akuntansi dan Keuangan Syariah*, 2(2), 179 – 205.
 19. Pajar, Rizki Chaerul. 2017. The Influence of Investment Motivation and Investment Knowledge on Investment Interest in the Capital Market [Pengaruh Motivasi Investasi dan Pengetahuan Investasi Terhadap Minat Investasi di Pasar Modal]. *Jurnal Profita Kajian Ilmu Akuntansi*, 5(1), 1 – 16.
 20. Pangestika, Tri, dan Rusliati, Ellen. 2019. Financial Literacy and Efficacy on Student Interest in Investing in the Capital Market [Literasi dan Efikasi Keuangan terhadap Minat Mahasiswa Berinvestasi di Pasar Modal]. *Jurnal Riset Bisnis dan Manajemen*, 12(1), 37 – 42.
 21. Robbins, Stephen P. 2006. *Organizational behavior [Perilaku Organisasi]*. Yogyakarta: Sekolah Tinggi Ilmu Ekonomi YKPN.
 22. Salim, Peter & Salim, Yeny .1996. *Contemporary Indonesian Dictionary [Kamus Bahasa Indonesia Kontemporer]*. Jakarta: Modern English Press.
 23. Saudi, M.H.M, Sinaga, O. Jabarullah, N.H., The Role of Renewable, Non-renewable Energy Consumption and Technology Innovation in Testing Environmental Kuznets Curve in Malaysia, *International Journal of Energy Economics and Policy*, 9(1):299-307, 2018.
 24. Sekaran. U., & Bougie, R. 2016. *Research Methods for Business: A Skill-Building Approach*. Seventh Edition. United Kingdom: John Wiley & Sons.
 25. Sidiq, Asah Wiari, dan Niati, Asih. 2020. The Influence of Financial Literacy Level, Individual Attitude on Stock Investment Interest among Masters Students [Pengaruh Tingkat Literasi Keuangan, Sikap Individu terhadap Minat Investasi Saham di Kalangan

- Mahasiswa S2]. Majalah Ilmiah Solusi economic faculty, Semarang University, 18(1), 1 – 16.
26. Syahyunan. 2013. Financial Management 1 [Manajemen Keuangan 1]. Medan: USU Press.
 27. Yuliati, Lilis. 2011. Factors Affecting Public Interest in Sukuk Investing [Faktor-Faktor yang Mempengaruhi Minat Masyarakat Berinvestasi Sukuk]. Walisongo Jurnal Penelitian Sosial Keagamaan, 19(1), 103 – 126.
 28. Victor, Ricciardi. 2008. Handbook of Finance, Investment Management and Financial Management. USA: John Wiley & Sons.