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Financial Literacy, Overconfidence, Risk Tolerance and Public Investment Decision of Ende Residents, East Nusa Tenggara Province of Indonesia

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Abstract	The goal of this research was to see how financial literacy, risk tolerance, and overconfidence influenced public investment decisions in the Ende Region. This is a quantitative study. The research subjects are located in Ende's downtown area, specifically Mautapaga, Onekore, Paupire, and Potulando, with a total of 80 respondents. The respondents were given questionnaires to fill out as part of the primary data collection process. The data was evaluated using SmartPLS to determine the validity and reliability of the data, and then a hypothesis test was performed to determine the impact of each variable on investment decisions and how much three variables affect public investment decisions in Ende. The level of financial literacy affects significantly on public investment decisions by 36.9%, by overconfidence with 14.9%, and risk tolerance or consideration of the risk that will be accepted by investors affects public investment decisions by 29.3% Financial literacy, overconfidence, and risk tolerance all have a 35% impact on people's investment decisions, according to the simultaneous test, while the other 65% is explained by other characteristics.
Keywords	**Financial Literacy; Overconfidence; Risk Tolerance; Investment Decisions; Ende**

INTRODUCTION

One of the reasons for the rising number of fraud cases and fraudulent investment offers to the general public is a lack of investment understanding. Many consumers are duped by investments with enticing interest profit prospects because they lack insight and understanding about investing, hazards, and legal investment methods.

The entire loss due to unlawful investments in the last ten years (2008-2018) is estimated to be 88.8 trillion rupiahs, according to the OJK. Customers from NTT were responsible for 23% of the total. Between 2014 and 2018, the NTT provincial investment alert task force shut down 14 unlawful investment firms in NTT, including the Mitra Tiara Financial Credit Institution in Larantuka, the Multipurpose Cooperative (KSU) in Maumere, and Amanda Permata in Waingapu, among others. After approximately eight months in operation, Dynasty Sejahtera in Ende was declared illegal in July 2020.

There are still illegal investment companies functioning in NTT today, and there are still people who believe in them. Fraudulent investors continue to employ the same methodology as before to entice individuals to engage in their schemes. Without needing to sell the product, investors guarantee to double the profits that are given every day. Furthermore, the capital required is quite little. Customers were initially relatively easy to obtain the promised investment benefits, and this became such a strong draw that many people sold their possessions in exchange for a free registration fee.

Investors also employ names that sound authoritative, such as the National Commission for the Rescue of State Assets (Komnas PAN), or names that have a fantastic sound, such as Big Data International Group (BDIG). They also identify their investments with well-known individuals, as though these individuals were also their clients. Investors frequently flee when a huge number of consumers join and a large sum of money is raised.

Aside from financial literacy, another element that might influence the type of investment is risk tolerance, or the amount to which investors are willing to accept the negative consequences of their investment decisions (Khairiyati & Krisnawati, 2019).

Overconfidence can also impact public investment decisions. Overconfidence causes investors to overestimate their expertise and underestimate their predictions since they have overstated their talents (Nofsinger, 2005 in (Kartini & Nugraha, 2015) Overconfidence will also influence risk-taking behavior, in which rational investors want to maximize profits while limiting risk (Nofsinger, 2005 in (Akmal & Saputra, 2016)

Appropriate investment knowledge about an investment instrument can assist an investor in making the best investment selections, allowing them to maximize their rate of return or return on investment and choose alternative forms of investments that provide sufficient returns. The purpose of research is to determine the impact of financial literacy, risk tolerance, and overconfidence among Ende City residents on their investing decisions.

In this investigation, four hypotheses must be proven:

H1. The citizens of Ende City's investing decisions are influenced by their level of financial literacy.

H2. Ende City residents' investing decisions are influenced by their overconfidence.

H3. The citizens of Ende City's investment decisions are influenced by their risk tolerance.

H4. The residents of Ende City's investment decisions are influenced by their financial literacy, risk tolerance, and overconfidence all at the same time.

As a result, the following is the research model provided in this study:
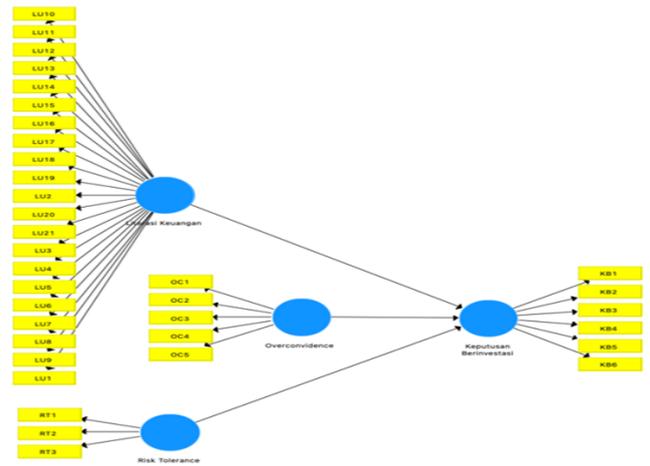

Fig.1 Research Model

RESEARCH METHODS

This is a quantitative study. The research takes place in the city of Ende, with the inhabitants of Ende as the subject of study. In the city of Ende, there are four sub-districts: North Ende District, East Ende District, Middle Ende District, and South Ende District.

Ende Regency has a population of 274,599 people in 2020. (based on the record of the Central Statistics Agency of Ende Regency). The researchers limited the sampling area to four areas in the downtown area of Ende, namely Mautapaga, Onekore, Paupire, and Potulando, due to the vast population.

The sample is chosen using a purposeful random selection method, to find respondents in the urban community who are over 35 years old and have (any) investments. The age of the respondent is determined on the assumption that at that age, people are generally financially stable and have at least one form of investment, such as savings, deposits, property, gold, and other investments. Because the overall population of over 35-year-olds with investments in the four cities listed above is unknown, the researchers limited the number of respondents per area to 20, resulting in a total of 80 respondents who will be sampled.

The researchers collected primary data by delivering questionnaires to respondents based on the criteria they established. The responses to the statement items in the survey were graded on a Likert scale of 1 to 5. Secondary data is gathered through book review and observation.

Table 1 summarizes the variables and indicators.

Table 1. Variables and their indicators

NO	VARIABLE	INDIKATOR	MEASUREMENT SCALE
1	Financial Literacy	Basic finance knowledge	Likert scale
		Savings and borrowing	
		Insurance	
		Investment	
		(Chen and Volpe (in Fitriarianti, 2013)	
2	Risk Tolerance	Risk seeker	Likert Scale
		Risk Neutral	
		Risk Averter	
		Halim (in Pradikasari & Isbanah, 2018)	
3	Overconfidence	Overestimate	Likert Scale
		Underestimate	
		(Nofsinger in Kartini and Nugraha, 2015)	
4	Investment Decision	Investment Security	Likert Scale
		Investment Risk	
		Investment return	
		Time value of money and liquidity	
		(Putri & Rahyuda in Khairiyati & Krisnawati, 2019)	

The data will be analyzed using SmartPLS to determine its validity and reliability, followed by hypothesis testing to determine the effect of each variable on investment decisions, and finally, a simultaneous test to determine which variables have the greatest influence on Ende City residents' investment decisions.

## RESULTS AND DISCUSSION

Validity and reliability

Table 2. Validity and Reliability Test Results

Construct Reliability and Validity

Matrix	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Keputusan Berin...	0.900	0.912	0.926	0.715
Literasi Keuangan	0.791	0.811	0.843	0.408
Overconvidence	1.000	1.000	1.000	1.000
Risk Tolerance	1.000	1.000	1.000	1.000

The Cronbach Alpha, rho A, and Composite Reliability values of each of these research variables are as follows: Investment Decision has a Composite Reliability value of 0.926 > Cronbach Alpha 0.5, Financial Literacy has a CR value of 0.843> Cronbach Alpha 0.5, Overconfidence and Risk Tolerance variables have a value of 1.0 > Cronbach Alpha 0.5, Overconfidence and Risk Tolerance variables have a value of 1.0 > Thus, by looking at the goodness of fit value of the study model, it can be inferred that the data has met the valid and reliable standards, allowing it to be continued.

Hypothesis Test

Fig.2 Hypothesis Test with SmartPLS
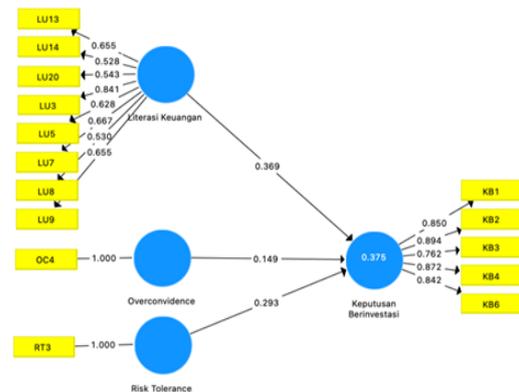
The effect of exogenous variables on endogenous variables was investigated using hypothesis testing. Investment decisions are the exogenous variables in this study, whereas Financial Literacy, Overconfidence, and Risk Tolerance are the endogenous variables. The Original Sample value, Sample Mean, Standard Deviation, t-statistics, and p-value are used to test the hypothesis. The following are the findings of hypothesis testing with Smart PLS:

Bootstrapping Path Coefficient Results

Table 3. Path Coefficient Results

Path Coefficients

Mean, STDEV, T-Values, P-Val...	Confidence Intervals	Confidence Intervals Bias Cor...	Samples	Copy to Clipboard:

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Literasi Keuang...	0.369	0.408	0.125	2.962	0.003
Risk Tolerance -...	0.293	0.269	0.116	2.532	0.012
Overconvidence...	0.149	0.159	0.135	1.100	0.272

Financial Literacy's Impact on Investment Decisions

With a T value of 2,962 where t count > t table (1.991673) and a significance or p-value of 0.003 < 0.05 on investment decisions, path analysis demonstrates that the financial literacy variable affects public investment decisions. The understanding of financial literacy has a considerable impact on investing decisions, influencing 36.9% of them. As a result, the first hypothesis, namely, that

financial literacy influences the inhabitants of Ende City's investment decisions, has been confirmed and accepted.

To avoid financial troubles, everyone needs to have a high level of financial literacy. Financial issues are not always caused by a lack of income; they can also develop as a result of a financial management error, such as the misuse of credit, a lack of financial planning, or a lack of savings. As a result, possessing a high level of financial literacy is critical to living a rich life (Akmal & Saputra, 2016). Financial literacy is defined by Huston (2010, in (Akmal & Saputra, 2016) as "the ability to read, analyze, manage, and communicate about personal financial conditions that affect material well-being, which includes the ability to distinguish financial choices, discuss financial issues, plan for the future, and respond competently to life events that affect day-to-day financial decisions, including general economic events." According to Byrne (Akmal & Saputra, 2016), a lack of financial awareness will lead to poor financial planning and a bias in achieving welfare when one's working years are over.

Budgeting, savings, loans, and investments are the four most common aspects of financial literacy, according to Remund (Akmal & Saputra, 2016). In the meanwhile, the Jumpstart Coalition (Akmal & Saputra, 2016) disseminates financial information on themes such as income, money management, saves and investment, and loans and credit.

Financial literacy is defined by Chen and Volpe (Fitriarianti, 2013) as having four indicators: a) basic financial understanding, b) savings and borrowing, and c) protection or insurance (insurance), d) Financial investment. Previous research (Khairiyati & Krisnawati, 2019; Mertha Dewi & Purbawangsa, 2018; Putri & Hamidi, 2019; Safryani et al., 2020; Upadana & Herawati, 2020) found that financial literacy influences people's investment decisions, regardless of profession.

An investor's knowledge of finance or investment is essential. A basic understanding of deposit or savings and loan types, as well as investment interest rates and returns on investment capital, can impact an investor's judgment about which investments to make. Investors who understand this fundamental understanding have a lesser risk of losing money and falling victim to investment fraud because they are less likely to be enticed by numerous investment offerings that appear appealing and beneficial at first sight but turn out to be the exact opposite.

Investors' educational attainment does not always imply that they have a sufficient level of financial literacy. According to the research team's survey findings, most victims of fake investment have a bachelor's degree and work as government or private employees, while there are also victims of fraudulent investment who have less education and work in a variety of occupations.

The Effect of Overconfidence on Investment Decisions

With a t-count value of 2.532, which is bigger than the t-table (1.991673) but a significant value or p-value of 0.272> 0.05 on investment decisions, path analysis demonstrates that Overconfidence affects investment decisions. Overconfidence influences investing decisions by 14.9 percent, according to path analysis, but the changes or consequences are not significant. As a result, the second hypothesis, that Overconfidence affects people's investment decisions, has been confirmed and is acceptable.

Overconfidence is the sensation of being overconfident. Overconfidence causes investors to overestimate their knowledge and underestimate their predictions because they overestimate their talents (Nofsinger, 2003 in (Kartini & Nugraha, 2015) Overconfidence can also alter risk-taking behavior, in which rational investors want to maximize profits while avoiding risk (Nofsinger, (Kartini & Nugraha, 2015).

Overconfidence can affect public investment decisions, according to studies (Addinpujoartanto & Darmawan, 2020; Tanusdjaja, 2018; Venti Laksita Bangun, 2020) Overconfidence causes investors or the general public to have expectations about the type of investment to make.

In this study, we discovered that the overconfidence variable has an impact on people's investment decisions, particularly when it comes to unlawful investments. For a modest amount of money, illegal investing offers an inflated rate of return on capital. This unlawful investing approach aims to target overconfident investors by presenting logical returns projections, allowing them to feel confident in adopting this sort of investment and promoting it to others.

Risk Tolerance's Impact on Investment Decisions

With a t-count value of 2.532 > t table (1.991673) and a significance or p-value of 0.012 < 0.05 on investment decisions, path analysis demonstrates that Risk Tolerance affects people's investment decisions. This suggests that risk tolerance, expressed as a percentage, or assessment of the risk that will be accepted by investors, is influenced by 29.3 and has a considerable impact on investing decisions. As a result, the research's third hypothesis, that risk tolerance influences public investment decisions, has been verified and accepted**.**

The willingness of investors to take the risk when making investments is referred to as risk tolerance (Budiarto, 2005 in (Pradikasari & Isbanah, 2018) According to Chavali and Mohanraj's research (Pradikasari & Isbanah, 2018), risk tolerance and investment decisions have a favorable association.
a) Risk seekers are investors who want more risk because they understand that risk and return are positively associated,
b) Risk neutral are investors who are flexible and cautious in making investment decisions, according to Halim in (Pradikasari & Isbanah, 2018)
c) Investors who choose to avoid investment risk are known as risk averters.

According to studies (Anggirani, 2017; Bahri, 2018; Budiarto, 2017; Ni Putu Priscilia Kartika Dewi & Krisnawati, 2020; Wardani & Lutfi, 2019) the risk tolerance factor or tolerance for investment risk might impact the public's or investors' investment decisions.

The Impact of Financial Literacy, Overconfidence, and Risk Tolerance on the City of Ende's Investment Decisions

Table 4. Simultaneous test results

R Square

Matrix	R Square	R Square Adjusted	
		R Square	R Square Adjusted
Keputusan Berin...		0.375	0.350

The simultaneous test demonstrates that financial literacy, overconfidence, and risk tolerance variables can explain 35 percent of the investment choice variable, while other variables can explain 65 percent.

The investment decision process, according to Tandelilin and Herlianto in (Khairiyati & Krisnawati, 2019), is a continuous decision process that proceeds until the optimum investment option is made. The fundamental in the investment decision process, according to Tandelilin (Khairiyati & Krisnawati, 2019), is understanding the relationship between projected return and risk of an investment.

The link between risk and expected return on investment is unidirectional and linear, which means that the higher the expected return, the higher the level of risk that must be taken into account. Because of such relationships, not all investors will solely invest in assets with the best rate of return. Aside from looking for high returns, investors must also assess the level of risk they are willing to take.

Investment decisions are influenced by five factors: investment security, investment risk, investment returns, time value of money, and liquidity levels (Putri & Rahyuda in 2008 in (Khairiyati & Krisnawati, 2019). The findings of this study also support previous research (Anggirani, 2017; Khairiyati & Krisnawati, 2019; Ni Putu Priscilia Kartika Dewi & Krisnawati, 2020; Venti Laksita Bangun, 2020; Wardani & Lutfi, 2019), which found that several variables, including financial literacy, overconfidence and risk tolerance, can influence public investment decisions. As a result, the fourth hypothesis, namely financial literacy, overconfidence, and risk tolerance, has a concurrent effect on investment decisions in Ende City residents, which has been confirmed and accepted.

CONCLUSION

One of the reasons for the rising number of fraud cases and fraudulent investment offers to the general public is a lack of investment understanding. Many people are fooled by investments by providing unfair interest profits and unclear investment management to those who lack insight and information about investment, hazards, and legal investment procedures.

Aside from financial literacy, another element that might influence the type of investment is risk tolerance or the extent to which investors are willing to accept the negative consequences of their investing decisions.

The overconfidence factor can also impact public investment decisions. Overconfidence causes investors to overestimate their expertise and underestimate the predictions

they make because they overestimate their talents.

Future research may be undertaken to see how additional characteristics, such as gender, income, employment, or any other possible variables supported by past research, can influence people's investment decision-making.

THANK YOU VERY MUCH TO:

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		Investment Risk	
		Investment return	
		Time value of money and liquidity	
		(Putri & Rahyuda in Khairiyati & Krisnawati, 2019)	

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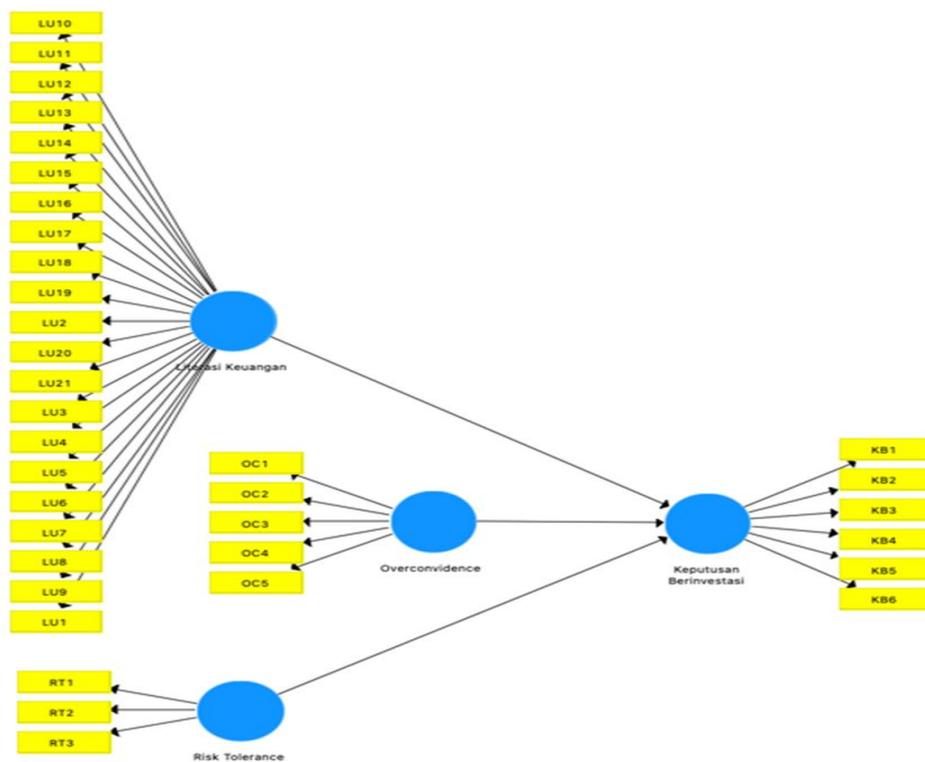|	R Square	R Square Adjusted
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Fig.2 Hypothesis Test with SmartPLS