

FINANCIAL INCLUSION AND FINANCIAL SELF-EFFICACY IN INDONESIA

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Abstract—*Financial inclusion is a strategy used by the Indonesian government to reduce financial exclusion. A person's inability to access formal financial services is an obstacle to the realization of the financial inclusion. Financial inclusion can be realized if the community is able to understand formal financial services very well. This study wants to find out whether financial self-efficacy can stimulate individual financial behavior in terms of using formal financial products to realize financial inclusion. Hypothesis testing of this study will be carried out using structural equation modeling (SEM), and the object of research is the people who live in Bogor-West Java. This study finds that there is an influence of financial self-efficacy on financial inclusion. Formal financial service providers must pay attention to the quality of services provided to their customers. Apart from improving the quality of services directly, every formal financial service company must be able to develop products that are easier to reach and understand. The influence of financial self-efficacy on financial inclusion can provide an explanation that the independence of each individual from the side of income owned will have an impact on account ownership in banking. In addition, an increase in the ability of each individual in managing his personal finances must be done. This increase in capacity can be done with an understanding of good financial literacy.*

Keywords—*Financial Self-Efficacy, Financial Inclusion, SEM, Financial Behavior, Financial Exclusion*

I. INTRODUCTION

In 2014, the World Bank recorded only 36 percent, or about 90 million, Indonesian adults who have bank accounts. Good economic growth will be realized if the community can invest in formal and non-consumptive financial services. The Indonesian government targets the population having a bank account to increase to 75 percent of the adult population. The strategy used by the government of Indonesia is by implementing a national financial inclusive strategy (SNKI).

A person's inability to access formal or involuntary financial services has been identified as a major barrier to the socioeconomic development of developing countries such as Uganda (Demirgüç-Kunt & Klapper, 2012). This inability, which is the cause of financial inclusion (FI), has not yet materialized.

Financial inclusion is very important for improving the economy of people who are financially incapable and can help them get out of poverty (Demirgüç-Kunt & Klapper, 2012). Inclusive finance will be realized if the people can understand formal financial services very well. Taking a decision to use formal financial services is sometimes influenced by the behavior of each individual. Mindra, Moya, Zuze, and Kodongo, (2017) emphasize that financial self-efficacy significantly influences financial behavior.

The Government of the Republic of Indonesia has a strategy in terms of realizing inclusive finance. One pillar is financial education that has a work program to educate other communities and students regarding formal financial services.

The results of research conducted by Mindra et al. (2017) found that financial self-efficacy significantly affects financial behavior by using moderating variables in the form of demographics which included gender, age and education. This study will add income variables. This refers to the results of study by Farrell, Fry, and Risse (2016a) which says that education, age and income have a significant influence on financial self-efficacy, whereas this study wants to see whether there are differences in perceptions in terms of gender, age, education, and income towards financial inclusion and financial self-efficacy variables. The results of the research conducted by Margaretha and Sari, (2015) explained that there were several factors that influenced financial literacy, including education level, age, income, and occupation.

This study's main objective is to see whether financial self-efficacy can stimulate individual financial behavior in terms of using formal financial products to realize inclusive finance. In order to achieve this goal, this study uses the ability approach to articulate individual behavior attributes in explaining financial self-efficacy and inclusive financial behavior from a demand-side perspective. The work program

created by the Indonesian government by educating the public about financial products is a step in the right direction. It can be said that the results of this study will provide the same or different viewpoints on the national inclusive financial strategy program.

This research provides benefits for financial institutions where they need to have a deeper understanding of their customers and focus on what their individual customers need. In addition, financial service providers and government need to work optimally on psychological elements, which aim to build financial trust, such as financial education, demand-focused campaigns, and socialization of benefits from formal financial services.

II. LITERATURE REVIEW

The community is very much required to understand a product from a formal financial service provider. Society makes decisions not only based on impulsivity. In this study there are two variables used, including financial inclusion and financial self-efficacy

Inclusive finance refers to "the process by which opportunities are created for all people who receive financial services, especially the poor and under privileges, to enjoy financial services that are appropriate to their conditions in life according to their comfort and at the time of their needs" (Christabell & Raj, 2012). Bank Indonesia is currently implementing a strategy so that the Indonesian people have a good understanding about the existing formal financial services. However, most marginalized people do not have access to credit from the formal credit channel. Loan decisions can be considered 'rational' only "if the loan decision is made by well-informed individuals triggered by objective needs, with the aim of maximizing benefits through loan funds" (Robb, Babiarz, Woodyard, & Seay, 2015).

According to Hannig and Jansen, (2010) and Serrao, Sequeira, and Hans, (2012), inclusive finance has three dimensions, namely access, quality and service. First, access refers to the ability to use available financial services and products from formal institutions. Second, quality is related to the relevance of financial services or products to consumer lifestyle needs. Third, use must go beyond the basic application of banking services and focus more on the provision and depth of financial services and product use. This information can be obtained from the demand side, namely at the individual, household, or company level, or from the supply side, namely at the level of financial institutions, or from a combination of both.

Self-efficacy is a part of the Social Cognitive Theory developed by Bandura (Mindra & Moya, 2017) and refers to a person's confidence in his ability to bring an impact that affects his life. Self-efficacy determines how a person feels, how they think, motivate themselves and behave. For individuals who

doubt their abilities, they will avoid difficult tasks, they will slow down efforts and quickly give up when faced with difficulties. They are slow to restore self-confidence when failure comes until they finally become individuals who are easily stressed and depressed (Mindra & Moya, 2017).

According to King (2017) "self-efficacy is the belief that a person can master a situation and produce a variety of positive results." Strong self-efficacy can increase one's success and wellbeing in many ways because, for someone with high confidence that he can complete a task, it is difficult to cause basic interests and adjustments in dealing with problems. In general, people with good self-efficacy will be quicker to rise from failure or setbacks experienced and have a high commitment to achieving.

Financial self-efficacy refers to a measure of the belief that someone has to use financial services, which are anchored in the context of the financial domain. Bandura (1994) argues that a "one-size-fits-all" approach usually has limited explanatory and predictive value because most items in testing all objectives may be of little or no relevance to the function of the domain. For example, Kinard and Webster (2010) examined the relationship between self-efficacy and unhealthy consumption behavior and found that self-efficacy was a weak predictor of risk behavior. This lack of significance is associated with general scale use rather than domain specific size. According to King (2012), self-efficacy is the belief that a person can master a situation and produce a variety of positive results. King (2012) explains that self-efficacy helps people in various unsatisfactory situations and encourages them to believe that they can succeed.

Many studies on inclusive finance have been carried out in several countries which have relatively small economic levels of society. The majority of bank accounts are not utilized, especially by poor people who are targeted by FI (Morawczynski, Square, Hutchful, & Cutrell, 2010). The findings by Morawczynski et al. (2010) are also supported by Hannig and Jansen (2010), that low-income savers and borrowers tend to maintain solid financial behavior throughout the financial crisis, keep deposits in a safe place and repay their loans.

Women with a higher level of self-efficacy have the possibility to maintain investment and savings products, and tend not to hold debt-related products and explanatory financial self-efficacy is found to be significant at critical level 1 (Farrell et al., 2016b). The research results from Joseph, Dhanuraj, and Joseph (2017) explained that the behavior of household loans is strongly influenced by the level of financial inclusion and the level of self-financial efficacy, and self-financial efficacy is influenced by financial inclusion.

The self-efficacy of finance has a significant influence on financial inclusion individually in Uganda (Mindra & Moya, 2017). Mindra and Moya, (2017) also show that financial self-efficacy significantly influences financial inclusion and has a positive relationship. Their research also showed that other moderating variables, such as age and sex, had a significant influence on the use of one's formal financial services.

Based on the above research, the hypothesis can be formulated as follows:

Hypothesis 1: Self-financial efficacy significantly influences financial inclusion.

Hypothesis 2: There are differences in perceptions of financial inclusion based on aspects of gender, age, education, and income.

Hypothesis 3: There are differences in perceptions of financial self-efficacy based on aspects of gender, age, education, and income.

III. METHODS

This study refers to previous research conducted by Mindra et al. (2017). The unit of analysis used in this study are individuals, namely respondents who have and or are holding an account at a bank. The design in this study uses hypothesis testing (hypotheses testing) and aims to determine the effect of self-financial efficacy on financial inclusion in the community in Bogor and its surroundings.

This study has one dependent variable and one independent variable and the moderating variable. Dependent and independent variables are ordinal data in the form of results from community statements that are the sample of this study. For moderating variables, it uses age, gender and income, while the dependent variable has three dimensions, namely access (acc), usage (usa) and service quality (qual). The model used to answer this research is covariant-based structural equation modeling commonly referred to as Covariance-Based Structural Equation Model (CB SEM).

The method of sampling in this study was carried out by purposive sampling, namely withdrawal of samples based on certain criteria determined by the researcher (Hermawan, 2013). The samples chosen were people who lived in the Bogor area and had no more than two savings accounts at the bank. The number of samples used was 266 respondents, determining the number of samples according to Cleff (2013) with a minimum number of 5-10 times the number of question items in the questionnaire. In this study, a different test will be carried out using moderation variables, the number of samples is 2 times the result of determining the number of samples (12 items of questions multiplied by 10 then multiplied by 2). The techniques for scoring are used in this research

questionnaire was a Likert scale technique. According to Sugiyono (2013), a "Likert scale is used to measure attitudes, opinions and perceptions of a person or group of people about social phenomena."

Table 1. Variable Measurement

Variable	Variable Name	Measurement
Dependent	Financial Inclusion	<ol style="list-style-type: none"> 1. The nearest formal financial institution can be accessed using existing roads. 2. The nearest formal financial institution is less than equal to 5km from my house 3. The distance between the ATM and my house is approximately 1km, so I can easily use the ATM machine 4. I know well the types of products from formal services, such as savings, loans, insurance and payment / remittances. 5. I can save money by having a savings account at the bank 6. I know what documents are needed when opening an account at a bank 7. I receive reports quickly about my transactions
Independent	Financial Self-Efficacy	<ol style="list-style-type: none"> 1. I can manage personal finance well 2. I can save money 3. I am very confident that I can set aside some money to be saved in the bank for the future 4. I am sure I can receive a loan from formal financial institutions 5. I have the ability to use formal financial services to achieve my financial goals
Moderating	<ol style="list-style-type: none"> a. Age b. Sex c. Income e d. Education 	-

(References: Mindra et al., 2017)

IV. RESULTS AND DISCUSSION

Inclusive Financial Variables consist of seven indicators, all having factor loadings that are greater than 0.40 (Hair's Factor Loadings for 266 respondents), except FI1 and FI2. Thus, these indicators are valid in

forming the construct of the Inclusive Finance variable. Cronbach's Alpha of the five indicators is 0.789, which is greater than 0.6. Therefore, these five indicators are reliable. The variable of Self-Finance Efficacy consists of five indicators, all having factor loadings that are greater than 0.40 (Hair's Factor Loadings for 266 respondents), except FSE4. Thus, these indicators are valid in forming the variable construct of Self-Finance Efficacy. Cronbach's Alpha of the four indicators is 0.787 which is greater than 0.6. Therefore, these four indicators are reliable.

Based on the test results on the feasibility of the model above, it was found that, based on the value of the RMR, GFI, RMSEA, AGFI, NFI, TLI and CFI, the goodness-of-fit model was concluded. Therefore, testing the theoretical hypothesis can be continued.

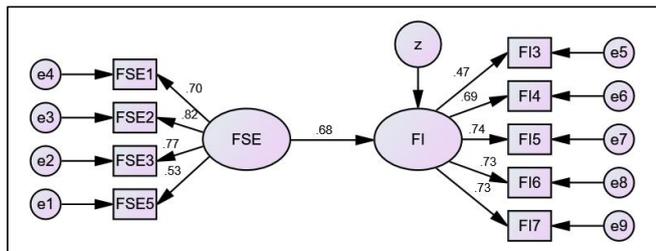


Fig. 1. Testing H1: financial self-efficacy significantly influences financial inclusion among individuals in Indonesia

Financial self-efficacy has a coefficient of 0.68 with a probability value of 0.000 which is smaller than 0.05 so that H_0 is rejected or there is an effect of financial self-efficacy on financial inclusion. The higher the perceptions of financial self-efficacy, the higher the perception of financial inclusiveness. Based on these results, the strategies created and implemented by the government in increasing financial inclusion are appropriate. Increasing financial independence seen from the perspective of each individual can manage finances well. Managing personal finance by entrusting some of the money to be deposited in the bank has also been effectively carried out. Each individual understands how important long-term financial goals are and understand the limitations of self-ability followed by reduced productivity which results in retirement. Thus, every individual has realized the importance of savings for retirement.

Meanwhile, for formal financial services to continue to improve the quality of services and financial products needed by each individual, access, usability, and service quality are very important for every customer. As such, the company must be able to adjust these conditions so that a national financial strategy in the form of financial inclusion can be achieved. The results of this study have the same results as studies carried out by Joseph et al., (2017), Mindra et al., (2017) and Mindra and Moya (2017).

TABLE 2. DIFFERENT TEST RESULTS

Variable	Probability			
	Sex	Age	Education	Income
Financial Inclusion	0.803	0.723	0.504	0.001** *
Financial Self-Efficacy	0.036**	0.083*	0.049**	0.545

Description: Significance Level *** 1%, ** 5% and * 10%

Based on the test results using both the Mann Whitney Test and Kruskal Wallis Test analysis tools, which seek to determine whether there are differences in perceptions of financial self-efficacy and inclusive financial perceptions in each category, it indicates that there are differences in the perception of inclusive finance in the income category. For the category of perceptions of self-financial efficacy there are different perceptions in the categories of gender, age and education level.

V. CONCLUSION

This study provides evidence about the FSE as a determinative of FI in the region of Bogor, Indonesia. This finding also supports the strategy carried out by the Indonesian Republic's government where one of the pillars of educating the public about financial products is the right step. In particular, confidence about managing personal finance and having financial goals can serve to encourage people to consider using formal financial services.

This research is more about reciprocal interactions supported between environmental aspects and cognitive factors in Indonesia to achieve financial inclusion. Financial institutions need to have an understanding of individual community income, to ensure the delivery of services that are more relevant and effective. In addition, financial service providers and policy makers need to focus on psychological elements that support increased financial independence.

Formal financial service providers must pay attention to the quality of services provided to their customers. Apart from improving the quality of services directly, every formal financial service company must be able to develop products that are easier to reach and understand. The influence of financial self-efficacy on financial inclusion can provide an explanation that the independence of each individual from the side of income owned will have an impact on account ownership in banking. In addition, an increase in the ability of each individual in managing his personal finances must be achieved. This increase in capacity can be done with an understanding of good financial literacy.

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