

THE EFFECT FACTORS OF ATTITUDE TOWARD BEHAVIOR, SUBJECTIVE NORM AND PERCEIVED BEHAVIOR CONTROL ON INTENTION OF STOCK INVESTMENT BY INDIVIDUAL INVESTOR IN JAKARTA

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ABSTRACT

This study aims to determine the influence of Attitude Toward Behavior, Subjective Norm, and Perceived Behavior Control to the intention of stock investment. Attitude Toward Behavior has four indicators: expectations, intention, good / bad feelings, and feelings of likes / dislikes. Subjective Norm also has four indicators: the influence of important person, the influence of near person, the influence of the community, and the freedom in making the decision. Likewise, Perceived Behavior Control also has four indicators: confidence in ability to invest, perception of ease / difficulty in investing, perception about the condition of self to invest, and perception of the ability to make profits in the investment. Finally, intention has three indicators as the willness to do best effort, the plan to act, and the intention to act.

In addition of these three main variables, as further analysis will be examined also the influence of demographic factors and stock training as control variables. Data analysis was done by using qualitative method that is Partial Least Square (PLS). The population in this study is the individual investor of mirae asset securities located in Jakarta city on April 2017. While the sample used amounted to 200 respondents with sampling technique as simple random sampling method.

Based on the results of the analysis, it is known that the most positive factor is the Attitude Toward Behavior factor, followed by the Subjective Norm factor. As for the Perceived Behavior Control factor has no effect on the intention of individual investor in stock investment. The control variables also have an effect weakly on the intention in stock investment. These variables are gender, age, income, and number of stock training ever joined. Men have more intention in stock investment. The older of customer's ages, the less intention to stock investment. The greater of customer's income, the less intention to stock investment. And the more training of customer joins, the more intention to stock investment.

Keywords: Attitudes toward Behavior, Subjective Norms, Perceived Behavior Control, Intention, Stock Investments, Stocks Training, Demographic Factors.

INTRODUCTION

After the monetary crisis of 1998, the stock market in Indonesia has begun to appear the result of its investment. It can be seen from the data of JCI (Composite Stock Index in Indonesia) which reached revenue of 635% in 18 years in January 1999 to December 2016 period. That means the average return on JCI investment per year is 10,81% per year . For long-term investment, this figure is quite good when compared with other investments such as deposito, property or gold. However, it was not followed by the intention of Indonesian people to invest in the stock market. This can be seen from the data owned by OJK (Financial Services Authority) and KSEI (PT Kustodian Sentral Efek Indonesia) in 2016, which shows that from 60 million banking customers in Indonesia, only about 490 thousand individual stock market customers or about 0, 81% of the total banking customers in Indonesia. And of the 135 million number of banking accounts in Indonesia, only about 618 thousand stock exchange accounts or about 0.45% of the total banking accounts in Indonesia.

From these data, this research tries to study the psychology factor that is predicted as the strongest factor influencing Indonesian people to invest in stock market. These psychological factors will be analyzed using the theory planned behavior (TPB) introduced by Azjen (1987). In the theory of planned behavior, it is stated that before a person (stock investor) engages in behavior (investing in stock market), there is a preceding variable of intention. And the intention influenced by Attitude toward Behavior, Subjective Norm, and Perceived Behavior Control. In addition, the further analysis will be done by taking the other factors (as control variables) that can better explain the real reality. These factors are demographic factors and stock training factors.

OBJECTIVES:

1. Analyze the effect of Attitude toward Behavior on the intention of stock investment.
2. Analyze the effect of Subjective Norm on the intention of stock investment.
3. Analyze the effect of Perceived Behavior Control on the intention of stock investment.

LITERATURE REVIEW

In studying of intention in investing action, some researchers have conducted prior research using psychological factors, demographic factors as well as training factors or investment knowledge of a person as factors influencing their intention in investing.

Theory of Planned Behavior by Ajzen (1987) explains that a person's behavior is determined by an intention. Intention is a function of behavior. This intention is determined by three things: Attitude toward Behavior, Subjective Norm and Perceived Behavior Control. Theory of Planned Behavior states that three things of determine the intention is the main point that is able to predict a behavior. Therefore the intention can indicate the behavior that will be done by someone. This may explain that if a person who has an intention in investing then most likely he will take actions to achieve his desire to invest, such as attending training and seminars about investing, receive a good investment offer, and then make an investment.

Philmore & Broome (2010) in his research concluded that Attitude toward Behavior is the most significant factor of student intention to invest. This study concludes that the paradigm t in the minds of students have a major cause in determining their decision to invest. This study concludes that factor of attitude towards investment decisions have a significant effect. However, the study found that Attitude toward Behavior variables can not operate on their own but also depend on social influences as well as individual experience and control behavior.

David Wanyoike (2016) in his study also concluded that Perceived Behavior Control and Subjective Norm were found to have a greater influence on employee intention in purchasing

health insurance than Attitude toward Behavior. This study concludes that an individual who is influenced by Subjective Norm from their internal environment is a significant factor in decision making.

Phan & Zhou (2014) in his research supports the hypothesis that intention in investing between individuals is driven by Attitudes toward investment, Subjective Norm and Perceived Behavior Control. According to him intention in investment has a strong impact because of the influence of factors Perceived Behavior Control then the Subjective Norm factor.

Barber & Odean (2001) conducted a study to determine the behavior of investors based on gender factor differences (gender). Quantitatively, this research concludes that male behavior tend to risk seeker whereas female investor behavior tend to risk aveter.

Kiran & Rao (2004) conducted a quantitative study to identify investor segmentation based on demographic conditions. One such condition is the age factor. The results of this study is the age factor is strongly influential on the risks taken in investing. Where at the age of 41-50 years, people will avoid the risk in investing.

Shum & Faig (2005) examines the large influence of one's earnings of stock ownership in the stock market. This quantitative study concludes that as income increase, the sensitivity of earnings to risk in the stock market will decrease and intention in investing in the stock market will increase. Therefore, factor of income will be used as an indicator that affects the variable of intention in stock investing.

Research by Komang (2015) aims to determine the effect of investment knowledge on student intention to invest their money in the stock market. Research conducted using this quantitative method successfully proves that knowledge of investment is positive significant on student intention of investment.

HYPOTHESIS:

H1: Attitude towards Behavior has positive significant effect on intention of stock investment.

H2: Subjective Norm has positive significant effect on intention of stock investment.

H3: Perceived Behavior Control has positive significant effect on intention of stock investment.

RESEARCH METHODS

A. DESIGN SAMPLING

Data collection was collect from 200 individual customers of Mirae Asset Company in Jakarta on April 2017. The sampling method used in this research is simple random sampling technique. By determining the magnitude of error (significance) of 5%, then the value of Power (P) = 0.95 and Effect size (F2) = 0.1. Then by using L-table with 5% significance level and value u = 3, then the value of L is 19.76. So with the formula we get the sample size: $N = (L / F2) + u + 1 = (19.76 / 0.1) + 3 + 1 = 200$ (rounded). The research instruments used in this study for data collection is an online questionnaire or commonly called the online questionnaire. And in this case researchers used google docs as an online questionnaire.

B. INDICATORS

Attitude Toward Behavior has four indicators: (1) expectations, (2) interest, (3) good / bad feelings, (4) and likes / dislikes. Subjective Norm also has four indicators: (1) the influence of important person, (2) the influence of near person, (3) the influence of the community, and (4) the freedom in making the decision. Likewise, Perceived Behavior Control also has four indicators: (1) confidence in ability to invest, (2) perception of ease / difficulty in investing, (3) perception about the condition of self to invest, and (4) perception of the ability to make profits

in the investment. Finally, intention has three indicators as (1) the willness to do best effort, (2) the plan to act, and (3) the interest to act.

C. ANALYSIS

This study used correlation analysis and Partial Least Square (PLS) analysis. Correlation test is intended to determine the relationship between two variables studied. While the PLS analysis is intended to confirm the theory and can also be used to explain the presence or absence of the relationship between latent variables with its indicators. Data analysis was performed using VPLS 1.4 software. The results of the analysis presented are the values of Convergent Validity, Discriminant Validity, Composite Reliability, and Cronbach Alpha on outer model measurement; Values of R^2 , f^2 , and t-test on inner model measurements; As well as create an equation of the path diagram results that have been calculated by the PLS program. With these analyzes then will be known the significance of the parameters that exist and will be used to test the hypotheses proposed in this study

RESULT AND DISCUSSION

Figure-1 shows that the variable Attitude toward Behavior has the greatest effect that is 1.738 to the variable Intention of stocks investment. While the Subjective Norm variable has an effect of 0.734 and Perceived Behavior Control variable has a negative effect of -1.555. In addition the model diagram has a value R^2 of 0.671. This figure explains that the variability of dependent variables can be explained by the variability of these three independent variables as 67.1%.

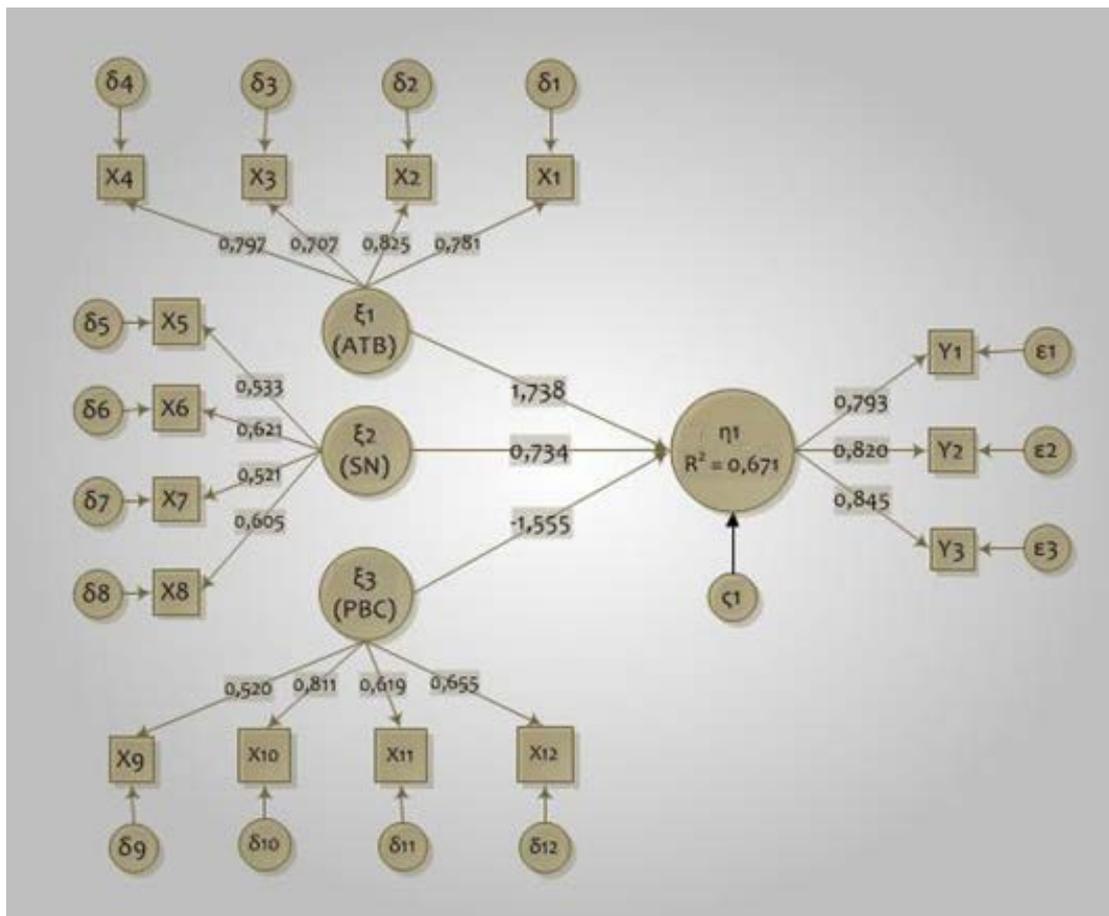


Figure 1: Visualization Results of Path Diagram

A. INNER MODEL

By evaluating the model and measurement on the inner model, the following equation will be generated as the result:

$$\eta_1 = 1,738 \xi_1 + 0,734 \xi_2 - 1,555 \xi_3$$

Information:

- η_1 = Variable Intention of Stock Investment
- ξ_1 = Variable Attitude toward Behavior
- ξ_2 = Variable Subjective Norm
- ξ_3 = Variable Perceived Behaviour Control

Negative value on the Perceived Behavior Control variable means that the variable has a negative effect on the intention of stock investing. But the significance of these effects should be tested first using the t-table value. If the value of the t-statistic variable is greater than the t-table value, then the negative result has a meaning. On the other hand, if the t-statistic is smaller than the value of t-table then negative coefficient value can be ignored, so it has no meaning or no significant effect.

B. OUTER MODEL

After evaluating the model and measurement on outer model, there will be some equation as follows: X1 = 0,781 ξ_1 ; X2 = 0,825 ξ_1 ; X3 = 0,707 ξ_1 , X4 = 0,792 ξ_1 , X5 = 0,533 ξ_2 , X6 = 0,621 ξ_2 , X7 = 0,521 ξ_2 , X8 = 0,605 ξ_2 , X9 = 0,520 ξ_3 , X10 = 0,811 ξ_3 , X11 = 0,619 ξ_3 , X12 = 0,655 ξ_3 , Y1 = 0,793 η_1 , Y2 = 0,820 η_1 , Y3 = 0,845 η_1 .

Information:

- X = Indicators affect to independent variables
- Y = Indicators affect to dependent variables
- η_1 = Variable Intention of Stock Investment
- ξ_1 = Variable Attitude toward Behavior
- ξ_2 = Variable Subjective Norm
- ξ_3 = Variable Perceived Behaviour Control

These equation shows that all loading factor from each indicator to its variable is bigger than 0,5. This result indicates that all indicators for each variable, both independent variables which are Attitude toward Behavior, Subjective Norm, and Perceived Behavior Control as well as dependent variable on Intention of Stock Investment is valid.

C. TEST RESULT OF HYPOTHESIS

The results of path coefficients and t-statistic values obtained through the bootstrapping process with the number of samples for resampling of 500 and repetition of 300 times by PLS program are shown in Table-1 as follows:

Table-1 : Hypothesis Test Results Using t-Statistic Test

Variables		Path Coefficients	t-Statistic	t-Table (5%)	Result
Dependent Variable	Independent Variables				
Intention	Attitude to Behavior	1,738	3,122	1,960	H1 accepted
	Subjective Norm	0,734	2,047		H2 accepted
	Perceived Behavior Control	-1,555	1,242		H3 rejected

Using a significance level of 5% or a confidence level of 95%, then precision or inaccuracy limit of $(\alpha) = 5\% = 0.05$ result t-table of 1.960; So the results of hypotheses tested in this study are:

1. Attitude Toward Behavior has significant positive effect on Intention of Stock Investment.
2. Subjective Norm has significant positive effect on Intention of Stock Investment.
3. Perceived Behavior Control has no significant effect on Intention of Stock Investment.

Perceived Behavior Control has negative path coefficient to intention investment variable of stock. It means that in fact the PCB variable has a negative effect on the variable of intention in stock investing. However, due to its t-statistic value is smaller than t-table, the negative coefficient value can be ignored, so it has no meaning or no significant effect.

D. CONTROL VARIABLES

In table-2 it can be seen that majority control variable has f^2 value which is too small and can be ignored. But there are four control variables that have the value of f^2 above the threshold. These four variables are; Gender with a value of f^2 is 0,024; Training stock with value f^2 is 0,038; Income with a value of f^2 is 0.012; and age with a value of f^2 is 0.012. Although they have a f^2 value above the threshold but its value is weak. So the effect on the intention of stock investing is also weak.

**Table-2 : Correlation of Control Variables
With Coefficient of Determination (R^2) & Effect Size (f^2)**

Variables		Correlation	R^2	f^2	Result
Dependent Variable	Control Variables				
Intention on Stock Investment	Family Member	0,091	,	0,009	Ignored
	Asset	-0,047	-	0,001	Ignored
	Etnic	-0,012	-	0,000	Ignored
	Job Title	0,072	-	0,005	Ignored
	Gender	-0,141	-	0,024	Weak
	Occupation	0,001	-	0,000	Ignored
	Stocks Training	0,176	-	0,038	Weak
	Education	-0,071	-	0,006	Ignored
	Salary	-0,151	-	0,012	Weak
	Marital Status	0,040	-	0,001	Ignored
	Saving Money	-0,049	-	0,001	Ignored
	Age	-0,123	-	0,012	Weak
	-	-		0,146	-

The gender variable has a negative correlation of -0.141 which means that men have more intention to invest in stocks than women. While the Stocks Training variables have a positive correlation of 0.176 which means that the more often a person conducting stock training is also greater intention of stocks investment. For income variables that have negative correlation of - 0.151, means that greater the income a person actually has smaller intention of stocks investment. The last is the age variable that has a negative correlation of -0.123 which means that the older the age of someone, the less intention of stocks investment. However, the effects of the four control variables is only weak due to the small f^2 value.

LIMITATIONS

1. The sample of respondents in this study is individual customers of Mirae Sekuritas company in Jakarta, where all respondents already know about stock investments and have ever conducted transactions in the stock market.
2. Sample of respondents taken in the period April - May 2017, when stock market conditions are bullish (up). So the conclusions of this study may not be applicable to other periods where the stock market is in bearish condition (down) or sideways (flat).
3. Test the validity and reliability is done with the data used, that is as much as 200 respondents. Academically, a validity and realibility test should be performed first before analyzing all data.
4. This research model is only measured using three independent variables with coefficient of determination R^2 equal to 0,671 of variable Intention of stocks Investment. While control variables that can actually explain the determination of 0.329 were not included in the main model in this study due to limited information available.

SCOPE FOR FUTURE RESULT

1. Perform research by looking for any mindsets that negatively affect to intention of stocks investment that prevents people from investing in stocks.
2. Next research is expected to be performed on a sample of respondents who are not stock customers where they have never conducted any transactions on the stock market or even not knowing about stock investments.

CONCLUSION

This study concluded that Attitude toward Behavior and followed by Subjective Norm have significant positive effect to intention of stocks investment. So the results of this study strengthen the existing theories from previous studies. However, it was found that Perceived Behavior Control had no effect on the intention of stock investing. These findings contradict but refine the previous theories that Perceived Behavior Control will have a significant positive effect on intention of stocks investment if a person has never invested in stocks. But if a person has been or is still investing in stocks that means the person already knows how to control the actual behavior (not just perception) of the stock investing action, then Perceived Behavior Control has no effect on intention of stocks investment

The results of this study also concluded that gender, age and stock training have an effect on the intention of stock investing. So the results of this study strengthen the existing theories from previous studies. That men have a greater intention than women to invest in stocks, the older a person's age, the less their intention in stock investing, and the more stocks training that a person participates makes greater intention in stock investing. However, it was found that the amount of salary income had a negative effect on the intention of stock investing. These findings contradict but refine previous theories that income will have a positive effect on intention of stocks investment if their knowledge of stock investments is good enough. But this result does not apply to people in developing countries like Indonesia where the knowledge of the most people about stock investments still very less. Precisely in Indonesia salary income will have a negative effect on the intention of stocks investment.

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