1 INTRODUCTION

Background

Demirgüç-Kunt and Levine (2008) stated that the financial sector is the parent of the development process. The development of financial sector by providing financial services and products accessible to everyone is one way to overcome poverty. Sanjaya (2014) and Jain (2015) affirmed that equitable distribution of financial services will create new and rapid sources of economic growth, thus creating a more equitable growth.

As a major player in financial institutions, banks have the ability to distribute their services to the society with equal opportunities, including to the society who live in remote areas to access financial services such as savings, payments, remittances, loans, insurance and other financial services. Banking as a provider of liquidity allows investment in more productive assets that can improve the efficiency of capital accumulation and economic growth. However, the World Bank survey in year 2014 showed that only about 50% of the world's adult population have access to formal financial institutions. In some Asian countries such as Bangladesh, India and the Philippines, the percentage of adult population that has access to formal institutions was 39.6%, 35.2%, and 26.6% respectively, while in Indonesia only 19.6% (WB 2014). The low access to formal financial institutions was partly due to an uneven distribution of the institutions.

Hisighsuren (2006) stated that those with low access to formal financial institutions were usually located in rural areas. The main constraining factors were extensive geographical spread, low population density, and limited transaction volume, resulting in costly operating costs. In addition, building bank branches physically in rural areas was expensive.

Serving financial services for the poor with small transaction volumes were considered to be less favorable. However, Jain (2015) explained that while providing relatively low margins, high transaction volumes promise profits and have a possibility to become commercially profitable businesses. Therefore, a different delivery channel is required from regular financial services. Transactions through agents, mobile transfer services, a collaboration between bank and microfinance institution, and looser of Know-Your-Customer (KYC) requirements are delivery channels that can be used to reach people in rural areas (Hisighsuren 2006, Aduda 2014).

McKay and Pickens (2010) explained that one approach to stimulate financial inclusion as a form of potential financial delivery channel to serve 'unbanked' and 'underbanked' people who mostly live in rural areas is Branchless Banking (BB). BB is a limited financial services provided by financial service providers, such as bank institution to the customers without having to come to the bank office. To that end, the bank uses a third party called agent as an extension of bank services in the rural and using information technology. Some observations found that BB lowers the cost of bank services in remote areas rather than opening the conventional bank branches (Ivatury 2008, Khattab 2012, Jain, 2015).

Mas (2009) explained that the success of BB is highly dependent on information technology (IT). The use of IT in BB is in line with The Long Tail of
Banking theory which is widely used to explain retail product offerings. Using the internet, retail companies can earn extra revenue by selling large quantities of small items in the skinny part of the tail, in addition to selling large items to a small number of buyers in the wide part of the tail. The theory suggested that IT has the potential to increase access to financial services for the population on the right of the curve, as described in Figure 1. The condition occurs because the perceptions of loan risk of the 'unbanked' people are reduced by the increase in familiarity in doing business between customers and microfinance institutions—or agent in BB program—and the availability of transparent data with the help of IT, as well as improving the ability to analyze potential borrowers (Weber 2012).

![Figure 1 The long tail of banking](image)

BB practices have been conducted in several countries, especially in countries where adult population access to formal financial institutions were low. Mobile banking such as M-PESA—name of mobile money services—is more popular in Africa, such as in Kenya and Tanzania. M-PESA is run by Safaricom network operator, using the applications contained on cell phones owned by customers. However, in Latin America, such as Colombia, Chile, and Brazil, they used POS (Point of Sale) -Based Agent Networks. The BB model in Brazil is run by large banks, such as Caixa Federal, Bradesco, and Banco Popular in cooperation with agents, equipped with POS terminals in almost all districts.

In Indonesia, BB, especially for low-income communities, is a new delivery channel or relatively new banking technology that proclaimed in the National Financial Inclusion Strategy in 2012. The goal of Indonesia's Financial Inclusion Strategy (FIS) is to promote economic growth through poverty alleviation, income distribution, and financial system stability by creating a financial system accessible to all levels of society (BI 2012). BB is a program that belongs to the fifth out of six pillars to achieve financial inclusion, namely the Pilar of Intermediation and Distribution Facility. Bank Indonesia (BI) named its program as a Digital Financial Services/”Layanan Keuangan Digital” (LKD). With digital money, transactions can be done easily because there is no need to carry cash, and can be used without distance limitations, and can be used with the smallest nominal starting from one rupiah. Digital money for people in remote areas is facilitated by using mobile phones. They can have it without having to open a savings account at the bank. To use and make top-up of digital money can
be done like using SMS (Short Message Service) and charging mobile phone credit. For such services, the customer was charged for each transaction (Untoro et al. 2014). The concept of digital financial services is described in Table 1.

Another institution that conducted a BB program is the Financial Services Authority (OJK). OJK calls its program under the name "Layanan Keuangan Tanpa Kantor Dalam Rangka Keuangan Inklusif" or "Laku Pandai"—Non-Office Financial Services in the Framework of Financial Inclusion. The aim of the program is to provide simple, easy-to-understand and appropriate financial products that meet the needs of people who have not been able to reach current financial services, and with the increasing number of members of different community groups in different parts of Indonesia using service finance. Therefore, the economic activity of the community is expected to be more fluent so that it can encourage economic growth and equitable development among regions in Indonesia, especially between villages and cities. The products of “Laku Pandai” are Basic Saving Account (BSA), micro-credit, and micro-insurance (OJK 2015).

Table 1. The concept of digital financial services

<table>
<thead>
<tr>
<th>The Concepts</th>
<th>Explanation</th>
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</thead>
<tbody>
<tr>
<td>Definition of Digital Money</td>
<td>• Services that can be used by the community as a substitute for cash for various daily transactions and the transfer of funds to other parties, whether at home or abroad with a certain maximum amount, anytime and anywhere via mobile phone.</td>
</tr>
</tbody>
</table>
| Benefits | • With digital money, transactions can be done easily, users do not need to carry cash so it is more practical, fast, and secure  
• Can be used for transactions without being limited by distance, place or location, and time; can be done anytime and anywhere  
• Can be used for transactions with the smallest nominal ranging from Rp 1 to a certain maximum. |
| Ways of Ownership | • This service can be used by mobile phone provided that mobile phone number used must be registered so that transaction can be done quickly, just like sending SMS to other party  
• Users do not have to have or open a savings account in a bank. |
| Ways of Use | • Use of digital money can be done just like using SMS on mobile phone  
• Charging for digital money can be done like a charging cellular phone with a certain maximum amount  
• Charging digital money can be done in three ways:  
  - In cash, as if it were to charging an HP balance, at predetermined places or mobile service outlets or in a predetermined minimarket  
  - Through ATM like the purchase of mobile phone credit  
  - Through the bank like a money transfer. |
| Cost | • The use of digital money will be charged for each transaction. |

Source: Untoro et al. (2014)
In the OJK report of Quarter III-2016 (Table 2.) explains that the number of agents of “Laku Pandai” reached 160,489 agents, consisting of 159,521 individual agents and 968 outlets of legal entities. The total amount of funds and customers collected amounted to Rp 93.79 billion and 1,948,995 customers, respectively, with BSA (Basic Saving Account) characteristics, including account opening, deposits, cash withdrawals, book-entry, bill payment, funds transfer, and/or account closure. Figure 2. illustrates that the largest spread of agents is in Java (68.92%), while 16.41% are in Sumatera, 5.54% in Sulawesi, 3.57% in Kalimantan, 2.2% in Maluku and Papua, and the remaining 3.34% are in NTB-NTT-Bali (OJK 2016). The data shows that the deployment of agents is still centered in Java. The data also shows that the program still in the early stage. Therefore, to achieve program objectives it is required the right approach to make the program to be sustainable.

<table>
<thead>
<tr>
<th>Type of Agent</th>
<th>Data of Customer</th>
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<tbody>
<tr>
<td></td>
<td>Individual</td>
</tr>
<tr>
<td></td>
<td>No. of Account</td>
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<tr>
<td></td>
<td>1 year growth(*)</td>
</tr>
<tr>
<td>Individual</td>
<td>159,521</td>
</tr>
</tbody>
</table>

Source: OJK report, Quarter III-2016; Compared to OJK report of October 2015

Figure 2. Distribution of agents
Problem Statement

BB program initiated by BI is linked to the implementation of national strategy called Financial Inclusion. The strategy aimed to promote economic growth by creating an equitable distribution of income in society, poverty alleviation and financial system stability (BI 2014). BI believes that to achieve those objectives, financial institutions can play an important role through their intermediary function. According to this function, Financial Inclusion is efforts aimed at eliminating all forms of price and non-price barriers toward public access in utilizing financial services.

Some facts supporting inclusive financial needs stem from the 2010 World Bank Survey, in which only 49% of Indonesian households have access to formal financial institutions. In addition, the survey results from Bank Indonesia in 2011 show that the amount of household savings in formal and non-financial institutions is 48%. The low households access to formal financial institutions is due to the low of income level, complex bank operational arrangement, lack of financial and banking education, high bank administrative costs and bank location is far away from the household residence. Thereby, through Financial Inclusion, it is expected that the economic activities of community groups can grow by utilizing financial services, thereby promoting increased production, followed by increased and equal distribution of income as well as poverty alleviation.

In accordance with those supporting factors, the community groups that are the main target of inclusive financial development are those who are experiencing barriers to access financial services. This community group includes three categories of people, namely the poor who are low income, the working poor or the productive poor, and the near-poor; as well as three cross-categories, namely migrant workers, women, and people in disadvantaged areas.

The category of "Poor Low Income" includes people with very limited access or no access to all types of financial services, including the very poor who receive social assistance. The "Poor Workers" group includes poor self-employed, including small and marginal farmers, fishermen, artisans and craftsmen, small traders, and micro-entrepreneurs in the informal sector in both urban and rural areas. Generally, this group has limited ability to expand production or make improvements in terms of productivity and income. The "Non-Poor" group includes all people not included in the first two categories.

The "Migrant Workers" group includes migrant workers or commonly called Indonesian Migrant Workers, where they are poorly served by the financial sector or have limited access to financial services. This group needs access to send money safely, quickly and cheaply from the workplace to home or family located in remote areas. The "Women" group includes housewives and women who need access to financial services for savings, education insurance for households, and other households needs. The "People in Disadvantaged Areas" group includes the population living in rural areas and has no access to formal financial services.

To address the objectives of FIS and to reach targeted target groups, Bank Indonesia operates a BB program, a program to open access to finance to a wider society. Through this program people in remote areas are herded closer to the banks and conducting financial transactions, so banks have a record of their financial condition which will make it easier for banks to channel credit for
community productive activities. BB Program according to Bank Indonesia is a limited payment and banking services system which is not through the physical office of a bank or telecommunications operator, but through the use of information technology in and third-party services or an Agent called the Financial Services Intermediary Unit/ "Unit Perantara Layanan Keuangan (UPLK)" (Adrianto 2013).

Included in the BB Program, OJK launched the "Laku Pandai" program or "Layanan Keuangan Tanpa Kantor Dalam Rangka Keuangan Inclusive" (Non-Office Finance Service in the framework for Financial Inclusion). "Laku Pandai" is a program of providing banking services and/or other financial services through cooperation with other parties (bank agents) and supported by the use of information technology (OJK 2015). The function of the agent is to act for and on behalf of the bank representing the bank as a BB service issuer providing limited payment and banking services to customers. In the system of services provided BB account is a banking product that utilizes Unstructured Supplementary Service Data (USSD) technology and applications on mobile phones to allow users to conduct transactions such as deposits and cash withdrawals, balance checks, and transfers.

The OJK report of 2016 mentioned that the number of "Laku Pandai" agents in Indonesia reaches 160,489 agents consisting of 159,521 Individual agents and 968 Legal Entity Outlets. As many as 110,609 agents (68.92%) are in Jawa, while 26,336 agents (16.41%) are in Sumatera, 8,891 agents (5.54%) in Sulawesi, 5,729 agents (3.57%) in Kalimantan, 2,276 in Maluku and Papua, and the remaining 5,360 agents (3.34%) are in NTB-NTT-Bali. The total number of clients collected is 1,948,995 people with the amount of funds collected reaching Rp 93.79 billion with the characteristics of BSA (Basic Saving Account), including opening of accounts, deposits, cash withdrawals, transfers, bill payments, funds transfers, and/or account closure. Compared to the 2015 OJK Performance Report, the "Laku Pandai" data of 2016 shows an increase in the number of agents, customers, and balances, by 525%, 78%, and 127% respectively.

The data reported by OJK indicates that BB program implementation has been implemented in the community and is expected to respond to the goals of an inclusive financial strategy that encourages growth through increased production, income distribution, poverty alleviation, and creating a banking intermediation function to the target community. However, in the preliminary studies conducted in this research, i.e. to analyze the implementation of the program at the regional level, have not found enough data and publication on the implementation of the BB program for the comprehensive analysis needs. That condition raises a number of questions that become a problem to be analyzed in this research, including: (1) How is the portrait of BB implementation in rural areas? (2) How is the implementation of BB program in accordance with its function to eliminate price and non-price barriers? (3) How is the existence of target groups (customers) involved in the BB program in terms of production activities and financial transactions related to the goals of the Financial Inclusion Strategy? (4) How is the potential of economic development of target groups (customers) related to the development of BB program?
Research Objectives

Based on the background and formulation of the problems, therefore the purposes of this study are:

1. To portrait the implementation of BB program in rural areas.
2. To analyze the implementation of BB program in accordance with its function to eliminate price and non-price barriers.
3. To analyze the existence of target groups (customers) involved in the BB program, in terms of production activities and financial transactions related to the goals of the Financial Inclusion Strategy.
4. To analyze the potential of economic development of target groups (customers) related to the development of BB program.

Significance of the Study

This research is expected to benefit the inclusive financial policy makers, especially those related to the development of BB. The results of this study may contribute information on the portrait of implementation, barriers and management irregularities in the implementation of BB program, the condition of target group (customers) developments that have been involved, as well as the potential development of target groups for expansion of BB program.

Scope and Limitations of the Study

According to Hisighsuren (2006), people who have not gained access to informal finance are generally located in rural areas. Therefore, this research chose case study in Bogor District which has a large area of 298,838.31 hectares, with 40 sub-districts and 417 villages (bogorkab.go.id). In addition, Bogor District area is close to the Jakarta City, which is expected to have a better implementation of BB program than other districts.

The BB model referred to in this study is a financial services program organized by banking institutions. This research will be conducted in a bank that implements BB program. The unit of analysis is an agent as an extension of the bank in the rural, as well as business households that conducted their financial transactions through the agent in BB program. According to Siregar (2009), agricultural households - in this study are households’ micro and small business-become an important highlight in the studies because they are the smallest unit that will illustrate the success of the development program. He stated that national planning will provide benefits to the welfare of the community if the program can provide benefits for the households.

Novelty

Table 3 describes some previous research of Branchless Banking regarding the research focus and the analytical methods used. Previous research of Branchless Banking (i.e. mobile-banking) mostly performed analysis on the
demand side, namely the acceptance of information technology. Other studies did analysis on the supply side, but focus on individual unit as well as bank institutions as Branchless Banking program provider. This study focuses on both sides, the supply and demand sides. In addition, this research can be stated to be the first study that examines households economic behaviors in the Branchless Banking program.

Table 3 Previous research: focus and method of analysis

<table>
<thead>
<tr>
<th>Author and Title of the Research</th>
<th>Focus</th>
<th>Method of Analysis</th>
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<tbody>
<tr>
<td>Services in the Framework of Financial Inclusion</td>
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<td>Permadi AD. 2017. The Perception of the Society of Pendem Berbah Village to Branchless Banking</td>
<td>Demand side</td>
<td>Eksploratory: Diffusion of Innovation Theory</td>
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<td>Technology</td>
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<td>Program in Thailand</td>
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<td>and Trust in Thailand</td>
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<td>Phanthanukitithaworn et al. 2015. User Intentions to Adopt Mobile Payment Services: A Study of</td>
<td>Demand side</td>
<td>Structural Equation Model: Diffusion of Innovation Theory</td>
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<tr>
<td>Early Adopters in Thailand</td>
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<tr>
<td>Structural Equation Modeling Study</td>
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<td>Shaikh AA, Karjaluoto H. 2015. Mobile Banking Adoption: A Literature Review</td>
<td>Demand side</td>
<td>Literature Review</td>
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<tr>
<td>Siddik. 2014. Financial Inclusion through Mobile Banking: A Case of Bangladesh.</td>
<td>Demand side</td>
<td>Structural Equation Model: Diffusion of Innovation Theory</td>
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<tr>
<td>Frani O. 2017. The Impact of Branchless Banking as a Financial Inclusion Strategy Against the</td>
<td>Supply side</td>
<td>Normative Law -</td>
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<tr>
<td>Level of Indonesian Banking Industry</td>
<td></td>
<td>Prescriptive</td>
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<tr>
<td>Secioktaviany ZA. 2016. Optimization of Risk Management as a Preventive of the Legal Risk of</td>
<td>Supply side</td>
<td>Normative Law -</td>
</tr>
<tr>
<td>Branchless Banking Organizer Bank in Indonesia</td>
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<td>System</td>
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The novelty of the methodology side is a descriptive analysis of the implementation of BB program with the principal-agent theory approach. From the management side, such analysis is good enough to explain the condition of program implementation.

Another novelty in terms of methodology is that the economic decision of the households’ micro-small business is a simultaneous decision with a non-recursive characteristic. From the households economic side, that analysis is good enough to explain the economic model of households’ micro-small business in rural areas. The novelty of the analysis of the impact of changes in variables related to the BB program, namely the value of transactions, and the combination with the change in other variables, enrich the treasures to develop a program development strategy.

2 LITERATURE REVIEW

Financial Inclusion Strategy and Branchless Banking

Investment and savings in rural areas are closely linked to the availability of access to a widespread and affordable financial service with no price and non-price barriers, as well as with a convenient way. The condition is defined as the financial inclusion (Aduda and Kalunda 2012; Aggarwal 2012; Demirgüç-Kunt and Levine 2008; Sarma 2012). According to Reddy (2007), the process of financial inclusion is to encourage ownership of bank accounts by each households and offer their participation in the banking system. As a major player in financial institutions, banks have the ability to distribute opportunities evenly, including to those living in remote areas, so they have the opportunity to access financial services such as saving, pay the bills, transfers, borrow credit and other financial services.

Banking as a provider of liquidity allows investment in productive assets that can improve the efficiency of capital accumulation and economic growth. Leyshon and Thrift (1995) and Carbo et al. (2005) (as cited in Sanjaya 2014) defined financial inclusion as the antithesis of financial exclusion, namely the inability to gain access to necessary financial services in an appropriate form. That financial exclusion for a particular group or individual has an impact on an uneven economic growth because it creates income differences and increases inequality.

In National Strategy of Financial Inclusive of Indonesia, in 2012, it is defined that the financial inclusive is the right of every person to have an access to and have a full service from the financial institutions in a timely, convenient, informative, and affordable manner, with full respect for his dignity. The financial services are available to all segments of society, with special attention to the poor, productive, migrant workers, and people in remote areas (BI 2014). The national vision of a financial inclusive is to create a financial system accessible to all levels of society to promote economic growth, poverty alleviation, equity distribution and the creation of financial stability in Indonesia. The strategy has six pillars, i.e.:
Untuk Selengkapnya Tersedia di Perpustakaan SB-IPB