

# **EURASIAN JOURNAL OF ECONOMICS AND FINANCE**

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## **APPLICATION OF FINANCIAL INCLUSIONS IN INDONESIA: A STUDY ON VULNERABLE GROUP**

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### **Abstract**

Financial inclusion refers to all efforts aimed at eliminating all forms of price and non-price barriers to people's access to financial services. Financial inclusion is a national development strategy and an influential agenda. The aims of this research are to examine any informal norms or limitations that affect the realization of financial inclusion. Regulative, normative, procedural, and declarative cognition as relaxed norms are thought to influence the implementation of financial inclusion, especially for vulnerable groups. Financial inclusion aims to encourage economic growth through income distribution, poverty alleviation, and financial system stability. This strategy is targeted at groups experiencing obstacles in accessing financial services, especially groups with the greatest needs and financial services that have not been fulfilled, such as poor people and vulnerable groups, in four different locations in Indonesia. As a result of testing several financial inclusion instruments for 254 respondents in this group, it was found that users of financial institution services, both men and women, had similar roles and needs; though government regulation through normative aspects has a positive effect, the procedural elements hurt financial inclusion. Moreover, government regulation through declarative cognitive aspects (the ability to use the dimensions of memory and cognitive skills) has a positive effect on financial inclusion.

**Keywords:** Financial Inclusion, Regulative, Normative, Procedural, Economic Growth, Financial Sector

**JEL Classification:** G23, I38, R580

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### **1. Introduction**

The existence of the financial sector is closely related to economic growth. One indication is the success of the development, with a stable financial system and providing benefits to the entire

community. In Indonesia, the financial sector is driven by banking and non-banking institutions. The development of the financial industry is influenced not only by internal factors, such as banking regulations and the capital market but also influenced by other factors, such as the development of the real sector, economic management, social development, politics and democracy, and the international world (Akinsola and Ikhida, 2018).

Financial institutions play an important role through their intermediation function to encourage economic growth, equal income, alleviate poverty, and achieve financial system stability. Empirically, the results of Karaman *et al.* (2018) state that, at the level of companies, industries, households, and comparisons between countries, there is a positive relationship between the functioning of the financial system and economic growth in the long run, where financial sector development can encourage economic growth (Cheng and Degryse, 2003) in Indonesia, poverty is a chronic problem. Various efforts have been made to reduce poverty, including through the inclusive financial system. The term "financial inclusion" has become a post-economic trend in 2008, mainly based on the impact of the crisis on groups in the bottom of the pyramid - low and irregular income, living in remote areas, disabled people, workers who do not have legal identity documents, and peripheral communities (Kose and Gunes, 2018), which are generally unbanked, and are recorded very high outside developed countries. Sanjaya (2014), argues that financial inclusion through micro-credit programs can improve social status and economic status of the poor. The form of application of financial inclusion, in the way of access to financial services. World Bank (2010) stated that there are four types of formal financial services that are important for people's lives, namely fund storage services, credit services, payment system services and insurance (including pension funds) and the availability of efficient and allocative payment mechanisms (Chakrabarty, 2012).

All poverty alleviation activities through the development of microfinance, need to be supported by the government through appropriate and wise regulations, and financial institutions, especially in terms of financing, with security procedures and low-interest rates. International Finance Corporation / IFC (2010) stated that there are still ± 245 million MSMEs in the world who have not had the opportunity to get bank loans, even though it is needed for business development. In Indonesia, only about 48% of the population has access to formal financial institutions (Bank Indonesia, 2014), with the remaining (52%) being unbanked. The community happens because of low-income levels, complicated bank operational procedures, lack of financial and banking education, high bank administration costs, the location of the bank from the place of residence, and the presence of several private companies, which use the cash payment method. This finding shows that the financial access of the Indonesian people to formal and non-formal financial institutions is still relatively low, so it needs to be improved.

Based on these problems, the idea emerged to implement an inclusive financial strategy for groups of people who have not enjoyed financial services. Previous research mostly discussed the importance of financial institutions (Cheng and Degryse, 2003; Karaman *et al.* 2018), this researcher will discuss the financial institutions that can be reached by unbanked people. As stated in Dixit and Gosh (2013), providing access to financial services has the potential to exclude the poor from the vicious circle of poverty, through a culture of saving, and to enable efficient and low-cost payment mechanisms. While according to Beck *et al.* (2007), the concept of access to financial services with the use of financial services is different. Economists may have access to financial services but do not want to use them. The community is due to socio-cultural reasons or high costs. Other problems are limited employment, and low income that is only enough for daily consumption, so that the desire and interest in saving at the bank are little. In this case, providing extensive employment is the main task of the government, because increasing the role and efforts of financial inclusion must be supported by the conditions of the community so that all attempts to alleviate poverty can be carried out optimally.

Globally, at present, financial inclusion programs are increasing. The programs happened because of the increasingly sophisticated technology that accelerated the process of dissemination, such as the existence of cellular phones and the internet, but the benefits evenly distributed throughout the country. This happens because not all people understand the use of technology related to the banking system. The use of technology, provides benefits to its users in the daily transaction process. Globally, 69 percent of adults have accounts at banks or cellular

money providers. In Indonesia, from 2004 - 2011, there have been around 515 million adults getting reports. In terms of gender, it was found that women were more dominant in having bank accounts than men. In Indonesia, women are five percentage points more likely than men to have an account. Fifty-one percent of women have an account, against 46 percent of men. However, women and men are equally likely to have an active account (Demirguc-Kunt *et al.* 2018).

## **2. Literature Review and Hypotheses**

### **2.1. Financial Inclusion**

Financial inclusion is a financial program that prioritizes public welfare through income distribution, whose main objectives are poverty alleviation, and financial stability. Financial inclusion is also a comprehensive activity that aims to eliminate barriers to access for people in utilizing services from financial institutions, be they banks or non-banks with various supporting infrastructure (Al Haryono, 2011; Sethi and Sethy, 2018).

Financial inclusion is all efforts to increase public access to financial services by eliminating all forms of price and non-price barriers (Demirguc-Kunt and Klapper, 2012), in other words, financial inclusion is a process that guarantees the ease of access, availability, and benefits of the formal financial system for all economic actors (Gardeva and Rhyne, 2011). Meanwhile, financial inclusion is an effort to include unbanked people into the legal financial system so that they have the opportunity to enjoy financial services such as savings, payments, and transfers; in addition, financial inclusion promotes austerity and develops a culture of conservation, increases access to credit, both entrepreneurship and consumption, and allows payment mechanisms to be more efficient, thereby strengthening the financial base of financial institutions capable of providing economic benefits (Chakrabarty, 2012). Various researchers define financial inclusion as the opposite of financial exclusion.

From these various opinions, it can be concluded that financial inclusion is a variety of efforts to increase public access, especially unbanked people to formal financial services by reducing multiple obstacles to access them.

### **2.2. Regulative**

The application of financial inclusion is inseparable from government regulations. Steward and Walsh (1992) deduce that the rule is a process that ensures that legal standards and requirements for particular services or public activities met. North (1990) indicates that regulations are written or unwritten manuscripts of the rules made by the state as law enforcers. Thus, the regulatory process involves the capacity of the country in setting standards, checking compliance with regulations, and if necessary, giving awards, or punishment to influence future behavior and actions (Scott, 2001). Thus, institutional characteristics of state law are laws and regulations that exist in specific social environments, which promote types of behavior and restrictions (Kostova, 1997).

In general, regulatory activities aim to achieve continuous quality improvement so that they can provide safe services to the community. For vulnerable groups, services, and easy access to banking institutions need special attention (Kose and Gunes, 2018), because there are still not many vulnerable groups in Indonesia, having accounts in banking institutions, which is one of the reasons for poverty. The term 'vulnerable groups' are a group where either individuals or organizations cannot anticipate, fight, or find solutions to the disasters that occur them and the impact of the accident. Environmental health in a disaster emergency (World Health Organization, 2002).

With the existence of regulations and laws, financial markets work efficiently, which will influence the behavior and actions of participants in the future (World Bank, 2001), the rules made must include the right rules. Especially for vulnerable group communities, financial inclusion occurs within a regulatory framework that affects their survival to enter formal finance, such as ease of credit application requirements, bank fees, savings, etc. This opinion is supported by Bongomin *et al.* (2016) which state that regulations must be made according to the "rules of the game" on financial markets, which will strengthen responsible supplier practices and behavior,

thereby convincing the poor to choose formal financial services rather than informally as determined by CGAP (2017).

### 2.3. Normative

Normative behavior refers to one's attitude and loyalty to the rules that apply in their environment. Bongomin *et al.* (2018), describes it as an informal rule that facilitates, motivates, and regulates the actions of group members. Norms arise from individual problem-solving activities and guide towards expected behavior. The choice of individuals in life determined by rules that govern their behavior and actions and determine what is appropriate and inappropriate for members of society (Scott, 1995).

When an institution promotes the right way of behavior, without legal sanctions, the institution influences individual actions with a normative process. Therefore, the most prominent normative aspects of an institution, in family groups, social classes, religious belief systems, and voluntary associations, where there are shared beliefs and values, this empowers and constrains social behavior that enables social action (Scott, 2001). Thus, norms (informal boundaries) shape individual choices in various contexts, such as the choice of people who use certain banking services, which are considered to be better for them and trust between them. Thus, the norm can facilitate the process of implementing a banking financial inclusion program in the community.

World Bank (2001) state that norm-based institutions are essential for poor people who lack formal access to an increasingly demanding market environment, this is to direct their behavior and actions, in other words, normative institutions play a significant role in determining household financial choices poor. Acemoglu and Robinson (2000) observed that the poor could not be separated from social rules, and norms are the first order in their behavior and actions towards finance, to determine financial decision making and the choice to save to the bank. The rules are consistent with the argument of World Bank (2001), that normative institutions play a significant role in determining the financial decisions of poor households. Based on this description, the first hypothesis can form, namely:

*H<sub>1</sub>: Normative mediates the influence of regulative on financial inclusion.*

### 2.4. Procedural

The application of a financial inclusion program must have procedures that are easily understood by prospective program users. Systems are a sequence of steps to carry out work, where the job is done, what do, how to do it, when doing it, and who does it (Lenka and Sharma, 2017). An easy procedure will make programs that are genuinely beneficial to the community, for example, in the process of applying for credit, both for individuals and microfinance programs. The plan means, in a procedure listed how each task carried out, related to what, when the job is done and by whom the task must be completed. In other words, a procedure that made has a purpose of facilitating us in carrying out an activity. Based on this description, the second hypothesis can be formed, namely:

*H<sub>2</sub>: Procedure mediates the influence between regulative on financial inclusion.*

### 2.5. Declarative cognitive

The role of financial inclusion will be in demand by the community, one of which is vulnerable groups when they understand the essential functions and roles of financial inclusion programs. This understanding can be obtained by the dissemination, display of pamphlets, or symbols in a language that is easy to understand and contains many contents that encourage the public to use financial services (Bongomin *et al.* 2018). The content is as suggested by Fink and Yolles (2015) that the cognitive-cultural conception of an institution emphasizes its central role which socially mediated with general meaning through language, systems, and other classification rules among individuals. Furthermore, this meaning mediated by the use of various cognitive frameworks, such

as symbols and cognitive cues that issue specific issues and suggest ways that might be used to respond to this problem (Jordan *et al.* 2019). These cognitive programs (schemes, frames, inferential circuits), affect the understanding of the poor, in seeing, categorizing, and interpreting information on financial markets, when they receive socialization from studying the characteristics of financial inclusion (Kostova, 1999). Communities, especially vulnerable groups, will use the information they get from socialization, to determine their choices in business decisions.

Implicitly and explicitly, procedures and declarations, help poor people in making decisions on sound financial choices, based on financial information that is remembered in their memory, to use financial inclusion. In other words, want and like to reuse banking services. Horn and McArdle (2007) state that poor people need the ability to use various dimensions and cognitive skills to make financial decisions. They use cognitive cues to filter and distinguish financial information based on the relevance of their memory understanding. All info about financial inclusions that do not fit the schematic pattern in their minds will be ignored. Evidence from Uganda regarding financial inclusion is a lack of understanding of financial information (Bongomin *et al.* 2016). Based on this description, a third hypothesis can form, namely:

*H<sub>3</sub>: Declarative cognitive mediates the influence between regulative on financial inclusion.*

Finally, by listening to and incorporating the regulative institutional framework, normative and cognitive culture of microfinance, financial learning, financial literacy, and giving accounts, it is hoped that it can better understand financial inclusion, in order to increase the interest of the poor/vulnerable groups, directly involved in financial inclusion programs, through the services of financial institutions, especially banking institutions.

### **3. Research Methodology**

#### **3.1. Research Design**

This study was conducted using the cross-sectional quantitative method, using SEM (Structural Equation Model) as a tool to test hypotheses, which was designed to examine the influence of regulative, normative, procedural, and declarative cognitive roles on the implementation of financial inclusion programs in Indonesia. The study area covers several provinces, namely West Java, West Sumatra, East Kalimantan, and Papua. The population data obtained from the Central Bureau of Statistics (BPS) and the National Development Planning Agency (Bappenas), the year 2018.

#### **3.2. Population and Sample Size**

This study used a sample of 300 people, including residents living in four study areas, with the proportion of regional division as many as 75 samples. The reason for the selection of the four regions is that in 2018, the poverty rate is quite high, which is almost 40 percent of the total population of Indonesia (265 million people). Judging from the formal education level, it is still relatively low, where the percentage of people aged five years and over, who graduated from high school is only 34.3 percent. From geographic conditions, the four regions surrounded by mountains and forests (BPS Statistics Indonesia, 2010). This research was carried out by looking at the categories of sex, age, education level, employment, type of region, and the level of wages or income which considered as part of several criteria for determining the poor.

#### **3.3. Data Collection**

In this study, all measurement indicator items were adopted from Bongomin *et al.* (2016), based on the North (1996) concept. The first stage of this research was, primary data collection, carried out by distributing closed questionnaires to 300 respondents using inclusive financial services. Of the 300 bakers who distributed with a sample proportion of 75 people per region, only 254 were eligible to be tested with the distribution of sample proportions for each part as follows: Java (71 people), Sumatra (65 people), Kalimantan (62 people) ) and Papua (56 people).

**Table 1. Characteristics of Respondents (N=254)**

Descriptions	Frequencies	%	Cumulative (%)
<i>Gender</i>			
Man	130	51.2	51.2
Woman	124	48.8	100
<i>Ages</i>			
17- 20	42	16.5	16.5
21 – 25	86	33.9	50.4
26 – 30	89	35.0	85.4
more than 30	37	14.6	100.0
<i>Ability to read and write</i>			
Yes	138	54.3	54.3
No	116	45.7	100.0
<i>Level of Education</i>			
Elementary School	45	17.7	17.7
Junior High School	72	28.3	46.1
High school	87	34.3	80.3
S1	50	19.7	100.0
<i>Type of Work</i>			
Farmer	83	32.7	32.7
Laborer	68	26.8	59.4
Private Employee	49	19.3	78.7
Government Employee	21	8.3	87.0
Entrepreneurship	33	13.0	100.0
<i>Income per capita</i>			
IDR. 500.000 - 2.000.000	76	29.9	29.9
IDR. 2.500.000 - 4.000.000	130	51.2	81.1
> IDR. 4.000.000	48	18.9	100.0
<i>Regional Type</i>			
Rural	96	37.8	37.8
Peri-Urban	88	34.6	72.4
Urban	70	27.6	100.0

The results of primary data processing showed that out of 254 samples, from the gender side, users of financial services are for men (51.2%) and women (48.8%). In this case, men are more dominant than women because the level of male needs is higher than women. The role of men as leaders in the household is required to be able to provide for the family, becoming one of the reasons for using financial services. In terms of education, it is dominated by high school education level of 34.3%, followed by junior high school education level, besides the ability to read and write around 54.3%, or still below the average. Of the 4 regions, the average population lives in rural areas with a livelihood as farmers, which is around 32.7%, if viewed geographically, the four regions have fertile geographical conditions, rich in plantation and mining crops, such as plantations of oil palm, paddy, gold mines, etc., where most of the people have an average income level between IDR. 2.500.000 - IDR 4.000.000 per month. Details of the results from the descriptive statistics of the respondents are presented in Table 1.

Before conducting a study into the next stage, the primary data is validity and reliability testing with Cronbach's Alpha values more than 0.7 and a validity value of more than 0.4. The test results are presented in Table 2.

**Table 2. Reliability and validity test results**

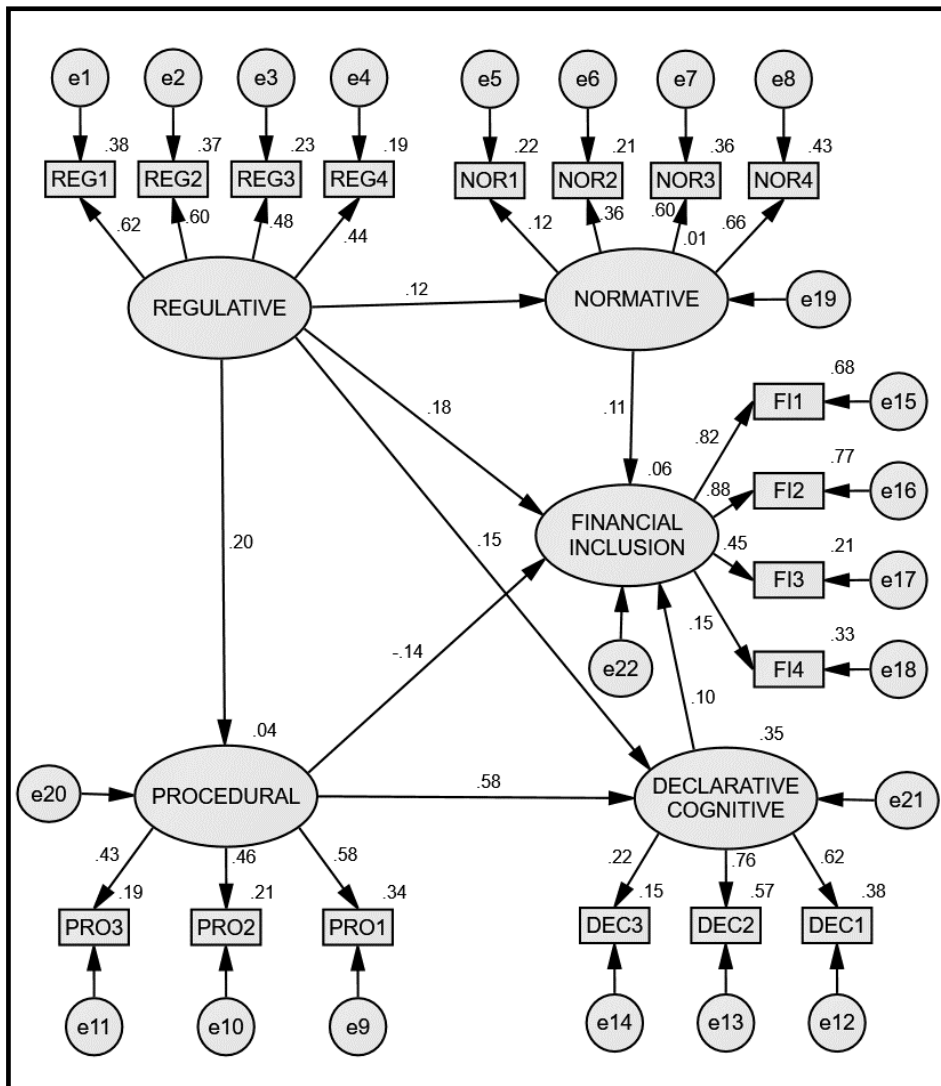
Code	Description	Cronbach's Alpha	Anti-Image Correlation	Decision
<i>Regulative</i>		0.810		Reliable
REG1	We always carry out due diligence before using the services of financial institutions, by asking for opinions / suggestions / consultations with relevant parties		0.720	
REG2	There are sanctions for every violation of the rules, related to the agreement made		0.699	
REG3	We voluntarily obey every rule, for every financial transaction carried out		0.725	
REG4	There is a fear of the rules of financial institutions		0.749	
<i>Normative</i>		0.787		Reliable
NOR1	Financial institutions show loyalty in all financial matters		0.657	
NOR2	Financial institutions always respect their customers, related to financial matters		0.667	
NOR3	There is a binding expectation between service users and financial service providers		0.692	
NOR4	Act appropriately in dealing with or serving consumers. Financial institutions help each individual in setting financial goals, and offer an acceptable path to achieving the individual's goals		0.644	
<i>Procedural</i>		0.794		Reliable
PRO1	We can easily handle financial problems everyday		0.648	
PRO2	We can easily make decisions in our daily financial affairs		0.695	
PRO3	The procedure for submitting or using services from financial institutions is very easy and its presence is very helpful		0.669	
<i>Declarative Cognitive</i>		0.719		Reliable
DEC1	We can easily memorize and remember financial problems		0.652	
DEC2	We can easily evaluate financial information content		0.656	
DEC3	Information provided by financial institutions is easy to understand		0.578	
<i>Financial Inclusion</i>		0.734		Reliable
INK1	Save money at the bank and depend on the interest rate		0.581	
INK2	Save money at home		0.564	
INK3	Payment media is often used through bank accounts and transfers		0.795	
INK4	Payment media is often used through cash receipts		0.634	

Next, a Goodness of Fit test conducted, to find out how suitable the model is with a series of observations. This test summarizes the difference between the observed value and the expected value in the model. Based on the Table 3 below, it can see that absolute fit measure, as the primary condition of the chi-square value, is not met, this can be seen from the chi-square value of 237.246 and p-value 0.000 (less than 0.05), so it concluded that the model this is not the goodness of fit. But as it is known that, SEM is very sensitive to the number of samples used in a study, this means that the number of respondents that are more and more, will be better but on the other hand, can cause the value of CMIN ( $\chi^2$ ) to be higher, so the model is considered worthy of further analysis.

**Table 3. Goodness of Fit Test Results**

	$\chi^2$	$\chi^2/df$	df	ECVI	AIC	IFI	NFI	TLI	CFI	RMSEA
Cut of points		≤ 5.0				≥ 0.9	≥ 0.9	≥ 0.9	≥ 0.9	≤ 0.08
Estimated Model	237.246	1.868	127	1.434	361.246	0.835	0.702	0.793	0.828	0.059

Therefore SEM provides another alternative goodness of fit test, through the criteria of absolute fit measures, by looking at the RMSEA value of 0.059 (smaller than 0.08) so that it can conclude that this model is 'good fit.' The criteria for ECVI and AIC are lower than the value of saturated models, which are 1.434 less than 1.500 (ECVI) and 361.246 smaller than 378.000 (AIC) so that they are still categorized as 'good fit.' The criteria based on Parsimonious Fit Measure by looking at the normed chi-square value ( $\chi^2 / df$ ) of 1.868 (fulfilling the lower limit 1 and upper limit 5). So that overall it can be concluded that this model is declared marginally feasible, to use as a tool in confirming the theory that has been built based on existing observation data or it can be said this model is 'goodness of fit' (Figure 1).



**Figure 1. Conceptual framework according to goodness of fit**



#### 4. Analysis and Discussion

The magnitude of the effect of each standardize effect (standardize effect) or indirect (normalize indirect impact), is presented in Table 4. It is known that regulative has a positive impact on normative financial inclusion (H1) with an effect of 0.621 or 62.1 percent in Table 4. This is in accordance with the previous research (Dixit and Gosh, 2013; Chakrabarty, 2012; Bongomin et al. 2018). Norms arise from individual problem-solving activities, where criteria guide the main rules of expected behavior. How to behave, is a vulnerable group, in managing their finances, which is the primary basis for financial institutions to be more responsive and flexible to the needs of the community. Thus, norms form the people's choice to use the services of individual financial institutions, which are considered to be better, and there is trust between the two. So the existence of norms can simplify the process of implementing a financial inclusion program in the community.

**Table 4. Regression weights**

			Estimates	SE	CR	P	R <sup>2</sup>
Regulative	→	Procedural	2.390	0.497	4.812	0.000***	0.796
Regulative	→	Normative	0.527	0.129	5.930	0.000***	0.621
Procedural	→	Declarative Cognitive	0.618	0.179	3.444	0.000***	0.583
Regulative	→	Declarative Cognitive	0.770	0.165	4.669	0.000***	0.549
Normative	→	Financial Inclusion	0.700	0.135	5.953	0.033*	0.609
Regulative	→	Financial Inclusion	0.241	0.129	1.428	0.000***	0.482
Procedural	→	Financial Inclusion	-0.142	-0.121	-1.226	0.043*	0.335
Declarative Cognitive	→	Financial Inclusion	0.526	0.257	1.453	0.000***	0.657

**Note:** \*\*\* p < 0.001; \* p < 0.05

The normative institutions play a significant role in determining financial decisions (World Bank, 2001). Thus, decisions are taken by the group depending on the behavior of individuals, who expected to behave similarly in the social group, because the deviant behavior will be subject to sanctions. Therefore, the financial decisions of poor households are formed by social policies that are seen in existing norms, adjusting to what is determined by the community.

The test results on the previous research are different (Bongomin et al. 2016; Kose and Gunes, 2018), which shows that the negative effect on financial inclusion, through procedural (H<sub>2</sub>), with a magnitude of -0.335 or 33.5%. In this case, the rules made may be too heavy to be obeyed by the vulnerable group. In practice, each financial service institution has its own rules, but the problem is that the procedure applied is quite burdensome and somewhat complicated. Inclusion program can be a success; the system should be made more accessible and financial inclusion programs beneficial to the community. This means that the implementation of the policy given through several procedure points, which made more straightforward so that the administrative process does not complicate the group.

The third hypothesis test has a positive effect on declarative cognitive (H<sub>3</sub>) financial inclusion of 0.657 or 65.7 percent. And this is the most impoverished people dependent on their ability to use dimensions of memory and cognitive skills to filter financial information to make business decisions. This is in accordance with previous research (Cheng and Degryse, 2003; Sanjaya, 2014). All financial inclusion information, which is not by the schematic pattern in their minds will be ignored, according to their need to enter into an account of the level of regulation stipulated in each program.

#### 5. Conclusions and Suggestions

The purpose of this study is to analyze the four main research variables (cognitive, regulatory, normative, procedural, and declarative) on financial inclusion. The results of the analysis concluded that service users of financial institutions do not see gender, meaning that is both important and women have equal opportunities in using banking services.

On the other hand, access and facilities from financial services are limiting factors for inclusion programs. Access in urban areas is very beneficial for urban communities, but for rural communities, use of this access requires time and sacrifice. Of the four variables tested,  $H_1$  was proven to have a positive and significant effect. This shows that normative behavior refers to one's attitude and loyalty to the rules that apply in their environment so that the normative component of the institution must determine what is appropriate and inappropriate for members of the community. Like an institution promotes correct behavior, without legal sanctions or otherwise, the institution influences individual actions through a normative process. In this case, there was a negative effect. This means that it can protect the financial inclusion process targeted at the group, but conversely, if the procedure is more complicated, this will be almost, so that the target of achieving financial inclusion will not work smoothly for the community of the group.

In the third variable, evidence found that  $H_3$  had a positive effect, which means that the rules applied by financial service institutions will be conceptualized in people's memories or memories so that regulative will have a positive impact on financial inclusion through declarative cognitive. In other words, the community will choose financial inclusion programs by the needs conceptualized in their memories and those supported by regulations that considered not burdensome or that benefit them.

One problem that limits financial inclusion, both poor households and vulnerable groups in rural areas, is the lack of financial information and good understanding of the information. There is a repetition of the use of financial institution services, in addition to reasons of satisfaction, also due to urgent matters that require them to use the services of these financial institutions. Therefore, the government through the central bank (Bank of Indonesia) must build an 'information and data center', so that the public can obtain information about providing possible financial services, to promote financial inclusion.

The government must also provide legal services, to various regions, especially for vulnerable groups. The legal system must operate with easy reach in rural areas, for financial guarantees and compensation. The government through institutions must strengthen the consumer protection law on existing finance and also create awareness of rights to financing

**Acknowledgments:** We are grateful to the Ministry of Research Technology and the Higher Education Republic of Indonesia, especially the Directorate of Research and Community Service. Directorate General of Research and Development Strengthening Ministry of Research, Technology and Higher Education. We are also grateful to our colleagues for their suggestions and comments. The various errors that exist are our responsibility.

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