Financial Management Behavior at Productive Age Community in Bukittinggi

Erni Masdupi¹, Rosyeni Rasyid², Rahmiati³

¹Universitas Negeri Padang, Padang, Indonesia emasdupi@gmail.com
²Universitas Negeri Padang, Padang, Indonesia rosyenirasyid@yahoo.com
³Universitas Negeri Padang, Padang, Indonesia rahmiati@fe.unp.ac.id

Abstract

This research analyzes the financial management behavior of productive age groups in Bukittinggi. Samples of this study are 100 people of productive age community from 18 to 55 years old obtained by snowball sampling technique. The data analysis method is Structural Equation Modeling (SEM) using the AMOS program. The results showed that financial knowledge and income had a positive and significant effect on the behavior and personal financial management of productive age people in Bukittinggi, whereas locus of control had no effect in mediating the relationship between financial knowledge and income on personal financial management behavior of productive age people in Bukittinggi.

Keywords: personal financial management behavior, financial knowledge, internal locus of control, income

Introduction

The success of a country can be seen from people welfare’s indicator. Welfare is a condition in which a person feels comfortable, peaceful, happy, and can meet the needs of his/her life. In order to meet the needs of a life well, intelligence is needed in managing personal finances. With the income it receives, it is expected that the public can behave properly and be responsible for using it. Ideally the income received should also be allocated not only for consumption but also for saving and investment. Some facts show the people who are very popular and have big names and large incomes but are heavily in debt. It can be concluded, in reality, financial management behavior in the community has not run well. The people referred to in this study are individuals in the productive age group that is in the age range of 18-55 years. In this age range, the community is assumed to have enough knowledge that they have obtained through formal education.

The financial management behavior of individuals since young is very important to achieve financial independence. Financial management behavior is a person’s ability to manage (planning, budgeting, examining, managing, controlling, searching and storing) daily financial funds (Kholilah and Iramani, 2013). In this regard, the Financial Services Authority (OJK) has conducted a surveyed financial management and continues to educate the productive age community and the younger generation. Besides, the Indonesia Stock Exchange (IDX) has actively encouraged the public to invest in the capital market since 2015. Thus, the public is encouraged to be smart in managing their finances.

Personal financial management behavior is very important to train responsible individuals to manage their finances productively and effectively, starting from the process of managing money and other assets. Based on previous research (Grable, Park and Joo, 2009; Kholilah and Iramani, 2013; Mien and Thao (2015); and Perry and Moris, 2005) it can be concluded that there are several factors determine personal financial management behavior including financial knowledge, locus of control and income.

Financial knowledge as an important factor to help individuals avoid their financial problems can be defined as knowledge to manage finances so that welfare can be achieved (Andrew and Linawati, 2014). Increasing needs require individuals to have adequate financial knowledge. Young people and productive age groups in Indonesia have the lowest level of financial knowledge among 16 countries in the Asian region. This indicates that investment education is an important factor for young people and productive age groups to support them in determining their investment decisions (tribunnews.com).
In addition to financial knowledge, locus of control also influences a person's financial management behavior. Locus of control is an individual's perspective on an event whether a person can or cannot control the event that happened to him (Rotter, 1996). Locus of control explains how the individual views the relationship between actions and effect.

Income received by someone will also affect one's financial management behavior. Income is also known as pre-tax profit and is used in the calculation of adjusted gross profit of individuals for income tax purposes. Income here is all income received by someone who is obtained from various sources such as salaries, bonuses, benefits and other income. High-income people are expected to have better behavior in managing their finances. However, there is still limited research conducted related to personal financial management behavior in the productive age group in Indonesia, especially in West Sumatra. In West Sumatra, there has been relatively little exploration and publication about to with concerning the financial management profile of individuals of productive age. For this reason, research on the financial management behavior of individuals of productive age community needs to be conducted. This is the contribution of this research.

Methods

Based on West Sumatra BPS data (2017) the total population of productive age is 2,845,734 people. Guided by the data, the sample is obtained by using snowball sampling, which is selecting the sample by finding a first respondent, then the next respondent information will be obtained, and so on until a sample that is sufficiently representative of the productive age group is obtained. With this method, 100 samples were obtained.

Data analysis was performed using qualitative descriptive analysis and structural equation modeling with the help of AMOS software. SEM is a two-stage method (Byrn, 2005). In the initial stage, a measurement model for each latent variable will be carried out. Through this measurement model the validity of each indicator and construct reliability will be known. The fit model of the measurement model can be seen through the value of Goodness of Fit Indeces. The second stage is a structural model of the financial management behavior of individuals of productive age communities in Bukittinggi.

Results and Discussion

Research Variable Description

Table 1 explains the descriptive statistics of each variable.

| Variable                          | Average Score | TCR (%) | Category |
|----------------------------------|---------------|---------|----------|
| Personal financial management behavior |               |         |          |
| Consumption                      | 3.68          | 73.60   | Good     |
| Cash-flow Management             | 3.45          | 69.00   | Good     |
| Saving and Investment            | 3.18          | 63.60   | Good     |
| Credit Management                | 3.14          | 62.80   | Good     |
| Mean                             | 3.36          | 67.25   | Good     |
| Financial Knowledge              |               |         |          |
| General Knowledge                | 3.92          | 78.40   | Good     |
| Saving and Borrowing             | 3.26          | 65.20   | Good     |
| Investment                       | 3.18          | 63.60   | Good     |
| Mean                             | 3.45          | 69.07   | Good     |
Based on TCR result in Table 1, it can be concluded that the average level of personal financial management behavior TCR of productive age people in Bukittinggi is 67.25% with a good category. This means that people's financial behavior is categorized as good, but it must continue to be improved. The average level of financial knowledge TCR of productive age people is 69.07% or is still categorized as good. This indicates that public financial knowledge can be said to be good and able to understand and master matters related to finance. Whereas for the average TCR locus of control level of 71.60% with a good category, this means that the majority of the productive age community in Bukittinggi has good control of controls in handling their financial problems. The average TCR income level is 69.88% with a good category. It can be concluded that the productive age community in Bukittinggi has been able to manage their income.

Structural Equation Modeling (SEM) Assumption Test

The initial data of this study were 100 people. Before using this data, it is first cleaned using an outlier test. Outliers are data that have values far above or far below the average data. Outlier test detected with Mahalanobis Distance. This study uses 16 indicators with critical value $x_{16}^2 = 39.252$. Based on the data obtained it can be seen that the highest Mahalanobis value is 30,715, thus there are no outlier symptoms because the highest Mahalanobis value is smaller than the critical value ($30,715 < 39,252$).

Testing the normality of each variable is determined from the probability value that must have a value above 0.05. The following table shows the results of normality tests:

| Source: Primary Data, SPSS 24 Results |
|---------------------------------------|

Table 2. *Hasil Uji Normalitas*

| Standardized Residual |
|------------------------|
| N                      |
| 100                    |

| Normal Parametersa     |
|------------------------|
| Mean                   |
| 0,0000000              |
| Std. Deviation         |
| 0,93743687             |

| Most Extreme Difference |
|-------------------------|
| Absolute                |
| 0,079                   |
| Positive                |
| 0,079                   |
| Negative                |
| -0,074                  |

| Kolmogorov-Smirnov Z   |
|------------------------|
| 0,079                  |

| Asymp Sig. (2-tailed)  |
|------------------------|
| 0,124                  |

Source: Primary Data, 2019
Based on Table 2, the result of Kolmogorov-Smirnov is 0.079, significant at 0.124 more than 0.05. This indicates all data in this research have normally distributed.

Multicollinearity testing is a test to see the relationship between the independent variables. To detect multicollinearity is variance inflation factor (VIF) and tolerance value are applied. If the VIF is less than 10 (VIF <10) or the tolerance value is greater than 0.10, it will be concluded that the model has no symptoms of multicollinearity. The following table shows the multicollinearity test results.

| Indicator      | Tolerance | VIF  |
|----------------|-----------|------|
| Income 1 (INC1) | .385      | 2.598|
| Income 2 (INC2) | .257      | 3.887|
| Income 3 (INC3) | .379      | 2.637|
| Income 4 (INC4) | .610      | 1.639|
| Income 5 (INC5) | .363      | 2.754|
| Income 6 (INC6) | .882      | 1.134|
| General Knowledge (GK) | .452      | 2.210|
| Saving & Borrowing (SB) | .431      | 2.323|
| Investment (INV) | .489      | 2.043|
| Ability (ABL)   | .637      | 1.570|
| Interest (INT)  | .640      | 1.563|
| Effort (EFF)    | .769      | 1.301|

Sources: SPSS Result

Based on Table 3, all variables or indicators have no multicollinearity symptom, indicated by VIF value less than 10 (VIF <10) or tolerance more than 0.10.

Structural Equation Modeling (SEM) Analysis

Confirmatory Factor Analysis (CFA)

SEM is a two step approach consist of measurement model and structural model. The purpose of the measurement model is to find out how precisely these manifest variables can explain the existing latent variables that are reflected by CFA value. If the CFA meets the convergent validity, the second stage is the structural model to see the effect of exogenous variables on endogenous variables can be run. It including examine the influence of financial knowledge, locus of control, dan income toward personal financial management behavior. The Figure 1 shows the overall measurement model.

![Figure 1. Overall Measurement Model](image-url)
Measurement model modification applied by modify e1 (GK) and e4 (INC3), e2 (SB) and e6 (INC1), e4 (INC3) and FMB, e2 (SB) and e13 (CM), e3 (INV) and e12 (SI), e11 (CFM) and e14 (INC4). Overall CFA meet acceptable fit as indicated by GOF value at Table 4:

| Goodness of Fit Indices | Statistic | Cut Off Value | Interpretation |
|-------------------------|-----------|---------------|----------------|
| Chi-square (x²)         | 84.83     | Highest       | Better fit     |
| Df                      | 77        | -             | -              |
| Probability (p-value)   | 0.25      | ≥0.05         | Better fit     |
| RMSEA                   | 0.03      | ≤0.08         | Better fit     |
| GFI                     | 0.90      | ≥0.90         | Better fit     |
| AGFI                    | 0.84      | ≥0.90         | Marginal       |
| CMIN/DF                 | 1.10      | ≤2.00         | Better fit     |
| TLI                     | 1.00      | ≥0.90         | Better fit     |
| CFI                     | 1.00      | ≥0.90         | Better fit     |

Source: AMOS Result

Based on Table 4, it can be seen that all GOF values show better fit because the values of each GOF can meet their respective cut-off values, so it can be stated that this measurement model is fit and structural models can be done.

**Structural Model**

The structural model is the second step of SEM. The structural model explains the relationship between exogenous variables which include financial knowledge, internal locus of control, income on personal financial management behavior. The structural model is the final analysis in SEM. Structural models aim to test the data fit model and the relationship between the hypothesized variables.

![Figure 2. Structural Model](image)

Based on the structural statistical output, the model shows that the model is fit. Chi-square is not the only criterion for determining model fit because chi-square is very sensitive to sample size. Large sample can...
cause significant chi-square so null hypothesis which states model fit with data is rejected. The purpose of the SEM model is to accept the null hypothesis that the model is compatible with the data. This research uses \( \chi^2/df \) ratio, RMSEA, GFI, AGFI, CMIN/DF, TLI and CFI. The following is a GOF table of the structural model of personal personal financial management behavior.

| Goodness of Fit Indices dari Structural Model |
|-----------------------------------------------|
| **Goodness of Fit Indices** | **Statistic** | **Cut off Value** | **Interpretation** |
| Chi-square \( (\chi^2) \) | 83,2 | Highest | Better fit |
| Df | 75 | - | - |
| Probability(p-value) | 0,24 | \( \geq 0,05 \) | Better fit |
| RMSEA | 0,03 | \( \leq 0,08 \) | Better fit |
| GFI | 0,90 | \( \leq 0,90 \) | Better fit |
| AGFI | 0,84 | \( \geq 0,90 \) | Marginal |
| CMIN/DF | 1,11 | \( \leq 2,00 \) | Better fit |
| TLI | 1,00 | \( \geq 0,90 \) | Better fit |
| CFI | 1,00 | \( \geq 0,90 \) | Better fit |

*Source: AMOS Result*

From Table 5 it can be explained that some Goodness-of-Fit-Index construct model structures show the corresponding results. Thus, exogenous variables in the research model can be accepted as forming fit models.

**Hypothesis Testing**

After all the requirements are fulfilled, the hypothesis testing stage can be carried out immediately. The processing process is carried out using AMOS 24. In general, the data processing steps carried out obtained data processing stages as below:

| Table 6. Regression Weights |
|----------------------------|
| **Hypothesis** | **Estimate** | **C.R** | **P** | **Result** |
| PF \( \rightarrow \) F | 0,517 | 2,232 | ,026 | Accepted |
| MB \( \leftarrow \) K | | | | |
| PF \( \rightarrow \) I | 0,037 | 2,136 | ,033 | Accepted |
| MB \( \leftarrow \) L | | | | |
| OC | -0,158 | 1,101 | 0,271 | Rejected |

*Source: AMOS Result*

| Table 7. Standardized Effects |
|------------------------------|
| **Hypothesis** | **Total Effects** | **Direct Effects** | **Indirect Effects** | **Result** |
| PF \( \rightarrow \) F | 0,417 | 0,517 | -0,101 | Rejected |
| MB \( \leftarrow \) K | | | | |
| PF \( \rightarrow \) I | 0,376 | 0,371 | 0,005 | Rejected |
| MB \( \leftarrow \) L | | | | |

*Source: AMOS Result*

In accordance with the results of the first hypothesis testing which aims to prove the effect of financial knowledge (FK) on personal financial management behavior (PFMB) with a probability value of 0.026, so the decision is Ho rejected and Ha accepted so it can be concluded that financial knowledge has a significant
effect on personal financial management productive age group behavior in Bukittinggi. In the next statistical testing stage it is also known that the income variable with a probability value of 0.033 is below the 0.05 error level, it can be concluded that income has a significant effect on personal financial management behavior of the productive age group in Bukittinggi. In the third hypothesis testing stage which aims to determine the direct influence formed between the locus of control on personal financial management behavior, the probability value obtained is 0.271, then the decision is Ho accepted and Ha rejected so it can be concluded that the locus of control affects the personal financial management productive age group behavior in Bukittinggi.

Based on Table 7 also obtained information that the value of the indirect influence of financial knowledge on personal financial management behavior through the locus of control is -0.101, smaller than the direct effect with a value of 0.417. This indicates that the locus of control of the productive age group in Bukittinggi has no role in mediating the effect of financial knowledge on its financial behavior. The influence of income on personal financial management behavior is not mediated by the locus of control, this is indicated by the value of the indirect effect of 0.005 which is not greater than the direct effect of 0.376. These results prove that the locus of control believed by the productive age group in Bukittinggi does not play an important role in mediating the relationship between income and financial behavior.

**Discussion**

Based on SEM results, it is concluded that financial knowledge has a positive and significant effect on the financial behavior of productive age groups in Bukittinggi, because the more people understand the financial knowledge, the better the financial behavior of the community, this indicates that with high financial knowledge, individuals will tend to do financial planning and decisions in his life. This study is in line with the four studies conducted by Perry and Morris (2005), Grable et al. (2009), Ida and Dwinta (2010) and Mien and Thao (2015) who stated that someone with good financial knowledge would have more responsible financial behavior. Financial knowledge is one of the information factors that explains the level of public understanding of financial knowledge.

The results of the second hypothesis indicate that the level of income affects financial behavior because income is able to shape one’s behavior in addressing financial problems. From the results of the hypothesis obtained a positive estimation value of 0.037, which means that the higher the income of productive groups in Bukittinggi, the responsible financial behavior will increase. The success of an individual in conducting financial planning is strongly influenced by how much income he earns, the greater the individual’s income the greater the proportion that will be allocated for saving or investment.

The results of the study showed that locus of control had no significant effect on personal financial management behavior, this gave an understanding that the high locus of control possessed by productive age groups in Bukittinggi would not be accompanied by increased financial behavior, so that locus of control could not influence and shape public financial behavior for the better and responsible. The results of this study are in line with research by Gabrel et al (2009) and research conducted by Ida and Dwinta (2010) where locus of control has a negative effect on personal financial management behavior. The results of this study are also not in line with Rotter's theory through social learning theory (Social Learning Theory) around the 1960s connecting behavior with cognitive psychology and believe that behavior is largely determined by "reinforcement" and through strengthening individuals believe in the factors causing their actions. In other words, the financial behavior in the productive age community in Bukittinggi is not determined by their reinforcement and self-confidence.

Locus of control that does not play a role in mediating the relationship between financial knowledge and personal financial management behavior of productive age groups in Bukittinggi. This indicates that someone who has good financial knowledge will not necessarily form good self-control as well and so cannot be said to have wise financial behavior. This is not in line with research conducted by Perry and Morris (2005), Grabke et al (20089) and research by Kholilah and Iramani (2013).
Based on the results of this study, it can be concluded that, to form good financial behavior, the productive age community in Bukittinggi does not need to have a good locus of control, but what they really need to form good financial behavior is a real form of knowledge that they get without having to have a sense of trust that is in themselves. Without having to have the confidence and trust to be able to manage finances well, only with the financial skills they have acquired, they can realize their financial well-being and overcome their financial problems.

Based on the insignificant results between income and personal financial management behavior mediated by the locus of control, someone who has a better income that is good cannot form good self-control in his financial problems. This research is not in line with research conducted by Perry and Morris in 2008. Perry and Morris stated that the results of achievement known as wages or income will be able to form self-efficacy or self-control in a person. In other words, each individual is able to assess themselves financially so that they are able to make adjustments to the things to be achieved. The adjustment process is identical to the effort to realize responsible financial behavior.

**Conclusion**

Based on the research results, it can be concluded that financial knowledge and income have a positive and significant effect on locus of control and personal financial management behavior of productive people in Bukittinggi, while the variable locus of control has no effect on personal financial management behavior of productive people in Bukittinggi. Based on the results of the research that has been obtained, the proud community in Bukittinggi is expected to be able to increase financial knowledge and manage the income that has been obtained properly because this will have an impact on financial prosperity in the future.

**References**

Andrew, V., & Linawati, N. (2014). Hubungan Faktor Demografi dan Pengetahuan Keuangan Karyawan Swasta di Surabaya. FINESTA, Vol.02. No.02.

Dew, J., & Xiao, J. J. (2011). The personal financial management behavior scale: Development and validation. Journal of Financial Counseling and Planning 22(1), 49-53.

Grable, J. E., & Nitzch, R. V. (2009). Explaining Personal financial management behavior for Korean Living in The United State. The Journal of Consumer Affair, Vol. 43 No. 1, 80: 107.

Ida, & Dwinta, C. Y. (2010). Pengaruh Locus of Control, Financial Knowledge dan Income Terhadap Personal financial management behavior. Jurnal Bisnis dan Akuntansi, Vol 12, No 3: 131 - 144.

http://sikapiuangmu.ojk.go.id

Kholilah, Naida Al& Iramani, RR (2013). Studi Financial Management BehaviorPada Masyarakat Surabaya. Journal of Business and Banking, Volume 3 No. 1, 69-80.

Lintner, G. (1998). Behavioral Finance:Why Investors Make Bad Decisions. The Planner 13 (1): 7 – 8

Mien, N. T., & Thao, T. P. (2015). Factors Affecting Personal Personal financial management behaviors: Evidence from Vietnam. Proceeding of the Second Asia-Pacific onference on Global Business, Economic, Finance and Social Sciences (AP15 Vietnam Conference).

Nofsinger. J. (2002). Investment Blunders of the Rich and Famous. Prentice Hall.

Perry, V. G., & Morris, M. D. (2005). Who Is in Control? The Role of Self-Perception, Knowledge and Income in Explaining Consumer Financial Behavior. The Journal of Consumer Affair, Vol. 39 No. 2. 299: 133.

Ricciardi, V., & Simon, H. K. (2000). What is Behavior in finance? Business. Education, and thechnology journal, fall: 1-9, 72.

Rotter, J. B. (1996). Generalized Expectancies for Internal Versus External Control of Reinforcement. Psychologial Monographs, Vol. 80. Pp 1-28.

Ricciardi, V. A. (2000). What is Behavior in Finance. Business,Education, and Technology Journal, Fall: 1 – 9.

Shefrin. H. (2000). Beyond Greed and Fear: Understanding Behavioral Finance and.
Harvard Business School Press.
Shefrin, H. (2007). Behavioral Corporate Finance: Decision That Create Value. McGraw- Hill/Irwin Series in Finance, Insurance, and Real Estate.
tribunnews.com
UNP (2017), Rencana Induk Penelitian, LP2M UNP, Padang