

The Effect of Experienced Regret and Overconfidence Based on Profession on Investment Decisions in Banda Aceh

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Abstract: This study was to see the effect of Experience Regret and Overconfidence on investment decisions with Profession as moderating. the population is all the people of Banda Aceh City who are investors in the capital market, which amounted to 5,126 investors spread over several securities. The criteria for selecting the sample were those who have made financial investments through various existing financial instruments, amounting to 150 people. The allocation of the sample was each 50 from civil servants, State Own Enterprise (SOE) employees, and private employees. Data were analyzed using Structural Equation Modeling (SEM). The results show that experienced regret affects investment decisions, overconfidence affects investment decisions, and profession does not moderate the influence between experienced regret and overconfidence on investment decisions. This finding contributes academically, that the investment decision model in the Capital Market by the people in Banda Aceh City depends on their experienced regret and overconfidence, but does not depend on the type of their profession which consists of civil servants, SOE employees, and private employees. In the multi-group test results, although the effect is not significant, it can be seen that civil servants have experienced regrets that influence investment decisions more strongly than SOE employees and private employees. However, for overconfidence, SOE employees have overconfidence which influences investment decisions more strongly than civil servants and private employees.

Keywords: Experienced Regret, Overconfidence, Profession, Investment Decision,

I. INTRODUCTION

Good investment decision-making by investors is usually done rationally to maximize its utility. However, accounting information is not enough, even experts state that the role of investor psychology has a very large role in investing (Fogel & Berry, 2006). The existence of these psychological factors affects the investment and the results to be achieved. Therefore, investment analysis that uses psychology and finance is known as behavioral finance. Behavioral finance tries to identify and learn from human psychological phenomena in financial markets and individual investors (Pompian, 2012). According to Pompian, behavioral finance is divided into behavioral finance macro and behavioral finance micro, where the meaning is behavioral finance macro, namely whether the market is efficient or the market is affected by the impact of behavioral finance and behavioral finance micro, namely whether investors act rationally or can cognitive and

emotional errors affect their financial decisions. In behavioral finance micro, the question is how to classify individuals based on certain characteristics, tendencies, or behaviors. Behavioral finance micro can use a psychographic model because the psychographic classification is very relevant concerning individual strategies and risk tolerance. The research only focuses on behavioral finance micro, where it is believed that many cognitive factors influence investors in making rational decisions.

Determinant factors of decision-making variables that have been studied by many previous researchers include experienced regret by (Zeelenberg, van Dijk, Manstead, & van der Pligt, 2000) and (Park, Ramesh, & Cao, 2016) and overconfidence by (Budiarto, 2017) and (Mushinada & Veluri, 2018). Experienced regret according to (Fogel & Berry, 2006) is an experience experienced by someone that causes the person to regret or be disappointed in making investment decisions or even accept the risk of previous decision making. So it can be said that someone who has high courage in taking the type of investment that has a high risk means that he is not yet ready to accept the risks posed by the investment decision and has an impact on regret (regret). Experienced regret is owned by someone if he continues to invest for years but the investment returns are not as expected. This has an impact on his attitude to tend to be more careful in making his investment again.

In contrast to experienced regret, overconfidence will make investors overestimate their knowledge. This overconfidence bias is the tendency to have false and misleading judgments about our skills, intelligence, or talents. In short, this is a self-fish belief that he values his abilities better than his actual abilities (Kartini & Nugraha, 2015). Overconfidence is often considered a strength in many situations, in investing, this trait tends to be a weakness. Careful risk management is essential for a successful investment. But mistakenly overconfidence in making investment decisions will be very disturbing in carrying out good risk management. The overconfidence bias often makes investors view their investment decisions as less risky than they actually are (Khan, Azeem, & Sarwar, 2017).

While the experienced regret variable is considered a very decisive variable in investing as proposed by Naveed (2011), (Fogel & Berry, 2006), and (Zeelenberg et al., 2000),

as well as the overconfidence variable which has also been widely studied for its influence on investment decision making as done by (Kartini & Nugraha, 2015), (Mushinada & Veluri, 2018), (Tanusdjaja, 2018), (Pradhana, 2018). However, not many have investigated the investment behavior of individual investors when it comes to their profession. Another moderator is competence and level of education that affect investment decision making researched by (Setyawan, Topowijono, & Nuzula, 2016).

As we know, the professional background of investors who invest in stock investment products comes from various professions, both those who work as Civil Servants, State-Owned Enterprises (SOE) employees, and private employees. The author will include the investor profession as a moderating variable, to see if there are differences in investment behavior in the two different professional groups. Thus, financial investment product providers can gain insight knowledge of the investment behavior of each group to design customized marketing programs to acquire more potential investors from each of these professional groups. The inclusion of the moderating variable of the profession also serves as a novelty in this study.

II. LITERATURE REVIEW

Experienced Regret

Experienced regret is regret caused by past mistakes that will affect future decisions, while anticipated regret arises when the investment plan is not as expected. In a study conducted by (Bell, 1982), that respondents are faced with an investment plan whose investment choice results are not better than the results of other investment plans. So that it will cause regret that will make an investor avoid the consequences that arise after making the wrong investment decision. In investing, investors must be prepared for the regrets that occur if the expectations they want do not match the reality in making investment decisions. Experienced regret is an experience experienced by someone that causes the person to regret or be disappointed in making investment decisions or even accept the risk of the results of making previous investment decisions (Fogel & Berry, 2006). This will make a person more daring to invest in the type of investment that has a higher risk and will calculate other risks that will arise when that person will make an investment decision.

Overconfidence

Overconfidence causes people to overestimate knowledge, or underestimate risk and overestimate ability in terms of control over what happens (Nofsinger, 2018). Overconfidence manifests itself in several ways. One example is diversification too little, due to the tendency to invest too much in well-understood assets. Another example, investors will tend to invest in local companies, even though this is bad from a diversification point of view. Overconfidence will manifest itself in many ways, including trading behavior. (Bell, 1982), analyzes trading activity

carried out using discount brokerage accounts. They found that the more people traded, the worse their results were. Men who make more deals, do worse than female investors. Overestimation of knowledge possessed and underestimation of risk is the cause of overconfidence in investors (Pompian, 2012). Investors with high overconfidence will be bolder in making decisions, while those with low overconfidence tend to be cautious in making decisions. Other researchers, namely (Khan et al., 2017) also conclude that there is a relationship between overconfidence and courage in making investment decisions.

Investment Decision

According to (Hartono, 2017) the notion of investment is: "Delaying current consumption to be used in efficient production for a certain period". According to (Tandelilin, 2010): "Investment is a commitment to a number of funds or other resources carried out at this time, with the aim of obtaining a number of benefits in the future". On the other hand, Relly and Brown (2012) provide an understanding of investment, as "An investment is a current dollar commitment for a specified period to obtain future payments that will compensate investors for (1) the time the funds are pledged, (2) except for the rate of inflation, (3) the uncertainty of future payments. There are two main categories when you consider investing. Each category is broken down into various opportunities that may suit your financial plan, that is Equity-related investment includes stocks, options, derivatives, venture capital, index funds, and others, and Low-risk investment includes bonds, CDs, and savings accounts (Musnadi, Faisal, & Majid, 2018).

Research Framework and Hypothesis

According to (Sekaran & Bougie, 2016) the theoretical framework is the foundation on which all research projects are based. From the theoretical framework, hypotheses can be developed that can be tested to determine whether the formulated theory is valid or not. Then later it will be measured by appropriate statistical analysis. Referring to the theory and previous research, there is a relationship between the variables that have been described previously. For this reason, the authors build a research model and hypothesis as referred to in the following figure.

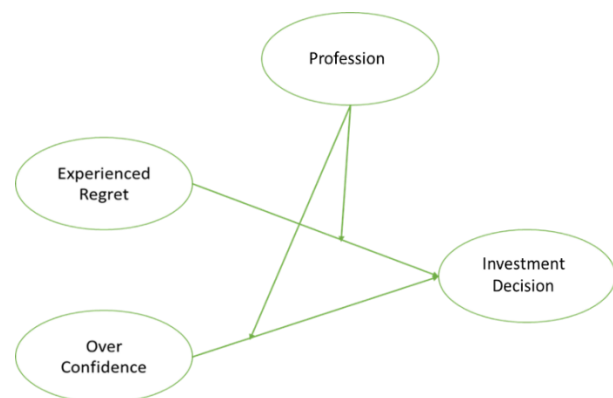


Figure 1. Research Model

Hypothesis 1 : Experienced regret affects investment decisions

Hypothesis 2 : Overconfidence affects investment decisions

Hypothesis 3 : There are differences in the profession of civil servants, SOE employees and private employees in moderating the effect of experience regret on investment decisions

Hypothesis 4 : There are differences in the profession of civil servants, SOE employees and private employees in moderating the effect of overconfidence on investment decisions

III. RESEARCH METHOD

Research Instrument

All measurement items were taken from previous studies to ensure validity; however, slight changes to the statement were made to suit the current analysis. The five-item Experienced Regret questionnaire was adapted from (Wulandari & Iramani, 2014). The five items adopted from (Pompian, 2012) were used to measure Overconfidence, while Investment Decision Making was operationalized using the five indicator items proposed by (Tandelilin, 2010).

A questionnaire with a 5-point Likert scale was used to collect data. In addition, this study used in-depth interviews with several sources (informants) who represent the elements of providers and customers. This was done to obtain in-depth information related to the research variables and to support the results of quantitative analysis.

Sample Design and Data Collection

The population determined in this study was all capital market investors in Banda Aceh city, Indonesia. Based on data from the Aceh Representative Office of the Indonesia Stock Exchange, the number of investors in Banda Aceh City was 5,126 investors spread over several securities.

The criteria for selecting the sample were those who have made financial investments through various existing financial instruments. The number of samples referred to the provisions of (Hair, Babin, Anderson, & Black, 2018), is between 100 - 200 people for research methods using the Structural Equation Modeling (SEM) technique. In this study, the authors set a sample of 150 people as respondents. The allocation of the sample was from civil servants, State Own Enterprise (SOE) employees, and private employees, which were taken 50 people each.

Data analysis

The data analysis technique in this research was descriptive and verification. Descriptive analysis was conducted to assess the demographic profile of the respondents and the internal consistency of construction. While the verification analysis uses SEM (Structural Equation Modeling) to verify the path of the relationship between tourist experience,

destination image, and place attachment to environmentally responsible behavior. In addition, the SEM analysis software is IBM SPSS-AMOS.

IV. RESULTS

Characteristics of Respondents

A total of 100 people consisted of male respondents and as many as 50 people consisted of female respondents, thus the respondents in this study were dominated by male respondents. Based on marital status, as many as 116 respondents are married and 34 respondents are unmarried. Then regarding the education level of the respondents, as many as 4 respondents with the last education of Diploma III, as many as 99 people with the last education of Bachelor's while the respondents with the last education of Postgraduate were 47 of the total respondents studied.

Validity

Convergent validity aims to determine the validity of each relationship between the indicator and its latent construct or variable. In this study, a loading factor limit of 0.50 was used. From the results of the measurement model calculations, there were 2 indicators, namely a8 and a15 which did not meet the requirements because they had a loading factor number below the required one, namely 0.5. So these two indicators must be eliminated. After being eliminated, the image of the new measurement model was:

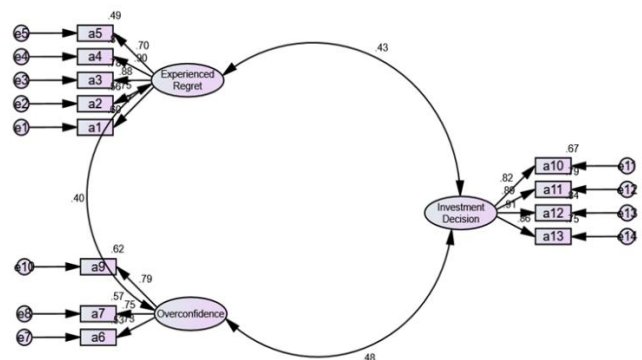


Figure 2. Value of Loading Factor

Table 1. Convergent Validity Result

			Estimate
a1	<---	Experienced_Regret	.774
a2	<---	Experienced_Regret	.752
a3	<---	Experienced_Regret	.883
a4	<---	Experienced_Regret	.898
a5	<---	Experienced_Regret	.703
a6	<---	Overconfidence	.715
a7	<---	Overconfidence	.769
a9	<---	Overconfidence	.785
a10	<---	Overconfidence	.821
a11	<---	Investment_Decision	.821

a12	<---	Investment_Decision	.886
a13	<---	Investment_Decision	.916
a14	<---	Investment_Decision	.864

Table 1 explains that all the variables used in this study are declared valid because they have a loading factor number > 0.50 so that all indicators in this research variable, namely Experienced Regret, Overconfidence, and Decision Making were declared valid to be continued in the next research stage.

Reliability

The reliability test intended in this study is to determine the extent to which the measurement results remain statistically consistent, namely by calculating the magnitude of the composite reliability of the data based on the estimated output obtained using Cronbach alpha. The results are as described in Table 2 which shows that the instrument in this study is reliable because its reliability coefficient value is greater than 0.60 (Malhotra, 2006).

Table 2. Reliability Test Result

No	Variable	Cronbach Alpha	Items	Information
1	Experienced Regret	0.900	5	Reliable
2	Overconfidence	0.815	4	Reliable
3	Investment Decision	0.924	4	Reliable

Based on the reliability analysis, it shows that the alpha for each respondent's perception of experienced regret of 90%, the overconfidence of 81.5%, and investment decisions of 92.4%. Thus, the reliability measurement result meets the requirements of Cronbach Alpha (CA) where the CA coefficient value is greater than 60 percent.

Direct Effect Testing

The hypothesis tests in this study were conducted to test and analyze the effect of Experienced Regret and Overconfidence on Investment Decisions. The verification hypothesis testing consists of testing the direct influence hypotheses and testing the moderation influence hypothesis. The results of testing the direct influence hypothesis can be seen in the following table:

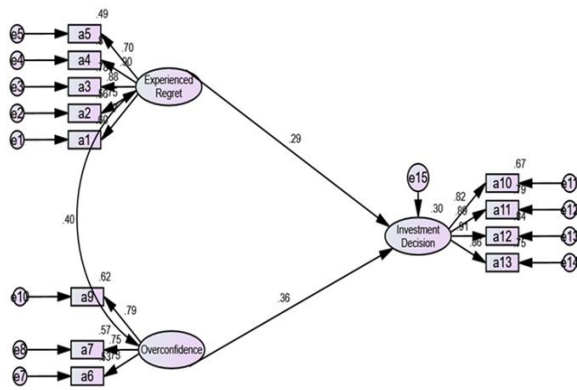


Figure 3. Structural Model

Table 3. Direct Effect Test Results

		Estimate	SE	CR	P	B
Investment Decision	<- Experience d Regret	.335	.104	3.218	.01	.289
Investment Decision	<- Overconfidence	.413	.112	3.668	.02	.363

Hypothesis Test 1: Experienced Regret Affects Investment Decisions

Based on Table 3, testing the effect of experienced regret on investment decisions shows a CR value of 3.218 and a probability of 0.001. The two values obtained have met the requirements for the acceptance of H1, namely the CR value greater than 1.96 and the probability less than 0.05. Thus it can be stated that the effect of experienced regret on investment decisions is significant. This means that if we need to understand one of the determinant factors in making investment decisions, it can be seen from the past experiences of these investors in making their investments. Past investment failures have a role in increasing investors' desire to reinvest. The magnitude of the effect of experienced regret on investment decisions is 0.289 or 28.9 %. This strengthens the results of research conducted by (Ahmed, Ahmad, & Khan, 2011) where it stated that regret plays a role in the decision-making process of small investors.

Hypothesis Test 2: Overconfidence Affects Investment Decisions

Based on Table 3, testing the Effect of Overconfidence on Investment Decisions show a CR value of 3.668 and a probability of 0.002. The two values obtained have met the requirements for H2 acceptance, namely the CR value greater than 1.96 and the probability less than 0.05. Thus, it reveals that the effect of overconfidence on investment decisions is significant. The coefficient of the effect of overconfidence on this investment decision is 0.363 or 36.3%. This means that self-assessment, even though it is to be excessive, affects the attitudes taken by investors in making investment decisions.

Moderation Effect Testing

Moderation of this multigroup profession is divided into three, namely civil servants, state-owned enterprises, and the private sector. Thus the moderating hypotheses that are proved in this study are :

- There are differences in the profession of civil servants, SOE employees, and private employees in moderating the effect of experience regret on investment decisions.
- There are differences in the professions of civil servants, SOE employees, and private employees in moderating the effect of overconfidence on investment decisions.

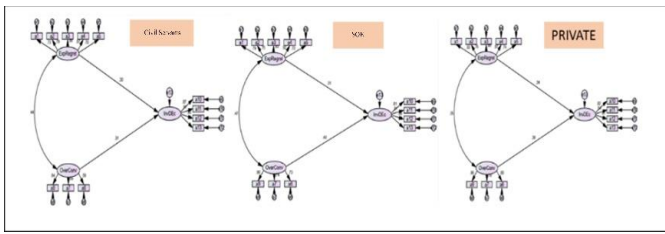


Figure 4. The Multi-group Model of civil servants, SOE employees and Private employees Profession

The figure above shows the structural model in the civil servant group compared to the SOE employees and private employees groups. Although it appears that there is a significant difference between the coefficients of influence in these two sub-group models, it turns out that the results of statistical tests that compare the two groups of respondents show insignificant results because they have $P < 0.05$, as shown in the following table.

Table 4. Comparison of Structural Weight and Standardized Loading Factor

Model	P	civil servants beta	SOE Beta	Private Beta
full	0.871 > .05	-	-	-
Path 1	0.791	.30	.31	.24
Path 2	0.924	.31	.40	.39

Source: Field Data Processing Results (2021)

Hypothesis Test 3: There are differences in the Profession of civil servants, SOE Employees, and Private Employees in Moderating the Effect of Experience Regret on Investment Decisions

In proving the moderating role of civil servants, SOE Employees, and Private Employees Professions in moderating the effect of experienced regret on investment decisions, it turns out that in these three groups there is no significant difference (invariance) as indicated by a P value of $0.791 > 0.05$. Thus, it is certain to accept H_0 and reject H_a , because there is no significant difference between these three groups in the path of influence of experience regret on investment decisions.

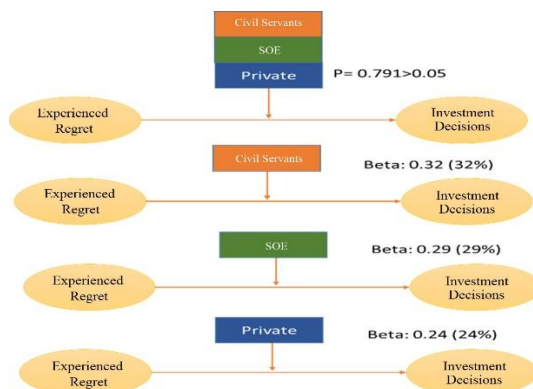


Figure 5. Beta Comparison Coefficient Between Groups on the Path of experienced regret effect on investment decisions

Figure 5 shows that the difference in the beta coefficient on the path of the experienced regret effect on investment decisions is 32% in the civil servant group and 29% in the SOE Employees group, and 24% in the private employee group. This means that regret over past investment actions has a stronger impact on the civil servant group in deciding to invest compared to the SOE employees and private employees groups, even though the difference was in the insignificant category.

Hypothesis Test 4 : There are differences in the Profession of civil servants, SOE employees, and Private employees in Moderating the Effect of Overconfidence on Investment Decisions

In proving the difference in the moderation of the civil servants, SOE, and private professional groups on the role of the civil servants, SOE, and private professions in moderating the effect of Overconfidence on investment decisions, it turns out that in these two groups there is no significant difference (invariance) which is indicated by a P-value of $0.924 > 0.05$. Thus, it is certain to accept H_0 and reject H_a because there is no significant difference between the two groups in the path of the overconfidence effect on investment decisions.

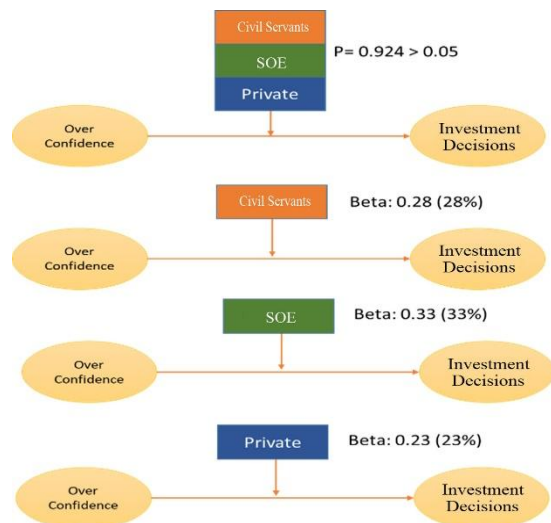


Figure 6. Beta Comparison Coefficient Between Groups on the Path of Overconfidence Effect on Investment Decisions

Figure 6 figures that the difference in the beta coefficient on the path of overconfidence on investment decisions is 28% in the civil servant group, 33% in the SOE group, and 23% in the private group. This means that overconfidence has a stronger impact on the SOE group in deciding to invest compared to the civil servant group and the private sector, although the difference is in the insignificant category.

Result Summary

After conducting a series of hypothesis testing, the summary can be seen in the table below.

Table 5. Result Summary

No	Hypothesis	CR	P	Beta	Result
H1	Experienced Regret Affects Investment Decisions	3.128	0.001	0.289	Ha Accepted
H2	Overconfidence Affects Investment Decisions	3.668	0.002	0.363	Ha Accepted
H3	There are difference in the Profession of civil servants, SOE Employees and Private Employees in Moderating the Effect of Experience Regret on Investment Decisions	-	0.791	0.320 (civil servants)	Ha Rejected
				0.290 (SOEs)	
				0.240 (Priv.)	
H4	There are differences in the Profession of civil servants, SOE Employees and Private Employees in Moderating the Effect of Overconfidence on Investment Decisions	-	0.924	0.280 (civil servants)	Ha Rejected
				0.330 (SOEs)	
				0.230 (Priv.)	

Table 6 above figures that all the direct hypotheses tested in this study were accepted. It means that in general there is a positive and significant influence between endogenous and exogenous variables. While proving the moderation hypothesis, both are rejected. This means that there is no real and significant difference between the profession groups, both in the first (Hypothesis Test 3) and second (Hypothesis Test 4) paths, in addressing the effect of experienced regret and overconfidence on investment decisions.

The use of profession variable as moderating variables in this study shows that differences in professions in moderating the effect of experienced regret and overconfidence on investment decisions are not significant, although there are differences in the percentage of each profession on the experienced regret and overconfidence variables. A previous study by (Setyawan et al., 2016) stated that individual investor education is the most influential factor in individual investor decisions. Investors with higher education have more knowledge about stock movements and are more daring in taking risks so that their decision-making in investing is greater than investors with lower education.

V. CONCLUSION

The results show that experienced regret affects investment decisions, overconfidence affects investment decisions, and profession does not moderate the influence between experienced regret and overconfidence on investment decisions. This finding contributes academically, that the investment decision model in the Capital Market by the people in Banda Aceh City depends on their experienced regret and overconfidence, but does not depend on the type of their profession which consists of civil servants, SOE employees, and private employees. In the multi-group test results, although the effect is not significant, it can be seen that civil servants have experienced regrets that influence investment decisions more strongly than SOE and private employees. However, for overconfidence, SOE employees

have overconfidence which influences investment decisions more strongly than civil servants and private employees.

With the results showing that the Capital Market investment decision model in the community in Banda Aceh City can be predicted and regulated by taking into account the experienced regret and overconfidence variables, further researchers can develop this tested model by adding the investment period and level of risk they take. For practitioners, especially the government and companies who want the capital market to be more crowded, of course, they must provide more education to capital market investors in Banda Aceh City to be able to stabilize their experience regret and overconfidence.

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