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### The Influence of Financial Literacy and Culture on Financial Inclusion in Medan City Through Branchless Banking

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**Abstract:** This study aims to investigate the influence of cultural and financial literacy on financial through branchless banking program in Medan City. This study is an explanatory research which explains relationship between variables. The population used in this study was the target population which was the population of Medan City in 21 districts with productive age and act as breadwinners for the family. The samples were 300 people which taken by using stratified random sampling. The data analysis method was Structural Equation Model (SEM) by using AMOS version 20. The findings showed that financial literacy and financial culture of Medan citizens were low and traditional with low and limited access to banking services so that the achievement of financial inclusion in Medan city was not successful because the branchless banking program has not been implemented. Financial and cultural literacy play a role to positively and strongly influence the achievement of financial inclusion in Medan City through branchless banking program. Branchless banking could be well implemented if public financial literacy and culture were good, which would be reflected from their positive financial behavior, especially when they prepared future security guarantee.

**Keywords:** financial literacy, culture, branchless banking, financial inclusion

#### I. INTRODUCTION

World Bank Survey in 2010 (*Booklet Keuangan Inklusif Bank Indonesia/Bank of Indonesia Inclusive Finance Booklet*, 2014) mentions that only 49% of all families in Indonesia have access to official financial institution. It is also mentioned in *Booklet Keuangan Inklusif Bank Indonesia/Bank of Indonesia Inclusive Finance Booklet* (2014) that only 48% of all families have access to financial institution in form of savings ownership. The number of people who have no savings at all in banks and non-bank financial institutions is still relatively high at 52%. The data indicates that public access to financial institution is still very low and needs to be improved. This condition has an impact on the economic slowdown of Indonesia which is also the cause of the high poverty rate in Indonesia (Tarmizi *et al.*, 2017).

Financial inclusion has been an international important agenda of G20, APEC, AFI, OECD, and ASEAN which is expected to be implemented in various countries with high poverty rate. In Indonesia, the government has issued the national strategy of inclusive finance in coordination with vice president secretariat-The National Team for the Acceleration of Poverty Reduction (TNP2K) and the Fiscal Policy Agency-Ministry of Finance supported by Bank of Indonesia and Financial Services Authority (OJK) in order to promoting economic growth through equal distribution of income, poverty alleviation and financial system stability.

Financial inclusion is a condition in which people already have access to financial institutions such as products or financial services system either banking or other financial institutions. Financial inclusion is translated into 6 pillars namely financial education, public financial facilities, financial information mapping, supporting policies/regulations, intermediation facilities and consumer distribution and protection (Booklet Keuangan Inklusif Bank Indonesia, 2014). Therefore, realization of inclusive financial condition requires encouragement to the banking and other financial institutions to conduct financial education to improve financial literacy and change the behavior and culture of society in managing its finances.

Branchless banking is a form of financial inclusion to increase public access to banking products and services that implements a limited payment system and financial services without going through the office, but using the means of technology and services of third parties i.e. agents in serving the community especially unbanked community. Branchless banking is one of the alternative banking service solutions to achieve inclusive finance through activities without the use of a branch bank office, using agents that work with banks, customers conduct transactions themselves or through agents, simple transaction features, cheap services, and of course the most important is aimed at the society of low economic segment (Supartoyo & Kasmiasi, 2014).

Implementation of branchless banking program requires good rate of financial literacy and positive financial culture so that people can receive and involve in the implementation and succeed the achievement of financial inclusion in Indonesia. In programs involving technological developments in finance called fintech, certainly the banking and government should educate the community how to use banking services independently and digitally. Branchless banking becomes a strategy of banking financial services distribution that utilizes technology, information and communication so that the community needs to improve their knowledge and adapt their behavior with the change.

Today's society is a society that lives in the development of technology where everything is fast-paced, instant and digital. However, these developments do not illustrate that there is also an increase in public financial literacy and better development of the financial sector. Service innovation and fintech products provide an easy and convenient service but sometimes forget to include a sense of responsibility in the balance of financial management. Cashless culture emerged in which people spend money easily because they do not feel the need to use the money physically. Therefore, fintech as a part of branchless banking using technology needs to be catalyst of healthy financial behavior.

The level of financial literacy is still low i.e. 21.80% (*Survey Nasional Literasi Keuangan OJK/Financial Services Authority National Survey of Financial Literacy, 2013*). Indonesia is the country with the lowest level of financial literacy compared to Malaysia (66%), Singapore (98%), and Thailand (73%) due to the fact that people do not fully use banking services and related to culture in managing the finance which is

still traditional. The achievement of financial inclusion in Indonesia is only 59.74%. Society with good financial literacy will be able to examine a banking product or service before deciding to buy or use the product or service. If people have been well educated, they will be able to take correct financial decision for them and their families.

Financial culture also has to adopt the development of technology since it is related to the achievement of expanding public access to financial services. Increasing consumerism culture has to be assisted with good financial literacy. Therefore, even though people do a lot of consumption, they do not forget the importance of saving and investment for future security guarantee. According to data from OJK (2015), there is a decrease in the ration of Marginal Propensity to Save (MPS) and an increase of Marginal Propensity to Consume (MPC). It is supported by survey from Manulife Investor Sentiment Index (2015) which found that 53% of the respondents spent 70% of their income for shopping and 10% of the respondents spent 90% of their income for shopping (ekonomi.kompas.com, 2017). The society is still traditional in financial management both for funding and saving. It is supported by the existence of non-formal parties who are trusted such as family / friends, pawnshops or loan sharks; even there are still people who prefer to save their money at home. It is more risky, expensive and unexpected (keuanganinklusif.co.id., 2017).

Therefore, the achievement of financial inclusion must be started from the achievement of good financial literacy level, good cultural change in managing the finances reflected by positive financial behavior so that finally they can support branchless banking program as one of the strategy of expanding financial access (inclusive finance) for the whole community.

## **II. THEORITICAL REVIEW**

### **2.1. Financial Literacy**

Financial literacy is the ability to make right decisions and effective actions based on future and present benefits also in terms of money management. In addition, OJK in National Strategy of Financial Literacy mentions that financial literacy is a series of processes or activities to improve public and consumer's knowledge, confidence, and skill so that they can manage their finance well. (Basu, 2005 in Banking Journalist Academy IV-OJK, 2016). Financial literacy is also defined as one's financial knowledge in managing one's finance in order to achieve welfare (Lusardi & Mitchell, 2007). Financial literature is used as a benchmark to find out to what extent one's ability to manage and use one's finances effectively, skillfully and appropriately in order to get a better life in the present and future. In addition, Hustion (2010) argues that financial knowledge is an inseparable dimension of financial literacy, but it cannot picture one's financial literacy. Financial literacy has other supporting dimensions i.e. One must have ability and confidence to use one's financial knowledge in order to make right decision.

### **2.2. Culture**

Culture is one of the factors that provide the most extensive and deepest influence on consumer behavior, including everyday financial behavior. Culture becomes the most basic cause of one's desire and behavior (Lubis *et al.*, 2016; Muda and Dharsuky, 2016 and Nurzaimah *et al.*, 2016 and Sirojuzilam *et al.*, 2016). Culture is a collection of basic values, perception, desire and behavior learned by a member of society from family or other important institutions (Sunyoto, 2013). Culture is also involved with the following: (1)

socialization (2) changing values (3) ethnic influences on consumer behavior (4) general implications of cultural change. Therefore, culture is eventually related to behavior and changes which influence one's behavior (Sunyoto, 2013).

### **2.2.1. Financial Culture**

According to a news from Viva.co.id (2015), Financial Services Authority (OJK) represented by Kusumaningtuti S Soetiono, Member of the Board of Commissioners in the Field of Consumer Education and Protection of the Financial Services Authority (OJK), states that in the last three years, consumptive culture of Indonesian society has increased, while culture of saving has decreased. Then, according to data from International Monetary Fund (IMF) 2015, Indonesia's Gross National Saving (GNS) per Gross Domestic Product (GDP) is smaller compared to other Asian countries. Indonesia's GNS is 30.87% below China and South Korea. 2015 IMF data showed that China's GNS reached 35.11 percent, Singapore's GNS is 46.73 percent, Malaysia's GNS is 29.83 percent, and South Korea's GNS is 35.11 percent.

In the current era of technological development, urban society is a consumer society. People embrace a culture of consumption as a result of global capitalism that provides convenience, beauty, and the fast-paced fulfillment of needs (Muda *et al.*, 2017). Consumer society is a society whose existence is seen only by distinguishing the shape and level of the commodity consumed. High consumption culture forms an urban society which measures the totality and purpose of life only in the framework or form of consumption (Kushendrawati, 2006).

The tendency of urban society also tends to lead to the culture of capitalism which is a culture that lacks the habit of saving, and prefer to shop or to consume. The increase in price without the ability to increase income and low knowledge in managing the finances will make it difficult for the community to adapt with current development or to prepare for a prosperous future. Therefore, financial knowledge becomes essential for the community, especially the family as the smallest group of urban society. Consumerism culture that is not accompanied by good financial literacy will make it difficult for urban communities to manage their finances for the preparation of a prosperous future even though they have a lot of money (Yulianti, 2013).

### **2.3. Financial Behavior**

Financial behavior started to gain attention after Solvic (1969 and 1972) proposed psychological aspects of investment and stockbroker. There have been a number of experts who have studied financial behavior: Thaler (1985) studied mental accounting, Statman (1995), Golberg & Nitzsch (1999) and Forbes (2009) focused on financial behavior (Manurung, 2012). Theory of financial behavior must be more thorough because there is already a psychological element in discussing decisions in the field of finance (Manurung, 2012 and Sadalia *et al.*, 2016 & 2017). Statman (1995) mentions that humans act rationally for traditional finance and think normally for financial behavior. Meanwhile, Shefrin (2005) argues that the difference of financial behavior and traditional finance is related to two things of the price of asset, namely: (1) sentiment which is a dominant factor in pricing in market While for traditional finance, the price of asset is related to fundamental risks or time varying risk aversion. (2) Utility expectation, where traditional finance conduct maximization of utility expectation. While financial behavior states that investor is not in accordance with utility expectation theory.

Manurung (2012) mentions that financial behavior is related to theory of prospect proposed by Kahneman and Tversky (1979). This theory criticizes theory of utility which is commonly used to do investment, particularly in a risky condition. Humans make decision in behaving according to psychology. Decision making in a risky condition can be perceived as an option between prospect or gambling.

#### **2.4. Branchless Banking**

Branchless Banking is a financial inclusion initiative which greatly helps the growth and economic progress of the country through the improvement and expansion of access to financial services, especially banking to the public so that the main objective of banking as a unit of business financing for the welfare of the community can be achieved. Branchless banking is an activity of banking services such as limited payment and finance made not through branch offices, but using technology or third parties/agents that have been trusted by the bank represented, primarily in serving the unbanked community. Characteristics of communities targeted for branchless banking program are those with small and non-fixed income levels, low levels of understanding of the financial system, and no / less experience in using banking services/products (Bank of Indonesia, 2013). Branchless banking is a banking service without the use of branch offices so banks do not need to open new branches that requires large funds in order to reach remote areas. Banking party is allowed to invite third party or agents to provide banking services for the community so they do not need to think about expansion strategy to reach remote areas (Yusharto, 2014).

#### **2.5. Financial Inclusion**

Financial inclusion is a new government policy that is a correction to financial exclusion that is a condition in which a financial condition only benefits some parties. According to World Bank (2008) and European Commission (2008), financial inclusion as a complete activity aims to eradicate all forms of public obstacles, either price or non-price, on access to use financial products and services from either bank or other financial institutions (Supartoyo and Kasmiasi, 2014).

Bank of Indonesia sets 6 pillars in attempting to realize inclusive finance namely financial education, public financial facilities, financial information mapping, supporting policies/regulations, intermediation facilities and consumer distribution and protection. In the implementation of the six pillars, Bank of Indonesia expects that the banking role through branchless banking program can be accepted and implemented by the community with the banking system. This is because banks control 80% of the financial industry in Indonesia is targeted to build financial services that can be enjoyed by all levels of society. Inclusive finance also requires support on banking to activate financial education for the community and increase banking distribution to reach all regions (Supartoyo & Kasmiasi, 2014).

#### **2.6. Hypotheses**

Hypotheses of this research are :

H<sub>1</sub>: Financial literacy and culture have influence on branchless banking.

H<sub>2</sub>: Branchless banking has influence on financial inclusion

H<sub>3</sub>: Financial literacy and culture have influence on financial inclusion through branchless banking.

### III. RESEARCH METHODS

#### 3.1. Type of Research

Exploratory research is a study that aims to test a theory or hypothesis to strengthen or even reject the theory or hypothesis of existing research results. Exploratory research is fundamental and aims to obtain information, information, data about things that have not been known (Tarmizi *et al.*, 2016 & 2017). Because it is fundamental, this research is called exploration Exploratory research is done if the researcher has not obtained the initial data so that has not had a picture at all about things to be studied. Exploratory research does not require a certain hypothesis or theory (Gusnari *et al.*, 2016). Researchers only prepare some questions as a guide to obtain primary data in the form of information, information, as necessary preliminary data (Dalimunthe *et al.*, 2016). This study is a research explanatory which aims to examine the influence of financial literacy and culture on financial inclusion through branchless banking program.

#### 3.2. Population and Sample

The population of this study was citizens of 21 sub-districts in Medan city. The population used in this study was the target population which was the population of Medan City in 21 districts with productive age and act as breadwinners for the family. The samples were 300 people taken based on maximum likelihood estimation technique in SEM (Structural Equation Model) analysis and to avoid outliers data. The sample was taken by using stratified random sampling technique. This technique would divide the population in 21 sub-districts and representatives from each sub-district will be taken.

**Table 1**  
**The Number of Research Sample Per Sub-district**

<i>Sub-district</i>	<i>The number of citizen</i>	<i>The Number of Research Sample</i>
Medan Tuntungan	85.613	12
Medan Johor	132.012	18
Medan Amplas	123.850	17
Medan Denai	146.061	20
Medan Area	98.992	13
Medan Kota	74.439	10
Medan Maimun	40.663	6
Medan Polonia	55.949	8
Medan Baru	40.540	6
Medan Selayang	106.150	14
Medan Sunggal	115.785	16
Medan Helvetia	150.721	20
Medan Petisah	63.374	9
Medan Barat	72.683	10
Medan Timur	111.420	15
Medan Perjuangan	95.882	13
Medan Tembung	137.178	19
Medan Deli	181.460	25
Medan Labuhan	117.472	16
Medan Marelan	162.267	22
Medan Belawan	98.113	13
<b>Total</b>	<b>2,210,624</b>	<b>300</b>

*Source:* Research Result, 2017 (processed data).

### **3.3. Research Method**

This research used SEM (Structural Equation Model) analysis to process the data using Amos software version 20. The reason for using SEM where SEM is a statistical technique to test and confirm whether a complex relationships model is true or not (including calculating magnitude or 'regression weight' values or symbolizing Beta for each involved variable of each equation and existing errors). To do so, tools or applications that I think the most simple and communicative is to use AMOS. AMOS facilities especially graphics (Muda *et al.*, 2016). The AMOS application has enabled us to draw and perform different types of techniques that exist in SEM. Path Analysis: test the relationship between the measured variables directly (all variables denoted by the box); Confirmatory factor analysis (CFA): testing the relationship between latent variables (factors that can not be measured directly, measured indirectly from the aspects that are allegedly related. Latent variables are depicted with ellipses, whereas the indirect items to measure are drawn with a box with the arrow line direction from the latent variable to those variable items) and Structural Regression model: ie testing the relationship between latent variables.

## **IV. RESULT AND DISCUSSION**

### **4.1. Result**

#### ***4.1.1. Characteristics of Respondents***

The respondents of this study was 300 people consisted of 73.33% male and 26.67% females. Therefore, there are more male research samples that work as the breadwinner of their families. Meanwhile, females are more likely to be housewives. The respondents are also dominated by productive age males who work as daily workers and entrepreneurs (56%) while the other (44%) are government employees/private employees/army/police. The respondents are dominated by daily workers or entrepreneur with low income i.e. 1-2.99 million (62%) and the rest have income <1 million (25%), 3-4.99 million (10%) and >5 million (4%). Based on the frequency of monthly financial transaction in a year. It is known that the respondents are dominated by those who did not do transaction at all (52%) while the rest did financial transaction 1-15 times in a month for a year (48%). The last category is knowledge of banking products and services besides saving and credit which is dominated by respondents who do not know products and other services besides saving and loan such as investment, insurance, deposit and stock. There are 61% who do not know and the remaining 39% know banking products and services such as deposits, investments, insurance and stocks.

#### ***4.1.2. Results and Relationship between Variables***

The following is the proposed model which is financial literacy and culture influence the achievement of financial inclusion through branchless banking program.

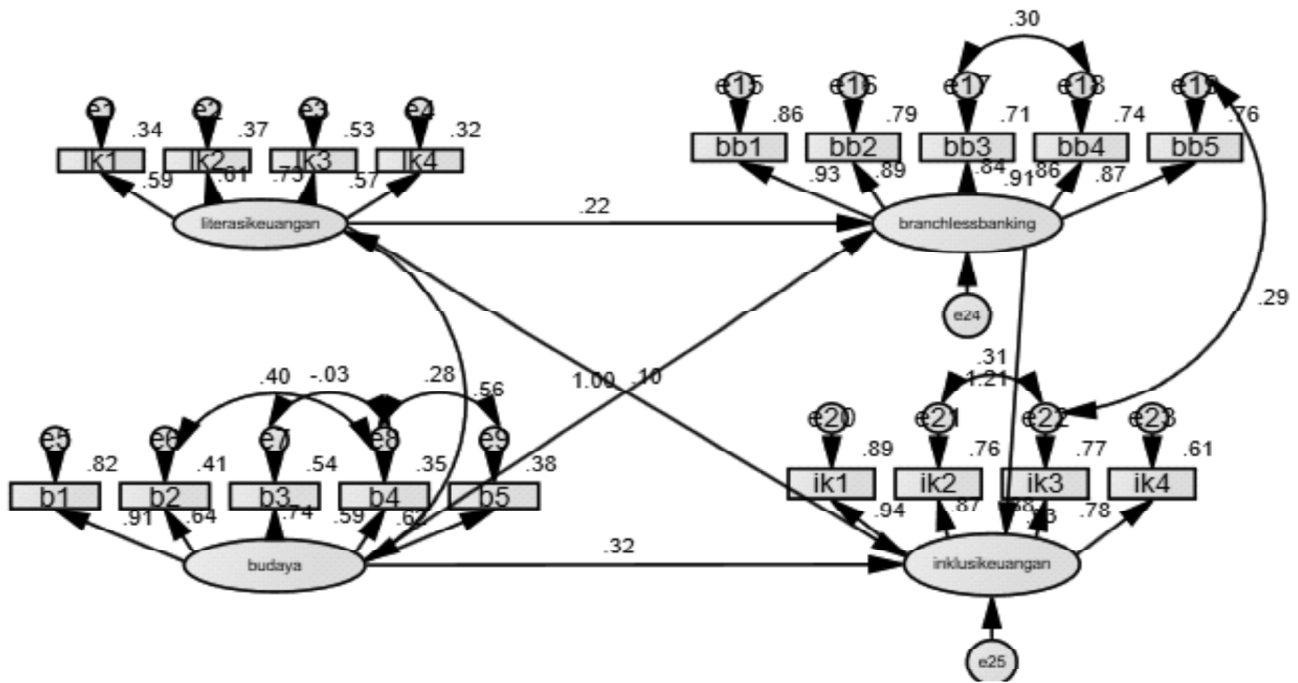


Figure 1: Research Model

Source: Research Result, 2017 (processed data).

Then we can test the appropriateness of the model by using table of Goodness of Fit (GoF) which is Table 3.

Table 3  
Structural Equation Model (SEM) Appropriateness Test Index

Goodness of Fit Index	Cut-off Value	Analysis Result	Model Evaluation
$\chi^2$ - Chi-square	Expected to be small (df=123)	379.117	Good
Probability	$\geq 0.05$	0.001	Marginal
RMSEA	$\leq 0.08$	0.083	Good
GFI	$\geq 0.90$	0,871	Marginal
AGFI	$\geq 0.90$	0.820	Marginal
TLI	$\geq 0.90$	0.930	Marginal
CFI	$\geq 0.90$	0.943	Good

Source: Research Result, 2017 (processed data).

Based on Table 3, it can be seen that the model appropriateness test by using data on Goodness of Fit table shows that the model is generally good or fit so we can proceed to analysis and be used to test research hypotheses. The test results to determine the validity of this research hypothesis can use Regression Weigh table below:



**Table 4**  
**Regression Weight Test Result**

<i>Relationship between variables</i>		<i>Est.</i>	<i>P</i>	<i>Information</i>
branchless banking	←— financial literacy	0.091	0.008	Significant
branchless banking	←— culture	1.002	0.000	Significant
financial inclusion	←— culture	0.317	0.026	Significant
financial inclusion	←— financial literacy	0.098	0.050	Significant
financial inclusion	←— branchless banking	1.213	0.000	Significant

*Source:* Research Result, 2017 (processed data).

Based on Table 4, it can be concluded that the test result of structural model is used as the basis to test the hypotheses of the study, as follows:

1. Financial literacy has positive and significant influence on branchless banking program. The value of influence can be seen on the parameter of the relationship estimation of 0.091 with probability value (P) of 0.008 where  $p < 0.05$ .
2. Culture has positive and significant influence on branchless banking program. The value of influence can be seen on the parameter of the relationship estimation of 1.002 with probability value (P) of 0.000 where  $p < 0.05$ .
3. Culture has positive and significant influence on the achievement of financial inclusion. The value of influence can be seen on the parameter of the relationship estimation of 0.317 with probability value (P) of 0.026 where  $p < 0.05$ .
4. Financial literacy has positive and significant influence on the achievement of financial inclusion. The value of influence can be seen on the parameter of the relationship estimation of 0.098 with probability value (P) of 0.050 where  $p < 0.05$ .
5. Branchless banking has positive and significant influence on the achievement of financial inclusion. The value of influence can be seen on the parameter of the relationship estimation of 1.213 with probability value (P) of 0.000 where  $p < 0.05$ .

#### **4.1.3. Direct and Indirect Relationship between Research Variables**

The following is the data of the relationship between variables directly or indirectly to see how the role of financial and cultural literacy towards financial inclusion through branchless banking or without branchless banking:

**Table 5**  
**Output of Direct Relationship between Variables**

	<i>culture</i>	<i>financial literacy</i>	<i>branchless banking</i>	<i>financial inclusion</i>
Branchless banking	1.002	0.091	0.000	0.000
Financial inclusion	0.317	0.098	1.213	0.000

*Source:* Research Result, 2017 (processed data).

**Table 6**  
**Output of Indirect Relationship between Variables**

	<i>culture</i>	<i>financial literacy</i>	<i>Branchless banking</i>	<i>financial inclusion</i>
Branchless banking	0.000	0.000	0.000	0.000
Financial inclusion	1.215	0.111	0.000	0.000

*Source:* Research Result, 2017 (processed data).

The data in Table 5 and Table 6 illustrate that the indirect relationship of financial and cultural literacy variables to financial inclusion through branchless banking is much greater than the direct relationship without branchless banking. Branchless banking plays a role in mediating or influencing the relationship between financial and cultural literacy towards the achievement of financial inclusion so that branchless banking is a work program that becomes an important financial inclusion strategy to be met so it is called intervening variable. Without the role of branchless banking as intervening variable as mediator or determinant, financial literacy and financial culture in Medan City society will not be able to play a role in achieving financial inclusion in Medan City. Branchless banking must first be fulfilled or implemented in Medan City. It should be accepted and adapted by the people of Medan City through increasing financial literacy and change of the traditional financial culture into a positive culture of financial behavior (Yahya *et al.*, 2017). Then, financial access will be able to be fulfilled indefinitely without obstacles to the community Medan city or in other words financial inclusion in Medan City can be achieved maximally.

## 4.2. Discussion

### 4.2.1. Influence of Financial Literacy and Culture on Branchless Banking

Good financial literacy level will provide positive and significant influence on the implementation of branchless banking in Medan City. People with good financial literacy will be able to manage and utilize their funds, to balance the culture of consumptive with investment or insurance for future security guarantees. If the behavior is better then the public will prefer the habit of saving or investment and insurance than consumptive habits. Branchless banking requires the use of technology and innovation in offering banking financial products and services to the community so that it requires a good level of knowledge and education and effective socialization to the community so that they will be able to accept and adapt to technological developments and abandon traditional financial behavior such as storing funds at home or even behind the mattress, making the debt as the best solution to meet the needs of life if in a state of urgency, use the help of friends / family, pawnshops and even loan sharks to help them in fulfilling financial needs of everyday life.

Branchless banking is a form of innovation and utilization of technological sophistication such as financial services without a bank office using agents that work with banks, customers can do transactions by themselves or using an agent, transactions feature a simple even using technology, low cost and most important service can directly address unbanked community. However, in the implementation there are some obstacles faced by the government and banking, namely (1) low level of public understanding about banking products and services system, complicated banking procedures and lack of information about

products and services offered to the community as well as products and services system which does not conform with the needs of the community (2) the banking constraints of limited coverage and infrastructure for office expansion, limited information about potential customers capable of receiving and adapting changes through branchless banking. Therefore, it can be concluded that knowledge about financial products and services become an essential factor for the success of branchless banking program (Supartoyo and Kasmiasi, 2014).

Bank of Indonesia Booklet of Inclusive Finance (2014) states that financial inclusion through the initiative of branchless banking will be able to expand access to banking services for the community with the support of banks to continue to increase the range of banking distribution to various regions and layers of society as well as intensify educational activities on society about finance (Supartoyo and Kasmiasi, 2014).

#### ***4.2.2. Influence of Branchless Banking on Financial Inclusion in Medan City***

The result of this study proves that branchless banking is able to influence the achievement of financial inclusion in Medan City. The result also proves that branchless banking acts as an intervening variable capable which is able to mediate or determine the role of financial and cultural literacy to influence the achievement of financial inclusion in Medan City. Branchless banking as one of the initiatives for achieving financial inclusion is able to provide maximum support to achieve an inclusive financial condition for all levels of society, where branchless banking programs that provide banking services and products without a bank office but using agents that work with banks will be able to touch the entire region and community in Medan City. The use of technology will encourage the community to actively improve the understanding and knowledge in digital banking products and services so they can become more productive and able to improve the welfare of their lives (Yusharto, 2014). Branchless banking for inclusive finance becomes a national strategy issued by OJK to support government programs which is beneficial to address the financial service issues that can not be obtained by all levels of society at affordable cost, and useful to offer products that meet the needs of the community (OJK 2014).

#### ***4.2.3. Influence of Financial Literacy and Culture on Financial Inclusion in Medan City through Branchless Banking***

Financial inclusion as a government program with the support of various banking and non-banking financial institutions in supervision from OJK (Financial Services Authority) and Bank Indonesia requires the role of adequate financial literacy from the community and a good financial culture reflected by positive financial behavior in the community. This achievement is not easy considering the low level of financial literacy of Indonesian society that is in the number 21.80% while the level of Indonesian financial inclusion is at 59.74% (OJK, 2013). The level of public finance literacy is low so there are still many who do not use products and services in banking and non banking financial institutions. Data from World Bank survey in 2010 indicate that there are indications that only about half of Indonesia's population has access to the formal financial system. The cause is the limited availability and accessibility of financial services. There are also many people who do not have any experience with transfer, saving or credit through banking. The World Bank survey in 2010 recorded only 47% of total population have savings and only 17% of the total number of people borrow money (Supartoyo & Kasmiasi, 2014). Branchless banking becomes an effective solution and strategy to address the slowing down of public access to banking products and services.

The results of this study are supported by a research conducted by Supartoyo and Kasmianti (2014) stating that financial inclusion is an improvement of the exclusive finance that limits financial services to the interests of certain parties only. Financial inclusion through branchless banking strategy can contribute to improving public access to banking services, removing barriers to access, making people more open to technological change with the support of banking that is intensifying education for increasing financial literacy and improving the distribution of banking services.

Republika.co.id (2017) states that there are as many as 2,997 financial services institutions but they do not fully reach all levels of society so they have not been able to provide services optimally. It indicates that education and literacy about banking products and services is required. It is also a case in Medan City. Based on the results of the survey respondents, it is known that the people of Medan are still not familiar with banking products and services other than savings and loans so their contact with banking is not maximal. Financial inclusion can only be achieved with banking support to improve financial education to the people of Medan City and also increase the range of distribution to expand access and eliminate barriers between communities and banking products and services. Branchless banking is a distribution strategy to provide financial services without physical branch office, instead utilize information, communication and technology. It is this condition that expects a good level of financial literacy and a positive financial culture that is reflected in financial behavior that is able to produce good and appropriate financial decisions for the future. Branchless banking is an idea that prioritizes the efficiency of banking expansion strategy (Supartoyo and Kasmianti, 2014). This idea is perceived to be more effective because it does not require a large cost for office procurement and operational activities so that it will make it easier for banks to reach the bottom layer for access to banking services in accordance with needs and low cost. Branchless banking is one of the strategies of implementing the pillars of distribution channel development for the inclusion of financial inclusion issued by Bank Indonesia (Booklet of Inclusive Finance, 2014).

In addition to financial literacy, culture also plays a role in supporting the achievement of financial inclusion through the utilization of branchless banking innovation. Culture or habits becomes one of the causes of high level of unbanked community in Indonesia especially in Medan City. Society considers saving is not something particularly urgent for the lower economic community, where their hopes for urgent need depend on debt to family / friends, loan sharks or mortgaging their productive goods. The impact is they no longer have productive property that has been helping them in earning a living. They are no longer able to earn income that meets daily needs and ultimately tied up with endless debt. Branchless banking becomes the most effective solution to solve the problems of lower economic society by providing education and proper training to the community to be able to manage finances well, trusting the official banking financial institutions protected and supervised by OJK and Bank Indonesia so the barriers of access will be removed and financial inclusion will be achieved in Medan City.

## **6. CONCLUSION**

The level of financial literacy and financial culture of the people of Medan City is not yet good. It is reflected from the behavior of Medan City people who have not used formal banking products and services in fulfilling their daily financial services. The people of Medan City are still traditional in managing their finances and many are not familiar with banking products and services other than savings and loans. Financial literacy and culture have a role to attain financial inclusion through branchless banking. Branchless

banking as intervening variable is able to mediate and influence significantly and give positive impact to the achievement of financial inclusion. Branchless banking becomes one of the inclusive financial strategies to remove barriers to public access to financial institutions. The implementation of the branchless banking program requires a well-educated community reflected by adequate financial literacy and a positive financial culture that generates financial behavior capable of making the right decisions in managing finances for future security.

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