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Financial Inclusion Profile: Determinant and Barriers

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ABSTRACT

The policies arranged by the government of the Republic of Indonesia in the efforts to develop rural areas and border areas, such as North Sulawesi (which is in the border of Indonesia-Philippines), is interesting to observe, particularly on the aspect of financial inclusion in small and medium enterprise. The research aims at examining the determinant and obstacles of financial inclusion in North Sulawesi. The results show that Age and Gender do not significantly influence financial inclusion, especially with the dependent variable of formal account. Meanwhile, other variables, the status of formal account and the automatic teller machine (ATM) cards, do not have significantly influence. Similarly, education has also dependent variables. The difference is the determinant of the dependent variables. The number of formal account and the ATM significantly influence the financial inclusion, but not the model of the status of the formal account. For the obstacles, there are six factors influencing the financial inclusion. Those are lack of business management, bad experience with the bank, less supporting business condition, religion and family, and various documents of credit requirements.

Keywords: Financial Inclusion, Determinant, Obstacles, Small and Medium Enterprise

JEL Classifications: E44, G2, G32

1. INTRODUCTION

Financial Inclusion is the effort to create and activate financial system in accordance with the access to all levels of society. It will lead to a good economic development as well as overcoming the problem related to poverty. Financial inclusion is the concept of connecting the financial aspect or budgeting with the marginalized society in certain area in the effort to minimize the gap between the rich and the poor, leading to the improvement of community's wealth and welfare. Good development of financial inclusion will encourage the growth of bank and non-banking institutions in the related areas. At the core, financial inclusion is the easiness of access to the services or formal financial system by all economic stakeholders. India government defines financial inclusion as a process of accessing financial services in appropriate time and credit availability needed by marginalized society, such as those having low income (Tamilarasu, 2014). Similar definition given by Garg and Agarwal (2014), stating that financial inclusion is a condition when people cannot access the banking goods and services, such as savings, credits, insurance, and education loans. In

short, financial inclusion is the provision of financial services in appropriate time to marginalized people (Fadun, 2014).

Financial inclusion is closely related to the access of bank for the marginal. Therefore, it is necessary to conduct an in-depth research. It is in line with the arguments provided in empirical findings. According to Tamilarasu (2014), family with low income has less access to the bank. In fact, they need more time and money to obtain the services of the bank (opening an account or getting a loan). They find it difficult to save or plan their finance. Similar Fadun (2014) states that Micro financial institution plays significant role in facilitating the inclusion because they have unique position in reaching the marginalized people.

The introduction of financial inclusion to the village will give broad impact to local and national economy, since it improve the economy and financial services in rapid pace. According to Shyni and Mayoothu (2014), the targeted of financial inclusion groups help to get the access to the loan or credit and various services available. It was improved the income and living standards.

The survey of the World Bank (2015), in the format of Global Findex) from 2011 to 2014, shows 700 million people have a new account in the bank or other financial institutions, or the service supplier of mobile money. The number of those without bank account have decreased to 20%⁷⁰ which is around 2 million. They released the information that the **access to financial services help the society to deal with the poverty**. "We have determined an ambitious goal, which is to provide financial access for all in 2020, and now ⁶⁰ have proven that we have undergone great development," said **President of World Bank Group, Jim Yong Kim**. "The efforts need many partners from credit card companies, bank, micro credit institutions, UN, foundations, and local figures. We can do it, and as a reward, millions of people will be no longer poor."

Besides, the World Bank stated that between 2011 and 2014 the percentage of the people having a bank account has increased from 51 to 62. The trend has encouraged the increase in the bank account of the country⁶⁷. 13%. Similar condition occurred with the role of technology. **In particular, the account of mobile money in the area of African Sahara has helped to expand and improve the access of the people to the financial services**. Along with the ¹⁷ improvement, the data also shows that there is a great opportunity **to improve financial inclusion for women and marginalized people**.

From the reports of ⁶⁶ **Global Findex**, by **Demirguc-Kunt et al.**, (2014), it is known that financial inclusion is significant in providing the facilities for the people to save their money as well as paying and receiving payment electronically. Various researches show that broad access to financial services and participation in the system can also encourage job vacancies, improve educational investment, and help marginalized people to manage the risks and survival from financial problems.

Further, a lot of things to do to expand the financial inclusion for women and the marginal. For example, more than 50 percent of the adults are categorized as marginalized in developed countries. And almost 40 percent of the ²⁹ total population in the countries have the bank account in 2014. **Gender gap in the account ownership did not decrease. In 2011, 47 percent female and 54 percent male had bank account; in 2014, 58 percent female had bank account, compared to the male, which reached 65 percent**. The highest gap in gender occurred in South Asia, where there was only 37 percent of female have an account, compared to the male, which is 55 percent. When a woman has an account and a save place for her money outside of the house, she has greater authority on the family finance and income (<http://www.worldbank.org>, 2015).

Nevertheless, there are many obstacles to be found in the implementation of the inclusion. They are related to: Less conducive business environment, stagnant in term of economic growth, minimum infrastructure, limited physical access, limited psychological aspect (fear of the staffs, structures, or the products of financial institutions), low income, low financial discipline, and low professional business practices (Fadun, 2014). Meanwhile, government has failed in taking their role. It is related to the efforts of balancing the access to financial services for low income people or to the efforts of encouraging the people awareness of financial services (Muzammilu et al., 2015).

²⁸ **Financial inclusion is defined as the effort to improve the access for the society to formal financial institution that encourage the welfare** (Franklin Allen, et al., 213). Formal financial institutions include the bank that can increase the savings (Aportela, 1999) and conduct productive investment (Dupas and Robinson, 2009). The World Bank has conducted an investigation related to financial inclusion in the format called Global Financial Index (Global Findex, 2012).

The impact of financial inclusion is not only on the financial aspect and on funding, but also on the aspect of society economic development, local and national, which is now being concerned by the local or national government. It is supported by the arguments and empirical findings. Financial inclusion can help to establish sustainable development of a nation through the provision of financial service for marginalized people (Tamilarasu, 2014). Financial inclusion does not only influence an individual, but also effect the family and neighbors, as well as the surrounding environment (Shyni, and Mavoothu, 2014). Financial inclusion is a significant step in reaching inclusion growth, leading to increasing the economy of marginalized society. Financial inclusion has general goal (economic goal), which is the growth, money mobilization, and expansion of financial service markets), and specific goal (social and politics), which is to eradicate poverty, sustainable development, expansive inclusion, and government program effectiveness. It can also provide job opportunities, credit facilities or easy loans, increase of income, money mobilization, micro insurance, micro pension fund, poverty decrease, establishment of assets, and personal financial management. The society has the access to the account and the technology tend to increase the consumption, improve productivity and income, improve the investment and to manage unexpected events (Fadun, 2014). To sum up, the impacts of financial inclusion is broad and deep to the society, both local and national. Limited use of financial inclusion can create an obstacle in the future economic development (Fungáčová et al., 2014).

Financial inclusion is closely related to the banking aspect. It needs strong roles of the institutions⁶⁵. Financial inclusion can be reached through banking and **non-banking financial institutions** (Shyni and Mavoothu, 2014). **The roles are crucial**. According to Shankar (2013), there are 5 areas of the financial inclusion: Banking, credit, insurance, savings, and financial suggestion. The products of banking include loans and mortgage are the best drivers for the inclusion (Clamara and Tuesta, 2014).

One of the elements in the inclusion is micro finance, which is significant in the economy. Woolley (2008) suggests that microfinance institutions also try to maximize poverty assistance, or outreach to poor. The argument means that the institutions help to maximize the help or assist the marginalized people. Broader idea is given by Krauss and Walter (2006), that the use of regression analysis is to see how microfinance institutions compared in financial indicators to commercial banks in response to world and domestic economic systemic risk. Then, microfinance serving the marginalized people survives in the monetary crisis. ¹³ According to McGuire and John (1998), microfinance institutions **were able to maintain relatively strong financial success**, especially among

those institutions that serviced poor clients. Specifically, they found: One, that the crisis had the least impact on microfinance institutions operating in the poorest countries, two, that institutions with poorer borrowers were better off, and three, while commercial banks had to substantially raise interest rates, village microfinance institutions were able to maintain relatively lower interest rate. It means that the microfinance will be able to maintain the financial condition because it focuses on the finance of marginalized people.

Besides, microfinance also influence the small and medium enterprise (SME). It is in line with Jansson (2001) who argues that microfinance institutions, unlike commercial banks, operate very close to the community and thus are able to have better information about and close ties to their borrowers SME. Microfinance operates close to the people as well as having better information of credit payment to the SME. While Krauss and Walter (2006) suggest that microfinance institutions have access to both international funds and investors that are interested in the long run and won't react negatively to a short-term downturn in the domestic economy population served, growth rate, and number of women served." It means that microfinance institutions have international access and the investor focuses on the long-term fund in improving the people welfare.

64 Small and medium scale (SME) plays significant role in improving economic growth of Indonesia. It exist in the crisis of 1997 to date. Musnandar (2012) states that in 2011 SME contributed to 56% of total gross domestic product (GDP) in Indonesia. SME can also decrease the unemployment, since it takes many labors. One of the product related to the aspect of credit, in particular, and microfinance, in general, is micro credit. Micro credit and the facilities are given to initiate the improvement of the marginal. From the SME point of view, micro credit is expected to create multiplier effect to the local economy. It can take the forms of decrease in local poverty, encouragement **63** job application, and people welfare. Therefore, a sustainable **development of micro credit** is necessary.

Sustainable **development of micro credit** is interesting to observe for its newness. There has not been micro credit accepted ir effective in all conditions. It is caused by the different characteristic of debtures. Thus, it needs a different model for every area, which is based on the characteristic of each debitor of each area. the model in the context of financial inclusion becomes complex when it is included in the broader framework. It means that the model engages many elements, including the government, micro credit institutions, debitor, and local economy. Government and local economy are included because micro finance is an economic tool, meaning that it does not only focus on the creditor, but also on the economic aspects in it. The aspect includes poverty, unemployment, labor, income, consumption **2** and investment, which are significant in the local economy. The programs that reach poor people should be able to give them at least the same number of options granted to the non-poor, and instead of confining the poor solely as government targets (Mangantar and Baramuli, 2016).

It becomes the concern of the government because it is in relation to the concept of people economy empowerment.

The problem in using the savings or micro credit are connected to various variables. High income, good education, will **4** ness to become a better human, and age, are relatable variables in China. Then, **income and education** also influence the alternatives of loan sources. Both results are similar t the research results showing that: (1) Bank account is related to an individual income; (2) **education is positively** related to the ownership of formal bank account; (3) **a 28** and Age2, has significant positive and negative relation and **non linear relation** between age a **59** financial inclusion. Individual characteristic can explain the **use of formal financial services** (Zuzana et al., 2014).

The success of implementing financial inclusion in the field depends on the institutional aspect and individual behavioral aspect. Various researches state that individual behavior or social characteristic significantly influences the success of the implementation. There is a significant relation between the characteristic of economy social and the use of financial inclusion, both by family and by small enterprise (Clamara and Tuesta, 2014). Traditionally, marginal groups (women, villagers, and youth) have bigger obstacle **34** accessing the system of formal finance. For the individual, **age, gender, education, and income,** become **the barriers in the** access of financial inclusion. Individual characteristics influence the performance of the inclusion. Social **7**d personal factors contributed to the exclusion and the key **barriers of financial inclusion** (Cnaan et al. 2012). Because many factors influencing financial inclusion, the concept is more complicated that what it seems to be. And based on the gap, it is necessary to conduct an in-depth analysis on the aspect of financial inclusion.

35 **2. LITERATURE REVIEW**

2.1. The Concept of Financial Inclusion

There are various definition of financial inclusion **43** According to the Bank of Indonesia (2014), it is all the efforts to **improve the access of the people to the financial services** by removing all the barriers, both price and non-price. Hannig and Jansen (2008), proposes that **financial inclusion** is the efforts to include unbankable society to the **formal financial system** so that they have the access to services, such as **savings, payment, and transfer.** Besides, according **17** ling to Sarma (2012), it is a process of assuring the **easy access, availability, and benefits of the formal system to all actors of economy.** Thus, **it can be concluded that** the inclusion is the effort to improve the access for the society, especially the unbankable, by lessening the barriers.

17 financial inclusion is the easiness on the access to services or **formal financial system** **27** by all stakeholders **of economy.** Indian Government defines **financial inclusion** as a process to **access financial services** in appropriate time and credit availability needed by marginalized groups, such as those who have low income (Tamilarasu, 2014). It has general goal (economic goal), which is the growth, money mobilization, and expansion of financial service markets), and specific goal (social and politics), which is to eradicate poverty, sustainable development, expansive inclusion, and government program effectiveness (Shyni and Mavoothu, 2014).

There are 5 pillars of financial inclusion. Those are: (1) Full access to financial services (loans, savings, insurance, and other payments); (2) appropriate and suitable services according to the principles of dignity and consumer's protection; (3) equal services for everyone who is able of using financial services, which includes disabled people, minority tribes, and marginalized or minority people); (4) road financial service suppliers supported by adequate financial infrastructure as well as clear regulations; and (5) society with understanding and capabilities to promote the use or benefits of the financial services (Fadun, 2014).

2.2. Financial Inclusion is One of Society Empowerment

Financial inclusion is closely related to society empowerment. Access to financial services promote social inclusion and confidence as well as society empowerment (Tamilarasu, 2014). It is given to marginalized farmers, labors, individual worker, immigrants, minority tribes, women, and other marginalized people (Shyn and Mavoothu, 2014). The empirical findings show that the index of financial inclusion and human development have positive correlation. Financial inclusion is one of significant aspects in the context of human development and inclusion growth. A system of financial inclusion promotes the allocation of efficient resources in productive way (Anurag et al., 2014).

2.3. Barriers in Financial Inclusion

There are many barriers in relation to the implementation of financial inclusion. Financial exclusion (mainstream) is caused by: (1) Limited geography (isolated areas) and small population; (2) limited access to social and economy for low income people or minority ethnic; and (3) limited opportunities for new enterprise due to inability to access the services (Anurag et al., 2014).

According to Shankar (2013), the barriers can be seen from two sides: Supply and demand. Demands include the aspect of psychology, culture, financial literacy, while supply includes physical barrier, lacking of suitable products, and documentation barriers (Shankar, 2013). Other arguments provided by Zuzana et al. (2014), stating that the reasons or barriers in the use of the inclusion are seen in the expressions of: "Too far away," "too expensive," "lack of documentation," "lack of trust," "lack of money," "religious reaspmns," and "family member has one."

Zuzanna et al. (2014) states that SME lacks to access of the credits. Further, many researches show that the access to credits is the main concern of small enterprises. The determinant factors of financial inclusion are income, education, age, and gender. The determinant factors of the main indicator of financial inclusion are formal account, formal saving, and formal credit.

2.4. Micro Finance and Economy

Woolley (2008), proposes that microfinance institutions also try to maximize poverty assistance, or outreach to poor. Indeed, the added goal of poverty relief may be what defines microfinance as separate from commercial banking. Because microfinance straddles worlds of commercial banking and poverty relief, when measuring performance, it is important to look at both financial success and outreach to the poor. The argument focuses on the basic assumption

that micro finance institutions are related to the economy of certain areas, such as in the effort of eradicating poverty.

On the other hand, micro finance institutions are involved in the small enterprises and invulnerable to crisis. McGuire and John (1998), they found that microfinance institutions were able to maintain relatively strong financial success, especially among those institutions that serviced poor clients. Specifically, they found: One, that the crisis had the least impact on microfinance institutions operating in the poorest countries, two, that institutions with poorer borrowers were better off, and three, while commercial banks had to substantially raise interest rates, village microfinance institutions were able to maintain relatively lower interest rates.

Micro finance institutions are able to respond to systematic risks. Krauss and Walter (2006) use regression analysis to see how microfinance institutions compared in financial indicators to commercial banks, in response to world and domestic economic systemic risk.

2.5. Micro Finance and SME

Micro finance is closely related to business enterprise, such as SME. According to Jansson (2001), argues that microfinance institutions, unlike commercial banks, operate very close to the community and thus are able to have better information about and close ties to their borrowers (SME). Krauss and Walter (2006) argue that microfinance institutions have access to both international funds and investors that are interested in the long run and won't react negatively to a short-term downturn in the domestic economy population served, growth rate, and number of women served.

2.6. Factors Influencing Financial Inclusion

According to Zuzana et al. (2014), the determinant factor of financial inclusion are: Income, education, age and gender. The determinant factor of the main indicator of financial inclusion are formal account, formal saving, and formal credit. From the findings, Bank account is related to an individual income; education is positively related to the ownership of formal bank account; age and Age², has significant positive and negative relation. There is non-linear relation between age and financial inclusion. Individual characteristic can explain the use of formal financial services.

According to Noelia and Tuesta (2014) there is significant relation between the characteristic social economy and the use of financial inclusion both for family and small enterprise. There is a significant relation between the characteristic of economy social and the use of financial inclusion, both by family and by small enterprise. Traditionally, marginal groups (women, villagers, and youth) have bigger obstacles in accessing the system of formal finance. The products of banking include loans and mortgage are the best drivers for the inclusion, compared to saving products. For the company, formality and education are significant factor in financial inclusion. For the individuals, age, gender, education, and income are the key factors in impeding the access to financial inclusion. Individual characteristics, as well as social and personal aspects can influence the performance of financial inclusion. Social and personal factors contribute to the financial exclusion and

become the key factors in financial inclusion (Cnaan et al., 2012).

2.7. Barriers of Financial Inclusion

The barriers of financial inclusion relates to less conducive business environment, lack of continuous growth, lack of infrastructure, limited physical aspect, limited psychological aspect (fear of the staffs, structures, or the products of financial institutions), limited information, low financial discipline, and low professional business practices (Olajide, 2014). Financial exclusion (mainstream) is caused by: 1) limited geography (isolated areas) and small population; 2) limited access to social and economy for low income people or minority ethics; and 3) limited opportunities for new enterprise due to inability to access the services (anurag et al., 2014).

The barriers can be seen from two sides: Supply and demand. Demands include the aspect of psychology, culture, financial literacy, while supply includes physical barrier, lacking of suitable products, and documentation barriers (Shankar, 2013).

3. RELATIONS AMONG VARIABLES

3.1. The Relation of Age and Financial Inclusion

Wachira and Kihiu (2012) has conducted a study on the influence of financial literacy on the access of financial services in Kenya in 2009. The access to financial services are not only influenced by the level of financial literacy, but also by the income, distance from the bank, age, marital status, gender, size of the family, and education level.

27. The Relation of Income and Financial Inclusion

Several researches have been conducted on the relation between financial inclusion and financial system stability. From the research, it shows positive and negative relation between them. Khan (2011) states that financial inclusion has the potential to give positive impact to the stability, but it is not without a risk. The example is presented by Morgan and Pontines (2014), as well as Hannig and Jansen (2010). Morgan and Pontiness (2014) states that the increase of the loans by small and medium enterprise will improve the financial stability described by the decrease of non-performing loan (NPL) as well as the decrease of the possibility of liability. Hannig and Jansen (2010) states that inclusion can overcome the imbalance of income and improve financial stability. It is due to the fact that the access of marginalized people to the savings of formal financial institutions increase the capacity of a family in managing financial vulnerability caused by the crisis, in diversifying the funding basis to eliminate the shock, in improving economic sustainability by speeding up the growth, and in facilitating the diversification and eliminating poverty. Khan (2011) explains 46 risk of instability because of the increase of the inclusion. It is supported by the research conducted by Dupas et al., (2013). In the research, Khan (2011) mentions the negative impact of financial inclusion because it decreases the credit standards to reach the unbankable people. Further, it increase the risk of bank reputation because they have to adjust the standards to local customers. In addition, it may cause instability because of untreated and insufficient regulation made by Microfinance institutions. The research by Dupas et al (2014) in the western

province of Kenya shows that the increase in the banking services does not improve financial stability because it does not decrease the loans by the marginal, because the people distrust the bank, and because it is not followed by quality improvement.

Wachira et al. (2012) has studied the influence of financial literacy on the access to financial services in Kenya in 2009. It turns out that the access is not only influenced by financial literacy but also by the income, distance from the bank, age, marital status, family size, and education level.

3.3. The Relation of Gender and Financial Inclusion

In Indonesia financial inclusion program can have significant impact to the actors of Small and Medium Enterprises, especially female. It is caused by several reasons. First, less than half of the population has the access to formal financial services. All having mentioned above can be achieved. However, the realization requires cooperation of all parties, including the government, Financial Sector/Bank of Indonesia, Banking, financial Sector, and development partners in Indonesia. Integrated cooperation will bring significant result. Second, designing a strategy involving integrated financial sectors and broader strategy for the development and eradication of poverty will give clear direction for the policy maker and private sectors. Government and Bank of Indonesia play important role in expanding the involvement of financial sectors. Private sectors are the witness of great market in the population of Indonesia reached through innovative means. Third, educating female actors of small and medium enterprise and introducing them to financial services and access are beneficial for them. Fourth, providing easy access to financial services to female actors in SME can be done through the introduction to Branchless Banking as well as allowing the use of mobile banking, since it has higher level of penetration. Fifth, the use of new technology of the banks and non-bank financial institutions with simplified regulations can provide easy access to financial services for female actors of SME. Mobile banking services do not only cut down the cost, but also improve the reachability (Evi Steelyana, 2013).

3.4. The Relation of Education and Financial Inclusion

Priyadi et al. (2016) proposes that education has positive and significant influence on the level of family saving. The result of examination is accordance with the hypothesis 52 similarly, it is also in line with the ideas delivered by Brata (1999) that the higher the level of education of the head of the family, the higher is the awareness of the people in managing and saving their money in the bank.

Wardhono et al. (2016) suggests that education has positive result. It means that a group of people graduated from Senior High School and above has higher opportunities 62 compared to those below Senior High, or 9.563 times higher. The higher the education level, the better the financial literacy and the more intensive access to financial information.

3.5. Determinant Factors of Financial Inclusion Obstacles

Financial inclusion provides a description of unbanked population with its limited access to formal financial system, either in saving,

payment, credit, or insurance. Therefore, it is necessary to establish specific policies designed for eliminating various obstacles of financial access (Hannig nad Jansen, 2010). Hannig and Jansen (2010) classify four factors in measuring the growth of financial inclusion of a country. Those are accessibility, quality, utilization, and impact. Access and availability are to measure the access to formal financial institution. It covers the offer of financial services, such as credit, saving, payment, and clearing system. Thus, to evaluate the access and availability, the potential obstacles, such as geography and infrastructure should be identified. To determine the accessibility level, the main determinant is estimated as the proportion to the number of population accessing the financial services.

Sarma and Pais (2008) conducted a research on the relation of financial inclusion and development. using the financial inclusion index, the study aims to identify the significant factors influencing the financial inclusion. The level of human development and the inclusion are highly correlated. Meanwhile, the factor of social economy, such as income, has positive relation to the inclusion. Similarly, inequality, literacy, urbanization have the same relation with the inclusion. Physical infrastructures is significantly related to the financial inclusion. The variable of NPL and CAR has negative relation with the financial inclusion.

The study conducted by Chattopadhyay (2011) observed the financial inclusion in the West Bengal using the dimension in the index of financial inclusion. The results show that Kolkata has the highest score of inclusion index, followed by Darjeeling. Based on the survey, 38% of the respondents feel they cannot afford to open a bank account and many loan sharks dominates the financial resources of the population in the village.

Jayati (2013) analyzes financial inclusion in Ghana. He finds that Human Development Index has significant correlation with the financial inclusion in the country/meanwhile, the obstacles include the expensive cost of transaction services and infrastructures. Although the government has established a supervision regulation and license, the institutions tend to not following the rules. Therefore, it is necessary to have a legal basis on the informal financial institutions to help the people of low income to access the finance with minimum requirements.

Kharchenko (2011) observed the determinant of financial literacy and the implication on the saving behavior in Ukraine using the survey data of the Financial Literacy and Awareness in Ukraine from the Financial Sector Development Project and USAID in 2010. The results show that the main determinant is gender, education level, occupation, areas, and wealth. Age and dwellings do not significantly influence financial literacy. The implication on the saving behavior do not directly influence on the controlled wealth.

4. METHODOLOGY AND DATA

The research employs associative and exploratory designs. The objects are the business owner of small and medium scale enterprises in the Province of North Sulawesi and Gorontalo. The sampling technique used is accidental consist of 173 respondents. The variables of this research are age (respondent's age), income

(total income of the respondent); education (level of formal education accomplished by the respondent), and gender (sex category).

The dependent variables include the number of formal account, saving account, and credit account. Y1 means the number of the formal account, Y2 status of the account (active or passive), and Y3 is the number of automatic teller machine (ATM) cards. Exploratory analysis observes several variables. Those are distant location of the bank (D1); expensive cost of opening an account (D2), expensive transportation cost to the bank (D3), documents of credit requirements (D4), business formal documents (D5), financial statements (D6), distrust towards the bank (D7), inexistence of collateral (D8), less confidence (D9), problem with previous loans (D10), low income (D11), low daily income (D12), small savings (D13), religious reasons for not visiting the bank(D14), religious reasons for not taking a loan (D15), not in need of a bank (D16), not in need of credit (D17), less conducive business (D18), stagnant business growth (D19), less supporting business facilities (D20), distance of the banking facilities (D21), distance of the business location with the bank (D22), remote houses (D26), fear of the bank (D24), unfamiliar with the bank products (D25), awkwardness to go the bank (D26), no socialization (D27), discipline of business finance (D28), discipline of family finance (D29), experience (D30), and less professional business management (D31). The analysis uses multiple linear regression and exploratory factor analysis.

5. PRESENTATION AND DISCUSSION OF RESULT

5.1. Determinant Factors of Financial Inclusion

In this research, the dependent variable (financial inclusion) use three measures, those are the number of formal account, status account (the frequency), and the number of ATM owned by the respondents. While the independent variables are age, income, education, and gender.

5.1.1. Age

It has positive regression coefficient on financial inclusion with the variable dependent of the number of formal account (0.007), status of formal account (0.004), and the number of ATM cards (0.001). The results show that age does not significantly influence the financial inclusion with the score reached by the number of formal account of 0.115, the status of formal account of 0.545, and the number of ATM cards of 0.833. The data proves that age is not the determinant of the society to involve in the financial inclusion in North Sulawesi. Easiness in opening a bank account is high and the banks are very aggressive in promoting the savings. The segments range from elementary school (family savings) to big enterprise.

5.1.2. Income

It has positive regression coefficient on financial inclusion with the variable dependent of the number of formal account (0.002), status of formal account (0.000), and the number of ATM cards (0.001). The results show that income significantly influences the financial inclusion with the score reached by the number of formal

account of 0.006. However, it does not significantly influence the model with the variable dependent of the status of formal account, reaching the score of 0.559 and the number of ATM cards of 0.369. Respondents' income has immediate influence on the number of the formal account, but not on the intensity of the use the bank account and the number of ATM cards. It means that the respondents are passive in using the facilities of their formal accounts. The condition in the field shows that most respondents treat their formal accounts as saving instead of a media of transaction and investment related to the development or expansion of business or activities. The respondents' preference of cash transaction will decrease the use of the function of formal account and the supporting facilities. Respondents with higher education will increase the number of formal account but they do not use the account intensively.

5.1.3. Education

It has positive regression coefficient on financial inclusion with the variable dependent of the number of formal account (0.277), status of formal account (0.032), and the number of ATM cards (0.386). The results show that education significantly influences the financial inclusion with the score reached by the number of formal account of 0.040 and the number of ATM cards of 0.006. However, it does not significantly influence the model with the variable dependent of the status of formal account, reaching the score of 0.855. The higher the education of the respondents, the more number of formal accounts and the ATM cards they have. The aggressiveness of the bank in marketing the saving products and the facilities, as well as credit facilities for the society with higher income leads a higher number of formal accounts and ATM cards. Yet, the formal accounts are not active (less used).

5.1.4. Gender

This factor has negative regression coefficient towards the financial inclusion with the dependent variable of the number of formal account (0.063), but it is positive to the status of formal account (0.036) and the number of cards (0.007). the research shows that education does not significantly influence financial inclusion with the dependent variable of the number of formal account is 0.0564 and ATM cards 0.803, or the status of formal account 0.949). Cultural aspect of the people in the North Sulawesi upholding gender equality makes no difference in terms of the access to the banking services. Male and female in North Sulawesi have equal rights and access to the products and the banks face no problem with the gender aspect.

The result shows that dominant factors of income and education influence the financial inclusion in North Sulawesi. For the model with the dependent variable of the number of formal account, F count and probability are 3.687 and 0.007; model with dependent variable of the status of normal account are 0.187 and 0.945; and the model with the dependent variable of the number of ATM cards are 2.228 and 0.068. The simultaneous determinants are 0.081, 0.004, and 0.050, respectively.

5.2. Exploration on the Factors as the Obstacles in Financial Inclusion

To explore the obstacle of the financial inclusion, exploratory analysis technique is used. From 31 variables, there are 6 factors

with the Eigenvalues above 1 with the following scores: 13.67; 2.65; 1.498; 1.309; 1.166; and 1.029, for factor 1 through 6, respectively. For the score of KMO (Keiser-Meyer-Olkin) is 0.920 and Bartlett's test of significant sphere is 0.000. the determinant is 5.88E-011. There is 26% non-redundant residual with absolute values greater than 0.005. All variables have followed the requirements of validity and reliability tests.

Based on the results of loading score, the factors impeding the financial inclusion in North Sulawesi are:

5.3. Lack of Mastery in Business Management

The factors include several loading variables. They are: Less professional business experience (D31) (0.707), less information distribution (D27) (0.706), family financial discipline (D29) (0.702), experience (D30) (0.698), business financial discipline (D28) (0.651), and unfamiliarity with the bank products (D25) (0.650). From SME in North Sulawesi, financial inclusion is closely related to the people's performance. Most relations are personal. Small and traditional management leads to low intensity of relation to the bank. The condition becomes the main obstacle of financial inclusion in the effort to optimize the access.

5.3.1. Bad experience with the bank

Loading variables included in this factor are: Previous credit issue (D10) (0.672), lack of confidence to the bank (D9) (0.654), and discomfort feeling to go to the bank (D26) (0.632). Bad experiences with the bank become the psychological reasons of the respondents to be optimally involved with the financial inclusion. The highest number shows by the previous credit issues, leading to discomfort to have another business with the bank. The worst, the psychological aspect has prevented the respondents from conducting any transaction or taking loans to the bank.

5.3.2. Less supporting business condition

This factors have several loading variables, those are less infrastructures (D20) (0.714), less conducive business (D18) (0.709), and stagnant business (D19) (0.622).

5.3.3. Religion and family

It has several loading variables. Those are the disinclination to the bank due to religion (D14) (0.836), disinclination to take loan due to religion (D15) (0.832), and feeling the unnecessary of a bank (D16) (0.784). The respondents believed that traditional bank are not in line with the religious values. When they need a hand, they borrow their closest relatives. This aspect prevents their access to the banking products.

5.3.4. Various documents of credit requirements

This factor has only one variable. Most SME in North Sulawesi do not make their financial statements in regular basis. However, to apply a credit requirement, the reports are needed. In other case, an enterprise does not hold any license in operating the business. Consequently, those enterprises cannot use the facilities or products provided by the bank.

6. CONCLUSION

Age and gender do not significantly influence the financial inclusion in North Sulawesi. It is due to aggressive marketing of banking products and gender equality. Income and education produce a mix result. The research shows that income significantly influences financial inclusion with the dependent variable of formal account. However, the dependent variable of formal account and the number of owned ATM cards do not significantly influence the inclusion. On the other hand, formal account and ATM cards as the dependent variable of education do not significantly influence the inclusion, but it does not so with the status of formal account.

There are six obstacles found in the financial inclusion in North Sulawesi, those are mastery of business management, bad experience with the bank, less supporting business condition, religion and family, and various credit requirements.

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