

The Effects of Financial Attitude, Locus of Control, and Income on Financial Behavior

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Abstract: This study aims to examine whether having sufficient opportunity and knowledge on how to manage the income, the workforce will have good financial behavior. This research is based on Theory of Reasoned Action (TRA), and then developed into Theory of Planned Behavior (TPB). The dependent variables in this study are locus of control, financial attitude, and income of the workforce who have been working and living in Jakarta – Indonesia. The samples consisted of 395 respondents, which were taken through purposive sampling technique, and then the data was processed by using SmartPLS version 3.0. Eventually, this study found that financial attitude, locus of control, and income positively affected financial behavior.

1 INTRODUCTION

The theory of behavioral finance is based on the Theory of Reasoned Action (TRA) that was firstly exposed by Ajzen in 1980 (Jogiyanto, 2007), and then developed into the Theory of Planned Behaviour (TPB). TRA is based on the assumption that human beings behave consciously by considering all acquired information. TRA stated that when an individual decides to do or not to do a certain action, he or she is influenced by intention. The intention is influenced by belief that forms behavior (Ajzen, 1991). Intention influences an individual's will to set the behavior, which is determined by three factors, which are attitude toward behavior, subjective norm, and perceived behavioral control (Ajzen, 2005).

Shefrin (2000) and Nofsinger (2001) mentioned that behavioral finance learns about how human psychology affects financial decision. The concept of behavioral finance states that the community thinks and makes decision by considering more on non-economic aspects, especially the psychological aspect (irrationality). Suryawijaya (2003) expressed that in real life, an individual often acts based on judgement, which is on contrary to the theories holding the assumption that human beings act rationally.

There are several variables affecting financial behavior, which are sociology, economics, accounting behavior, and investments. Financial

behavior is also affected by other variables, such as financial attitude, income, and locus of control.

Locus of control is the characteristic of human psychology. This concept was initially put forward by Rotter in 1966. Locus of control is one among the variables of personality defined as an individual's belief on the capability in self-controlling, or as an individual's mindset controlling the power determining success or failure in life (Sardogan et al., 2006). Therefore, it can affect an individual's financial behavior. Locus of control of an individual's consumptive behaviour is related to the individual's desire to consume products which are actually not abundantly needed in order to achieve maximum satisfaction. An individual's desire to consume a product materially is limited by his/her own income. There is a possibility that an individual with higher income will show more responsible financial behavior. Therefore, income can affect an individual's financial behavior (Aizcorbe et al., 2003). Locus of control is divided into two parts, which are internal locus of control (more self-relying on hope) and external locus of control (more relying on hope to others) ((Tambunan, 2001) and (Moningka, 2006)).

Financial attitude according to Pankow (2003, in Ningsih and Rita: 2010) and Klontz et al., (2011) is a measure of state of mind, opinion, and judgement about finance. Financial attitude has an important role in determining an individual's financial success or failure. Jodi and Phyllis (1998, in Rajna et al.,

2011) mentioned that financial attitude can be perceived as a psychological tendency expressed when evaluating recommended practice of financial management. Financial attitude is the applied financial principles in order to create and maintain value through proper decision making and resource management (Rajna, 2011). The higher an individual's financial attitude, the higher his/her awareness to save the income, thus will affect financial behavior.

Locus of control has shown different phenomena in many studies. Grable et al., (2009) and Ida and Dwinta (2010) mentioned that locus of control does not affect financial behavior. According to Kholila and Iramani (2013), locus of control positively affects financial behavior. Meanwhile, Perry and Morris (2005) stated that locus of control affects consumer financial behavior.

Income also shows different results in various studies. Perry and Morris (2005) stated that *income* does affect consumer financial behavior, meanwhile Grable et al., (2009), Ida and Dwinta (2010), and Kholila and Iramani (2013) expressed the opposite result.

From various studies that have been conducted, there is an evidence that financial attitude positively affects financial behavior (Budiono, 2014). Another study also stated that financial attitude has a strong effect on financial behavior, as that conducted by Parrotta and Johnson (1998, in Rajna et al., 2011).

Another survey conducted by Manulife Indonesia (2016) among Indonesian investors concludes that Indonesian people are commonly incapable in managing expenses effectively and tend to think impulsively. This survey result stated that 70% respondents did not have savings fund, 53% respondents spent 70% of their monthly income, 10% respondents spent more than 90% of their monthly income, and 66% respondents did not have investment plan. This result indicates that Indonesian people do not have good financial behavior when spending their income to fulfil their individual and family needs.

This study intends to reassess how locus of control, financial attitude, and income affect financial behavior. This study is the replication of the one conducted by Perry and Morris (2005). In Indonesia, a similar study was conducted by Kholilah and Iramani (2013) with respondents living in Surabaya, as well as that conducted by Ida and Dwinta (2010) with students in Indonesia as the respondents. The difference between this study and the previous ones is related to the research subject. This study involves employees in Jakarta due to this

city is viewed as the capital city of Indonesia, which becomes the benchmark of economic achievements in this country. Besides, the employees in Jakarta also have bigger opportunity to conduct various activities to manage their income to be allocated in many media investment due to having more complete information. Moreover, the study regarding financial behavior in more specific way among employees in Jakarta has not been conducted previously.

2 THEORETICAL REVIEW AND HYPOTHESIS

According to Ajzen (2005), based on the Theory of Planned Behavior, the intention affecting an individual's will to set a behavior consists of three determinants, which are attitude toward behavior, subjective norms, and perceived behavioral control.

Pompian (2006) explains human behavior in financial aspect psychologically is divided into two parts. The first is Behavioral Finance Micro (BFMI) which is related to behavior or bias from individual investor. This kind of behavior describes an individual as a rational being. This aspect is viewed from individual's cognitive and emotional aspects. The second is Behavioral Finance Macro (BFMA) which detects and describes the anomaly in Efficient Market Hypothesis (EMH) explained in behavioral model. The theory of traditional finance assumes that investors tend to behave rationally (Statman, 2008).

In practice, financial decision is divided into three kinds, which are decision to consume, decision to save, and decision to invest. Consuming is a kind of activity conducted by individuals in spending their incomes in order to fulfil their necessities (Mankiw, 2003). According to Maslow, consumption is influenced by an individual's motivation. Human necessities are arranged from the most urgent to the least urgent (additional necessities). When the most urgent necessities have been fulfilled, it stops being a motivator, and then the individual will attempt to fulfil the next necessities (Kotler et al., 2003). Saving is the residual of income that has been spent to fulfil the consumption necessities, and the excess of fund is saved for a certain period (Case, 2007). Investment is an individual's activity in allocating present fund in order to gain profit in the future (Henry, 2009).

Thaler (1999) assumed that an individual's financial behavior could not only be explained by the theory of finance and the law of economics, but

can also be explained with the theory of psychology. Ricciardi and Simon (2000) stated that financial behavior consisted of three aspects, which were psychology, sociology, and finance. These aspects would strengthen financial behavior of an individual. Suryawijaya (2003) mentioned that investors often showed irrational behavior by managing the knowledge possessed in order to make conclusion far from the assumption of rationality. Olsen (1998) explained that financial behavior focused on the principles of economics and psychology which determined the financial decision making. Perry and Morris (2005) expressed that an individual tended to make decision which deviated from the reality, because the individual tended to think in short-term and conducted it due to the decision. It was considered more beneficial.

Locus of control was initially expressed by Rotter (1966) which was one among personality variables defined as an individual's belief on his/her own capability to control the destiny. Sardogan et. al (2006) defined locus of control as the mind controlling the power in positive or negative situations that occurred in individual's life. Robbins and Judge (2008) defined locus of control as the extent of which an individual felt certain that he/she was the determinant of his/her own destiny.

Robbins and Judge (2008) also stated that locus of control (LOC) was divided into two kinds, which were internal and external LOC. Internal LOC was an individual's belief that what happened in life was under his/her own control. By working hard, an individual would succeed. They also believe that those who fail are due to the lack of motivation to themselves. An individual who has internal locus of control is identified to rely hopes more to him/herself and also to be fond of their own expertise. The result achieved in internal locus of control is assumed to be originated from self-activities. An individual who has internal locus of control will view the world as something that can be predicted and individual's behavior also has certain roles within (Kreitner and Kinicki, 2003). Among the explanations on LOC, it can be concluded that the higher the internal locus of control possessed, the more responsible the individual in his/her financial behavior. This is because the individual is viewed more capable in controlling him/herself, managing financial matters, not easily being influenced by other people, being more motivated, and being more capable in accomplishing difficult tasks than anyone who has lower locus of control.

External locus of control is the perspective of individuals who believe that the powers are out of

their control, but they do affect their life, such as fate, opportunity, luck, or other people (Moorhead and Griffin, 2013). An individual having external locus of control will view the world as something that cannot be predicted, thus the individual will have no roles within. An individual who is having a higher external locus of control will rely more on hopes to other people, as well as seeking and choosing advantageous situations. Someone with high external locus of control tends to show irresponsible financial behavior (Kreitner and Kinicki, 2003).

Financial attitudes has an important role in determining the success or failure of an individual's financial behavior. Pankow (2003, in Ningsih and Rita: 2010) and Klontz, et al., (2011) explains the financial attitude as the way of thinking, arguing, and assessing on finance. Eagly and Chaiken (1993) defines financial attitude as a psychological tendency which is the easiest to be exploited, in showing something that is liked or disliked. Robbins and Judge (2008: 92) defines financial attitude as a kind of behavior in certain aspects, in form of preferable situation to object, individual, and occasion.

Income can be meant as the revenue acquired by an individual comprising salary, gain, or other compensations. An individual with higher source of income shows more responsible financial behavior. Hilgert et al., (2003) explains that an individual with higher income has the capability to pay the bills on-time compared to one with lower income. Aizcorbe et al., (2003) reveals that a family with lower income has small possibility to show saving behavior. Arifin et al., (2017) also reveals an evidence that income does not affect an individual's financial behavior.

Ida and Dwinta (2010) conducted a study about the effect of locus of control, financial knowledge, and income on financial behavior, with university students as their research subjects in Bandung. The result of this study shows that locus of control and income does not affect financial behavior. Grable, et al., (2009) also conducted a study on locus of control, income, and financial knowledge. Their research subject was the community of America and South Korea living impermanently in United States. This study reveals that there is no direct effect of locus of control and income on financial management behavior generally. Kholila and Iramani (2013) in their study about the effect of locus of control, income, and financial knowledge on financial behavior, concludes that locus of control positively influences financial behavior, whereas income does not. Perry and Morris (2005)

were conducting a study by using the variable of locus of control, income, and financial knowledge. They conclude that locus of control and income do affect consumer financial behavior.

Budiono (2014) also conducted a study by using the variables of financial attitude, financial behavior, and financial knowledge, with university students in Yogyakarta as research subject. The result shows that financial attitude has a positive influence on financial behavior, but external locus of control shows the opposite effect on financial behavior.

Mien and Thao (2015) conducted a study in Vietnam which reveals that there is a positive relationship between financial attitude and financial behavior.

Based on the literature study and relevant research conducted in the past, the hypotheses in this study can be proposed as follows:

H₁: Locus of Control affects Financial Behavior

H₂: Financial Attitude affects Financial Behavior

H₃: Income affects Financial Behavior

3 RESEARCH METHODOLOGY

The subject of this research is the employees who are being included in the workforce-age, having fixed income every month, and living in Jakarta. The objects of this research are locus of control, financial attitude, and income (as independent variables), and financial behavior (as dependant variable). The data were collected by distributing questionnaires to employees in Jakarta. These questionnaires were distributed to individuals by using the *WhatsApp* application, and *e-mail* gradually. The collected data were then analyzed by using *SmartPLS* (Arifin, 2017)

Financial behavior has four dimensions (Kholilah and Iramani, 2013) and then were developed into 10 indicators, which are controlling personal finance, paying the bills on-time, planning personal finance, fulfilling family necessities, allocating money for saving, feeling happy to save the money, allocating money for pension and insurance, allocating money for urgent purposes, arranging periodical budget, and paying all related bills.

Financial attitude was measured by using 11 indicators (Rajna et al., 2011; Mien and Thao, 2015), comprising the aspects of saving, financial objective, budget, financial prosperity, monthly income, financial planning, pension fund, insurance, and the period to achieve financial success.

Locus of control has seven indicators, which are the combination among internal and external locus of control adopted from Rotter (1966) and Mien and Thao (2015), which include the way to solve the problems, the pressures from surrounding environment, the capability to do anything that exist in mind, the capability to change something important in life, the capability to do something that can affect the future, the capability to solve the problems in life, and the capability to control any occasions in life.

Income is all revenues acquired by an individual every month. This categorization of respondents based on monthly acquired income uses nominal scale with dummy variable (D). Dummy = 1 is for those having income higher than five millions (rupiah), and Dummy = 0 is for those with income lower than five millions.

The scale used in measuring financial attitude, locus of control, and financial behavior is the *likert* scale, applying five categories ranging from “Strongly Disagree” to “Strongly Agree”, which requires the respondents to determine the degree of agreement or disagreement to the statements provided (Malhotra, 2009).

3.1 Statistical Analysis

The outer-model test was used to analyze the validity and reliability of this research model. The validity test uses *Partial Least Square (PLS)*. The inner-model test was used to test the relationship among latent variables. Then, the *bootstrapping* process will be conducted to acquire the result of *t-statistic* test and original sample. The *Normed Fit Index (NFI)* was used to test the *Goodness-of-Fit (GoF)*.

3.2 Data Analysis

Collected data was then analyzed by using *Partial Least Square (PLS)*, which becomes an alternative analysis method of *Structural Equation Modelling (SEM)* based on variance. According to Ghozali (2014), data analysis by using SEM based on PLS can be applied to assess a model comprising the analysis of outer-model and inner-model.

In order to pass the convergent validity test, the loading factor has to be greater than 0.70. However, according to Ghozali (2014), for initial phase of research from the development of measurement scale, the loading factor between 0.5 and 0.6 is already sufficient. In this study, the loading factor limit is 0.5. The assessment of composite test and

Cronbach's α must have greater value than 0.7.

3.2.1 Outer-model Test

a. Validity Test.

An indicator is considered valid when having a loading factor above 0.5 to its latent variable. The result of convergent validity test is displayed in Exhibit 1 as follows.

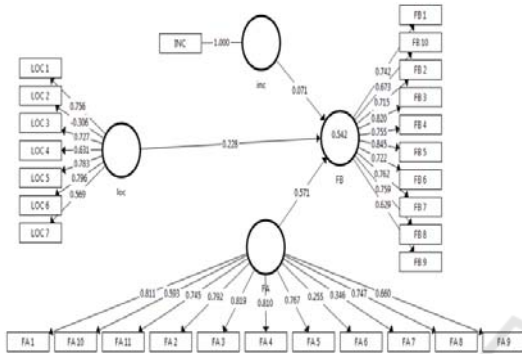


Exhibit 1: Loading Factor from the-First Convergent Validity Test.

In Exhibit 1, indicators that do not meet the minimum requirement are indicator FA6, FA7, and LOC2. Consequently, they are omitted. After that, the test was reconducted to gain the result of convergent validity, of which can be seen in Exhibit 2 as follows.

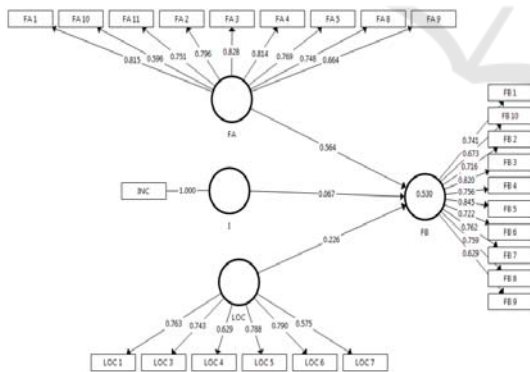


Exhibit 2: Loading Factor from the-Second Convergent Validity Test.

Exhibit 2 shows that all indicators have *loading factor* greater than 0.5. Therefore, the *convergent validity* test has been passed, and all indicators are already valid. Table 2 shows that the value of *cross-loading factor* among the indicators of FA (FA 1 – FA 11) in construct FA has the greatest value compared to those of the other constructs (FB, I, and LOC). Such result reflects that the latent construct

has better value to the indicators located in the same construct, compared to the indicators in the others. The same phenomenon also happens to the indicators of the other constructs. Based on the *cross-loading factor*, all indicators of constructs in this study are already valid.

A variable is considered reliable when the *composite reliability* and *Cronbach's Alpha* has greater value than 0.7. In this study, the result of reliability test is as follows: FA = 0.923, FB = 0.925, I = 1.000, and LOC = 0.864. The *composite reliability* for all variables examined have met the requirement of discriminant validity. The lowest composite reliability is 0.864 for *LOC*, and the highest is 1.000 for *income*.

3.2.2 Inner-model Test

After the model in this study has met the outer-model criteria, then the inner-model test can be conducted. This test is applied to measure the *Coefficient of Determination (CD)* in form of *R-Square*. The result is R-Square = 0.530, which means that 53% of the change in variable *Financial Behavior (FB)* can be explained by the independent variables, and the remaining 47% is explained by other variables are not examined in this study. The test of *Goodness of Fit (GOF)* is conducted by using NFI ranging from 0 to 1. The NFI is closer to 1, which means that the model built is better or fitter. The NFI in this study is 0.809 (close to 1.000), thus this model is considered fit.

3.2.3 The Contribution of Each Indicator to Variable

In order to measure the contribution of each indicator to its related variable, another test is conducted by using *bootstrapping* simulation method. The result can be seen in Exhibit 3 as follows.

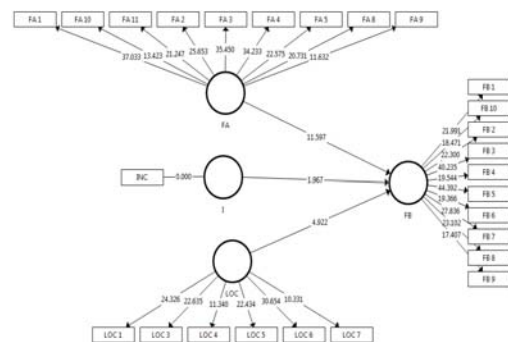


Exhibit 3: Bootstrapping.

For *Financial Attitude* (FA) variable, the indicator FA1 has the highest contribution, with the value of 37.033. For Locus of Control (LOC) variable, the indicator LOC6 has the highest contribution compared to other LOC indicators, with the value of 30.654. Lastly, for *Financial Behavior* (FB) variable, the indicator FB3 has the highest contribution compared to other FB indicators, which is 40.235.

In Exhibit 3, the value of t-test about the effect of FA on FB is 11.597. The effect of LOC on FB is positive, which is 4.922. The effect of *income* on FB is also positive, which is 1.967. All values are greater than 1.96, so that all independent variables have positive and significant influence on FB. Thus, all hypotheses in this study are accepted.

4 CONCLUSIONS

4.1 The Effect of Financial Attitude on Financial Behavior

Data analysis shows that *Financial Attitude* (FA) has a positive effect on *Financial Behavior* (FB). The better the financial attitude of an individual, the better financial plan arranged for short-term (consumption) and long-term (investment). This means that financial behavior of the individual will also be better. This phenomenon is supported by the characteristic of respondents, most of which (81%) have bachelor-degree. This group of respondents (S-1 level of education) has a more rational way of thinking. The result of this study is consistent to those conducted by Mien and Thao (2015) and Budiono (2014).

4.2 The Effect of Locus of Control on Financial Behavior

This study reveals that Locus of Control has a positive effect on Financial Behavior. According to Rotter (1966), Locus of Control is an individual's belief of his/her capability to control his/her own life. Locus of Control shows an individual's faith in his/her own success. When an individual has higher internal locus of control, then the financial behavior becomes better, because the individual is perceived to appreciate the revenue more deeply and is attempted to conduct good financial management. In contrast, when an individual has better external locus of control, then the individual will have less control in financial behavior, because the individual

believes that the success comes from external factors. This result is consistent with two previous studies conducted by Kholila and Iramani (2013), Perry and Morris (2005), and Arifin (2017), but in the opposite to those conducted by Ida and Dwinta (2010), and Grable et al., (2009).

4.3 The Effect of Income on Financial Behavior

This study shows that *Income* has a positive effect on *Financial Behavior*. This result is consistent to the existing theory mentioning that the higher the income, the better an individual's financial management, such as the increase of saving and investment. This result is supported by the characteristic of respondents, which 81% of them already have bachelor-degree. This group of respondents also has higher level of awareness on long-term financial planning, due to 68% of them can generate income more than five million rupiahs every month.

Therefore, it can be concluded that individuals with higher income can arrange their finance better, due to because they are more capable to save and invest money than those with lower income. This result is consistent to the study conducted by Perry and Morris (2005), which states that income significantly affects financial behavior. On the other hand, the result do not support the studies conducted by Kholilah and Iramani (2013), Grable et al. (2009), as well as by Ida and Dwinta (2010).

4.4 Limitation and Suggestion

Based on the theoretical review and data analysis, this study reveals that Financial Attitude, Locus of Control, and Income positively affect Financial Behavior.

In conducting this study, there were several limitations, which were the amount of samples and the variety of respondents. Thus, for further research, those two factors should be enhanced with the same variables examined. The amount of questionnaires collected compared to the amount of workforce in Jakarta Special Region might become a problem for not reaching the minimum amount of samples required. Respondents with 81% having bachelor-degree causes the variation in educational background becomes less normally-distributed, because in fact, bachelor-degree workers are the smallest part in population, compared to those without the bachelor-degree among the available workforce in labor market.

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