



# Analysis of Student Investment Decisions in the Era of Industrial Revolution 4.0

Annur Fitri Hayati<sup>(✉)</sup>, Rita Syofyan, and Jean Elikal Marna

Faculty of Economics, Universitas Negeri Padang, Padang, Indonesia  
annurfitrihayati@gmail.com

**Abstract.** In Indonesia at the beginning of 2020, many variants of investment instruments have emerged, this is in line with increasing public awareness. However, since the Covid-19 pandemic has had a huge impact on the investment climate, especially in Indonesia. This change reached 180 degrees because many people were affected by layoffs, business stalls and other factors. Seeing the current situation, there is a need for research that examines the extent of investment made by the community, especially in the younger generation. This study aims to analyze the extent of investment decisions made by Universitas Negeri Padang students. The sampling technique used in this study is a purposive sampling technique, where the data sampling technique uses certain considerations. The number of data samples taken is 97, the researcher uses the Willian Chocran formula. The result showed that the investment decisions of Universitas Negeri Padang students are good enough and there is an influence of Interest to Investing on investment decisions.

**Keywords:** Investment · Investment Decisions · Interest of Investment

## 1 Introduction

In this era of globalization, investment is not a new thing. Investment is an activity of investing in a company or an asset with the aim of receiving its benefits in the future. Investing is basically the same as saving. An investment decision is a decision taken by a person to determine and invest in a particular asset or company to gain profits in the future.

Indonesia is a developing country with a society that is still oriented towards short-term finance or in the category of saving (saving society). Compared to developed countries, people's financial orientation is more long-term or in the investment society category. Awareness of their financial management is already so high that they are able to set aside 30% of their income for investment, so intensive and sustainable public education is needed to change society from a saving society to an investing society.

A decision is a choice made from existing alternatives. Decision making is the process of recognizing problems and opportunities to be solved later [1]. Investment is linking resources in the long term to generate profits in the future [2], capital expenditure for an asset that is used to earn income or income [3], placing excess funds in an investment

instrument for a certain period of time which is expected to benefit from the investment in the future [4].

In another explanation investment decisions are decisions regarding investment in the present to get results or profits in the future [5], investment decisions include understanding the basics of investment decisions and how to organize activities in the investment decision process [6]. The fundamental thing in investment decisions is understanding the relationship between return, expectation and risk of an investment, decision making is a thought process in the context of solving a problem to obtain the final result to be implemented [7].

From the description of the theory above, the author concludes that investment decisions are the selection of alternatives by recognizing problems, opportunities, the basis for decisions and being able to organize investment activities regarding investment to generate profits that are expected to benefit in the future on the basis of profitability or savings costs.

There are several reasons and objectives why someone makes an investment, including: 1. Achieve a better level of welfare in the future. A wise person will think about how to increase his standard of living from time to time or at least try how to maintain his current level of income so that it does not decrease in the future. 2. Reducing the risk of inflation [6]. By investing in the ownership of a company or other object, a person can avoid the risk of a decline in the value of his wealth or property due to the influence of inflation. 3. Encouragement to save on tax payments. Several countries in the world carry out many policies that encourage the growth of investment in the community through the provision of tax facilities to people who invest in certain business fields.

In investing there are 3 foundations on which investors make decisions, namely the expected return, the level of investment risk and the relationship between return and risk [8]. The investment gain is called the return. The returns expected by investors from the investments made are compensation for opportunity costs and the risk of decreasing purchasing power due to the influence of inflation. Investment risk relates to the possibility of obtaining a low return on investment in a risk free asset. In addition to expecting a certain return, investors must also bear a level of risk when investing. The relationship between return and risk. The relationship between the level of risk and the expected return is a unidirectional and linear relationship. The balance between the expected returns and the risks to be faced must take place in a rational environment. Indicators that can shape investment decision making are the use of income for risky investments, investment without consideration, investment guarantees, investments based on intuition/feelings [9].

The COVID-19 episode has had a genuine effect on nearly all nations within the world, including Indonesia. The affect isn't as it were in one zone, but in almost all existing activities. One viewpoint that's of concern within the middle of the flare-up of the Crown infection is speculation. The presence of different limitations in a nation certainly has an effect on financial movement. With the entry of the plague abruptly changing people's mindsets, wasteful behavior began to move to a condition where individuals felt they had to have investment funds within the frame of savings and ventures. Be that as it may, since investment funds in banks are fluid resources that are effortlessly sold, speculation is the correct choice as long-term capacity.

Investment is not only done by workers who already have income, but also by students as a form of their awareness of the uncertain economic conditions in the future. With the rampant socialization about investment is also one of the driving factors. The forms of investment made by students also vary, with small capital students can invest in the capital market, gold investment, deposits and bonds. From the search results, the authors found that many students at Universitas Negeri Padang also invest, student investment decisions can be influenced by various factors, just in case or to buy something in the future, therefore researchers are interested in knowing what factors cause students to decide to invest. Choose a type of investment.

## 2 Methods

This research is a quantitative descriptive research (Quantitative Research), where quantitative research is an approach that uses a lot of numbers in data collection, interpretation, presentation of research results [10]. The purpose of conducting research using this approach is to test theories, develop facts, show effects and comparisons between variables, provide statistical descriptions, interpret and predict the results [11]. This study uses inferential statistical analysis of causality, using a simple regression design.

This research was conducted in Padang with Universitas Negeri Padang student respondents and the implementation of this research took place from August to October 2021.

The population is a generalization area consisting of objects or subjects with certain qualities and characteristics determined by the researcher to be carried out and conclusions are drawn [12]. The population of this research is Universitas Negeri Padang students who have already done investment activities.

The sampling technique used in this study is a purposive sampling technique, where the data sampling technique uses certain considerations [12]. The considerations in sampling in order to produce representative data are: Universitas Negeri Padang students who are still active and students who have done investment activities.

A large number of data samples will be taken from an unknown population, the researcher uses the Willian Chocran formula [11], the formula is as follows:

$$n = \frac{z^2 pq}{e^2} = \frac{(1,96)^2(0,05)(0,05)}{(0,01)^2} = 96,04$$

Based on the calculation of the formula above, a sample of 96.04 was obtained, but based on certain considerations, the researchers rounded up to 97 samples of research data. In this study, there are two variables in the research instrument, namely investment interest and investment decisions, the data is taken using a questionnaire.

After the research data is collected and arranged well, then it is calculated by using descriptive analysis technique using TCR [13]. To analyze the results of the TCR, the following criteria are used (Table 1):

**Table 1.** TCR Category

No	TCR (%)	Category
1	90–100	Very Good
2	80–89,99	Good
3	70–79,99	Enough Good
4	55–69,99	Not Good
5	1–54,99	Bad

### 3 Result and Discussion

#### 3.1 Result

The following is the result of a descriptive analysis of investment decisions based on the results of filling out a questionnaire with 12 questions filled out by 97 respondents:

Based on Table 2, we can see the results of the recapitulation of investment decision variables with 3 indicators that exist in these variables.

Based on Table 2, we can see the results of the recapitulation of investment decision variables with 3 indicators that exist in these variables. From the 3 highest score indicators, the Risk indicator gets a mean of 3.21 with a TCR of 80.20% in the Good category, while the Relationship between Return and Risk indicator gets the lowest mean of 3.00 with a TCR of 75.09% in the Good Enough category. So that the mean for 97 respondents to the investment decision variable is at a mean of 3.10 with a TCR of 77.51%, which shows that the investment decisions of Universitas Negeri Padang students are good enough.

Based on Table 3, we can see the results of TCR processing regarding the Interest to Investing variable with 3 indicators that exist in that variable. Of the 3 indicators, the highest TCR level is the “Want to find out about investment” indicator of 89.69% in the Good category, while getting the lowest TCR value is the “Spending more time learning about investing” indicator with a value of 75.32% in the category Good Enough. So that the average TCR value of 97 respondents to the Interest to Investing variable with an average score of 3.28 and TCR 81.98% which means that the answers from respondents include Good.

**Table 2.** Results TCR of Investment Decision

No	Indicator	Mean	TCR (%)	Category
1	Return	3,09	77,25	Good Enough
2	Risk	3,21	80,20	Good
3	Relationship between Return and Risk	3,00	75,09	Good Enough
Mean		3,10	77,51	Good Enough

Source: Primary Data Processed in 2021

**Table 3.** Results TCR of Interest to Investing

No	Indicator	Mean	TCR (%)	Category
1	Want to find out about investment	3,59	89,69	Good
2	Spending more time learning about investing	3,01	75,32	Good Enough
3	Start investing	3,24	80,93	Good
Mean		3,10	3,28	81,98

Source: Primary Data Processed in 2021

Based on the results of the analysis in Table 3, the results of the simple regression equation are as follows:

$$Y = a + b1X1 + e$$

$$Y = 14,829 + 0,875X_1 + e$$

The results of simple regression analysis can be seen clearly that the constant value is 14,829 with a positive value, indicating that if there is no influence from the Interest to Investing variable, the investment decision value is 14,829. The regression coefficient for the Interest to Investing variable is 0.875, indicating that if Interest to Investing increases by 1%, the Investment Decision will increase by 0.875 with the assumption that other variables have a fixed value. A positive value means that there is a positive relationship between Interest to Investing and Investment Decisions, the higher the Interest to Investing value, the higher the Investment Decision.

Next, test the hypothesis to test how far the influence between the independent variable and the dependent variable is. If the significant value (Sig.) is less than 0.05, a variable is said to have a significant influence on other variables. The hypotheses used are:

- H<sub>0</sub>: there is no effect of Interest to Investing on investment decisions
- H<sub>1</sub>: there is an influence of Interest to Investing on investment decisions

In Table 4, a significance value of 0.000 < 0.05 is obtained, then H<sub>0</sub> is rejected, it can be concluded that there is an influence of Interest to Investing on investment decisions.

**Table 4.** Regresion Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.829	3.979		3.727	.000
	Interest to Investing	.875	.098	.675	8.916	.000

Source: Primary Data Processed in 2021

**Table 5.** Results of Coefficient of Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.675 <sup>a</sup>	.456	.450	6.003	1.799

Source: Primary Data Processed in 2021

Based on Table 5, it can be seen that the value of the relationship (R) is 0.675. From the output, the coefficient of determination (R Square) is 0.456 which means that the influence of the Interest to Investing variable on the Investment Decision variable is 45,6% and the remaining 54,4% is influenced by other variables.

### 3.2 Discussion

From the test results, it is found that the Interest to Investing variable has a positive influence on investment decisions, meaning that every increase in the Interest to Investing of UNP students, there will be an increase in investment decisions made by UNP students. Hypothesis testing shows Interest to Investing has a significant effect on investment decisions with a significance value of 0.000 which is below the real level of 0.05.

The results of this study show that Interest to Investing is an important factor in influencing investment decisions where without interest, someone will not want to take certain actions or behaviors. This is in accordance with the Theory of Planned Behavior (TPB) which states to carry out a behavior or a person's actions will begin with the intention of interest and based on beliefs that are influenced by various factors that make a person decide to invest [5].

The results of this study are in line with research conducted by Halimatus Sakdiyah et al., which results in partial investment interest having an effect on investment decisions [15] and the results of research conducted by Andini [16], Yoga [14] which says that there is a positive and significant influence between investment interest on investment decisions in students.

Based on the results of descriptive analysis where the student investment decision variable is still in the Good Enough category, this shows that there needs to be an effort to increase investment decisions made by UNP students. The TCR results for the Interest to Investing variable show that they are in the Good category. The Interest to Investing category is already good, but needs to be improved because the higher the Interest to Investing, the higher the investment decisions of UNP students. From the results of other information when filling out student questionnaires who have not made an investment, it is stated that there are still many students who do not have sufficient knowledge to invest and have not taken the time to want to learn about investment. Desire and interest as well as high commitment are the main provisions to foster student interest in investing, so that interest will produce good and sustainable and consistent investment decisions [5]. However, investment activities today are very beneficial for life in the future.

## 4 Conclusion

The results showed that the students of the State University of Padang, had an interest as a driving factor in making investments. Where this interest is represented in the form of curiosity about investing, then learning how to invest and invest. Meanwhile, in investing, Padang State University students consider risk more than return and compare risk with return.

Based on the results of the research, it can be suggested to the University to provide an investment corner where interested students can seek information about investment in addition to holding seminars/training for Padang State University students to increase student interest. It is hoped that the existence of students investing can help their economic conditions in the future.

**Acknowledgements.** The researcher expresses high appreciation and thanks to the Institute for Research and Community Service, Universitas Negeri Padang, which has funded this research with research contract number: 789/UN35.13/LT/2021.

## References

1. Daft, R. L. (2012). *Era Baru Manajemen*. Jakarta: Salemba Empat.
2. Mulyadi, M. (2001). *Akuntansi Manajemen*. Jakarta: Salemba Empat (PT. Salemba Empat Patria).
3. Julita, J., Jufrizen, J., & Sihotang, I. M. (2014). *Penganggaran Perusahaan Pedoman, Pengkoordinasian, dan Pengawasan Kerja*. Bandung: Citapustaka Media.
4. Dewi, G. A. K. R. S., & Vijaya, D. P. (2018). *Investasi dan Pasar Modal Indonesia*. Depok: PT. Raja Grafindo Persada
5. Putri, M. T. (2017). Pengaruh Profitabilitas dan Keputusan Investasi Terhadap Nilai Perusahaan Pulp & Paper Yang Terdaftar Di Bursa Efek Indonesia. *Jom Fisip*, 4(2), 1–12.
6. Tandelilin, E. (2001). Analisis Investasi dan Manajemen Portofolio. Yogyakarta: BPEE.
7. Azmi, Z., & Dahria, M. (2013). Decision Tree Berbasis Algoritma Untuk pengambilan Keputusan. *Jurnal Saintikom*, 12(3), 157–164.
8. Ekananda, M. (2019). *Manajemen Investasi*. Jakarta: Penerbit Erlangga.
9. Wulandari, D. A., & Iramani, R. (2014). Studi Experienced Regret, Risk Tolerance, Overconfidence Dan Risk Perception Pada Pengambilan Keputusan Investasi Dosen Ekonomi. *Journal of Business and Banking*, 4(1), 55–66.
10. S. Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktik.*, Jakarta: Ansi Mahasatya, 2002.
11. S. Siregar, *Statistik Parametrik untuk penelitian kuantitatif*, Jakarta: Bumi Akasara, 2013.
12. Sugiyono, *Metode penelitian kuantitatif kualitatif dan R&D*, Bandung: Alfabeta, 2012.
13. Riduwan, *Metode dan Teknik Menyusun Tesis*, Bandung: Alfabeta, 2010.
14. Y. Ristanto, "Pengaruh Financial Literacy, Pengetahuan Investasi Dan Pelatihan Pasar Modal Terhadap Keputusan Investasi Melalui Minat Investasi Sebagai Variabel Intervening (Studi pada Mahasiswa Fakultas Ekonomi Universitas Negeri Semarang)," Thesis Universitas Negeri Semarang, p. 138, 2020.
15. S. M. a. F. A. Ratno, "Faktor-Faktor yang mempengaruhi Mahasiswa menjadi Anggota KSPM UIN Walisongo," *Semarang Dalam Perspektif Islam*, vol. 8, no. 2, pp. 141–153, 2017.
16. Retno wahyu Andini, "Pengaruh Minat Investasi terhadap Pengembalian Keputusan Investasi di Pasar Modal Studi Pada Mahasiswa FE UNY.," pp. 5–10, 2019.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

