

IMPLEMENTATION OF BRANCHLESS BANKING IN BOGOR: A FIGURE OF NEW FINANCIAL SERVICE IN RURAL AREA

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Abstract: *Branchless Banking (BB) is a limited financial service provided by financial service providers, such as banks to the customers without having to come to their office. The banks use the third-party called BB Agent and Information Technology. This study aims to provide an overview of the implementation of the BB program in rural areas. This research was carried out in a bank that implemented a BB program. The unit analysis is the BB Agents as an extension of the limited banking services in rural areas and household micro and small businesses conducting financial transactions through the Agents. The method used in this study is descriptive analysis using primary data source through questionnaire. This study was conducted in Bogor District, at 13 Sub-districts. The samples were the BB agents and business households involved in the BB program chosen purposively and analyzed by a descriptive method. The results show that most transactions were in cash and for payment transactions, while savings and cash withdrawal transactions, which are related to production activities, are still minimal. In addition, transactions using digital money (T-Bank) and BSA (Basic Saving Account) as financial products which aims to reach the unbanked communities have not run. Therefore, this study recommends to the Bank to provide adequate education and information to increase public confidence in BB agents. In addition, OJK and BI need to encourage the penetration of BSA products and bring up the culture of digital money in rural areas and encourage the society to utilize the services of financial transactions through BB agents.*

Keywords: *branchless banking, types of transaction, instruments of transaction, digital money, BSA*

Abstrak: *Branchless Banking (BB) adalah jasa keuangan terbatas yang disediakan oleh penyedia jasa keuangan, seperti bank kepada pelanggan, tanpa harus datang ke kantor mereka. Bank menggunakan pihak ketiga (Agen BB) dan Teknologi Informasi. Penelitian ini bertujuan untuk memberikan gambaran tentang implementasi program BB di daerah pedesaan. Penelitian ini dilakukan di bank yang menerapkan program BB. Unit analisis adalah Agen BB sebagai perpanjangan dari layanan perbankan terbatas di daerah pedesaan, serta usaha mikro dan kecil rumah tangga yang melakukan transaksi keuangan melalui Agen BB. Metode yang digunakan dalam penelitian ini adalah metode analisis deskriptif dengan menggunakan sumber data primer melalui kuesioner. Studi dilakukan di Kabupaten Bogor di 13 Kecamatan. Sampel agen BB dan rumahtangga usaha yang terlibat dalam BB dipilih secara 'purposive'. Hasilnya menunjukkan bahwa transaksi paling banyak menggunakan uang tunai dan untuk transaksi pembayaran. Transaksi tabungan dan penarikan tunai, yang berkaitan dengan kegiatan produksi masih minimal. Selain itu transaksi menggunakan uang digital (T-Bank) atau BSA (Basic Saving Account) sebagai produk keuangan yang ditujukan kepada masyarakat unbanked belum berjalan. Oleh karena itu, studi ini merekomendasikan kepada Bank untuk melakukan edukasi dan memberikan informasi yang memadai untuk meningkatkan kepercayaan masyarakat kepada agen. Selain itu memberi rekomendasi kepada OJK dan BI untuk mendorong penetrasi produk BSA dan memunculkan budaya uang digital di daerah pedesaan, selanjutnya mendorong masyarakat untuk memanfaatkan jasa transaksi keuangan melalui agen BB.*

Kata kunci: *branchless banking, jenis transaksi, instrumen transaksi, uang digital, BSA*

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INTRODUCTION

World Bank (2014) survey explained that there is only about 50% of adult people in the world who already have access to formal financial services. The condition becomes worse in the developing countries, such as Indonesia in which there is only about 20% of adult people who do have access to formal financial services. According to Hisighsuren (2006), those with low access to formal financial institutions are usually located in rural areas. The main constraining factors are extensive geographical spread, low population density, and limited transaction volume, resulting in costly operational costs. In addition, construction of buildings of bank branches in rural areas is expensive.

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

McKay and Pickens (2010) explained that one approach to stimulate financial inclusion as a form of a potential financial channel to serve 'unbanked' people who mostly live in rural areas is Branchless Banking (BB); limited financial services provided by financial service providers, such as bank institutions 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 by using information technology. Some observations found that BB lowers the cost of bank services in remote areas rather when compared to opening the conventional bank branches (Ivatury, 2008; Khattab et al. 2012; Jain, 2015).

In Indonesia, BB for low-income communities is a new financial channel, proclaimed in the National Financial Inclusion Strategy in 2012. The goal of Indonesia's Financial Inclusion Strategy (FIS) is to achieve economic prosperity through poverty alleviation, income distribution, and stability of financial system

by creating a financial system accessible to all levels of society (BI, 2014). BB program is the fifth pillar out of six pillars to achieve financial inclusion, namely, the Pillar of Intermediation and Distribution Facility. Bank Indonesia (BI) named its program as a Digital Financial Services/Layanan Keuangan Digital (LKD). Digital money for people in remote areas facilitated by using mobile phones without having to open a savings account at the bank (Untoro et al. 2014).

On the other hand, Financial Services Authority (OJK) calls its program as Layanan Keuangan Tanpa Kantor Dalam Rangka Keuangan Inklusif or Laku Pandai—The 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. The products of Laku Pandai include Basic Saving Account (BSA), micro-credit, and micro-insurance (OJK, 2015).

The activities of financial transaction in BB program include savings, cash withdrawals, money transfers, as well as payments for household obligations such as electricity payment, credit instalment, and other obligations. All expenditures are inherent in the decision of individuals or households. However, by reviewing the types of financial transaction in the program and the objectives of financial inclusion strategy, the objective of the measurement in this study leads to the business household. The focus on the household is reinforced by the customer condition in the rural areas in which types of business households are generally micro-small business, in which any decisions in business development and financial transactions are closely related to the decision of the households.

Furthermore, the implementation of the BB program leads to the goals set forth in the financial inclusion strategy, if the bank's activities related to the assignment of the BB agent and monitoring support the achievement of the objectives. In addition, transactions conducted by business households involved in the BB program are related to the production activities indicated by saving and cash withdrawal transactions, in addition to other types of transactions.

Several studies related to BB from the demand side generally discuss the public acceptance of the technology used (Siddik, 2014; Phanthanukitithaworn

2015; Montazemi and Saremi, 2015; Shaikh, 2015; Chuchuen, 2016; Yuwono, 2017; Permadi, 2017; and Shadikin, 2017) while BB research from supply side generally discusses normative law with prescriptive approach (Secioktaviany, 2016; Khanan and Pujiono, 2016) and analyzes the competition level of the banking industry (Wibowo, 2013; Frani, 2017).

This study discusses both, the supply and demand sides of the BB program implementation in the rural area. The purpose of this research is to portrait the implementation of the BB program, whether it leads to the objectives of the inclusive financial strategy, related to the implementation of agent selection and monitoring activities as well as transactions conducted by micro-small business households at BB agent. The hypothesis in this research is The implementation of BB program in research location takes place according to the concept and objectives of the program. For this reason, a survey to obtain data and information through interview and discussion by using questioner were conducted. Furthermore, by using descriptive analysis, this research is expected to give an overview that the implementation of BB program is running in accordance with the concepts and objectives set.

METHODS

This research is a case study in Bogor District as a remote area adjacent to Jakarta City, the state capital, which is expected to have a high success rate in the implementation of the program. This study used primary data in the form of cross-section data obtained by using interview techniques using questionnaires that had been prepared.

Since the functions and duties of BB agents are homogeneous, the sample of BB agents was chosen purposively in 13 sub-districts out of 40 sub-districts of Bogor District. The sub-districts chosen were Sukaraja, Jasinga, Cibungbulang, Pamijahan, Dramaga, Ciomas, Bojong Gede, Cibinong, Taman Sari, Ciawi, Babakan Madang, and the two sub-districts at the edge of Bogor City were Tanah Sereal and North Bogor. Samples of micro-small business households were also selected purposively i.e. those located around BB agents and involved in transactions with them. The data were collected from November to December 2016.

As an extension of a bank office in a rural area providing limited banking services, the BB agents have duties and functions which are homogeneous, providing limited banking services to customers, such as checking balance accounts, savings, withdrawals, bill payments, voucher sales and top-up mobile phone credit, as well as selling electricity vouchers. Therefore, as many as 32 BB Agents from 27 villages were chosen purposively with the help of the authority, namely BRI-Unit Bank in each sub-district (Table 1).

The samples of selected business households were small micro-business households who have conducted transactions with the BB Agents. Due to difficulties in obtaining the economic data from the households, the selection of the samples was carried out purposively i.e. small micro-business households located around the area where the agents reside and appointed by BB agent assistance. A total of 97 business households were selected, with an average of three households per BB agent.

The data were analyzed using descriptive method. It was used to describe the situation and behavior of the BB agents and micro and small business households in implementing the Branchless Banking program in rural areas i.e. by gathering information that can be measured for statistical analysis. The quantitative data presented in the form of descriptive statistics provides information to describe the portrait of BB program implementation from both sides: the agents and the households of micro-small business actors as program targets such as average, minimum, maximum, and frequency of the activities. The data are represented in a table form.

The BB program is one of the programs in the fifth Pillar of the Financial Inclusion Strategy. Therefore, the targets and the objectives of the BB program implementation must be in line with the achievement of the targets and the objectives set out in the Inclusive Financial Strategy, namely, increased and equal distribution of income, poverty reduction, and financial system stability. This study aims to explain how well the BB program is in achieving the targets and fulfilling the objectives of the Financial Inclusion Strategy.

In the implementation, the bank institution as the second-level principal-after BI and OJK as the first level principal-in cooperation with the agent here in after referred to as the BB Agents who are domiciled

in the location of the target i.e. in rural areas. The BB agents act as an extension of the bank to provide limited banking services to the community in the targeted area of the program. To know how good the program implementation is, this research will explain the portrait of BB program implementation in a rural area. The research framework is described in Figure 1.

RESULTS

As per April 2016, the number of BB Agents from Bank X reached 62,036 agents spread throughout Indonesia. The number of BB Agents in West Java as per September 2016 amounted to 5,707 agents and 360

agents of whom were spread in Bogor District and 86 agents in Bogor City (Data were obtained from Bank X, October 2016).

As many as 32 BB agents and 97 micro-small business households from 27 villages were selected. Most types of micro-small business households in rural areas are stalls, most of which are stalls selling basic daily necessities or staple goods. Other types of stalls are food stalls and other stalls selling different types of goods. Some other types of business household activities include business services, peddlers, and craftsmen. However, the distribution of each business activity is uneven, and the size of the business varies considerably, as described in Table 2.

Table 2. Number of BB agents per Sub-district

Sub-districts	Villages	No. of Agent	No. of Respondents
Sukaraja	Pasir Kakapa, Cijujung, Cijujung Blodes, Pasir Jambu,	6	11
Jasinga	Pamegarsari	1	4
Cibungbulang	Situ Ilir	1	3
Pamijahan	Kp. Segog, Ciasihan, Ciasmara, Pasar Ahad	4	10
Dramaga	Petir, Neglasari, Ciherang	4	13
Ciomas	Parakan, Ciapus	2	9
Bojong Gede	Cimanggis	2	5
Cibinong	Keradenan	1	2
Taman Sari	Sukajaya-Nambo, Pasir Eurih, Kp. Kabandungan	4	16
Ciawi	Teluk Pinang, Cileungsi, Cibedug	3	12
Babakan Madang	Banceuy	1	3
Tanah Sereal	Kel. Cibadak	1	1
North Bogor	Kel. Tanah Baru, Kel. Cimahpar	2	8
Total		32	97

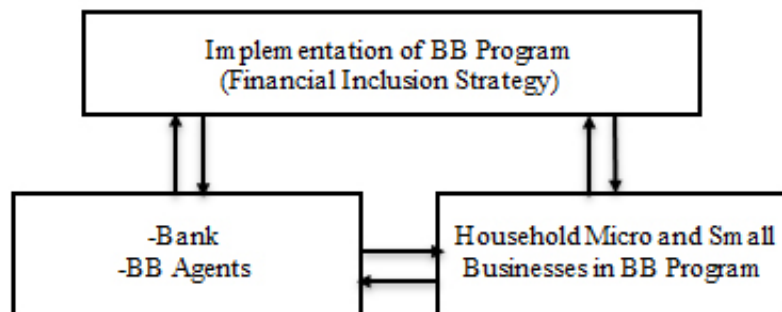


Figure 1. Research Framework

Table 2 Types of business households

Types of business	Activity	No. of respondent	%
Staple good stalls	Stalls selling basic daily necessities	17	17.52
Food stalls	Stalls selling ready food, 'gado-gado', meatballs, coffee, noodles, fried chicken, etc.	12	12.37
Other stalls	Stalls selling gallon water refill, mobile phone & electrical vouchers, internet-game store, electrical materials, paints, eggs, DVD, cakes, etc.	35	36.08
Services business	Photocopy service, motorcycle workshop, tailor, barber shop, beauty salon, primary school, money lender, etc.	21	21.65
Peddlers	Peddlers selling bananas, crackers, 'putu' cakes, 'siomay'	7	7.22
Craftsmen	Shoe makers, wooden frame makers, fiber glass makers	5	5.15

There are two types of BB Agents: individual agents and agents that have legal entities. Individual agents are local people, having business activity in their xx location, as well as having credibility, integrity, and ability to do activities as the BB agents. Examples of individual agents include teachers, retirees, customary heads, shop owners, or the head/owner of CV (Comanditaire Venotschap) or Firma.

Agents that have legal entities are Indonesian legal entities, permitted to engage in financial activities or owning retail outlets, have on-site business activities with adequate information technology and good reputation, credibility, and strong performance. Examples of legal entities include Limited Liability Companies, Regional Companies, or Cooperatives (OJK, 2015). The data from the survey show that as many as 32 BB Agents are individual agents, one of whom is an agent of a CV, and there is no BB Agents in the form of legal entity (Companies and Cooperatives).

Characteristics and Transaction Activities of BB Agents

In the implementation of the BB program, the Bank as the managing unit organizes the recruitment towards the prospective agents. BB Agents are the customers of a Bank that fulfil the requirements, such as having sufficient capital, owning business unit, mastering and being able to operate computer and information technology, being honest and trustworthy, and being a prominent person in society. Furthermore, through a personal approach by the Bank Unit, the intent and objectives of the BB program are socialized to potential agents.

Field findings indicate that prospective agents generally accept and are ready to join as the BB agents. Furthermore, the Bank Unit organizes education and technical training to provide knowledge of banking service. There are many people applying to become BB agents, and this gives a positive indication of the success of the socialization of the program.

Bank have roles and responsibilities to encourage and oversee agents after the contracts are signed. Field finding indicates that the Bank Unit conducts a meeting with BB agents periodically. The meetings are held as a medium of communication, information delivery, as well as evaluation towards the activities of agents, and this shows that supervisory functions carried out by Bank have worked well.

The characteristics of the respondents of BB Agents are explained in Table 2. The average age of BB Agents belongs to the productive age category (39.8 years), and the average level of formal education is equivalent to a senior high school (having a 12-year formal education). Most of them Agents (68.8%) were male or head of households. This condition illustrates that the main business undertaken by BB Agents is a micro-small business in their home. Field observations show although those registered as agents are head households, their spouse generally also act as agents as well.

As many as 32 BB Agents who were selected in this study have their business activity, so it can support their activity as BB Agents. Agents generally have one type of business activity that is a stall. However, some agents have two or more types of businesses at once. Business type of BB Agents is varied as described in Table 3.

Table 2. Characteristic of BB Agents

Characteristic	Average	Min	Max
Age (year)	39.8	27	49
Formal education (year)	12	9	16
Number of Male BB Agents (%)	68.8	-	-
Number of Female BB Agents (%)	31.2	-	-

Table 3 Types of business of BB Agents

Types of business	No. of Agent
Stalls - selling household staple goods	17
Distributors of SIM Cards and mobile-phone & electrical vouchers	6
Agent of Gallon Water Refill	3
Photocopy and stationery	2
Motorcycle workshop	2
Electronic Equipment Store	2
Financial Transaction Services	2
Goods and Money Credit Services	2
House Rent Business	2
Beauty salon services	1
Motorcycle Showroom	1
Craft Curtains	1
PAUD School services	1
CV of building materials	1

Each BB Agent is equipped with EDC (Electronic Data Capture) device and supporting tools such as cell phone card (sim card), transaction paper, charger, transaction fee list, certificate or card as proof of official BB Agents and banner. Type of sim card provider is tailored to the signal condition at that location and widely used by the surrounding community. Some agents are equipped with two types of cards from different providers. It aims to avoid or reduce the occurrence of failed transactions due to unstable signals. As BB Agents, they have obligations and rights. The obligation of BB Agents is to serve people living around them to conduct financial transactions, such as savings balance checking, savings, cash withdrawals, bill payments, purchases of vouchers of cell-phone & electricity. The transactions are conducted using an EDC machine.

For transaction purposes, BB Agents must have sufficient funds, either cash or funds in a savings account. When people want to withdraw their savings through the BB Agents, they will swipe their ATM card through an EDC machine. In that way, they transfer funds to the Agent account, so that the balance of the Agent account increases, and that of the customer account decreases.

Furthermore, Agents gives cash to the customer as much as the fund transferred. Conversely, if the customer wants to increase the balance of his savings through the BB Agents, then the Agent receives their cash. Furthermore, by using an agent ATM card and through an EDC machine, the Agent transfers some funds to the customer's account. Thus, the Agent account balance will be reduced and turn into cash. The proof of a transaction is indicated by a final check balance. For such transactions, the customer pays a certain amount of funds as a transaction service fee to the agent in accordance with the applicable tariff.

Customers may also transfer by using their ATM card through an EDC machine available at the agent, to the same bank account or to another bank account. In this case, there is no change in the savings account and cash funds of the agent. The customer only pays the transfer service at the applicable rate. Customers can also transfer using cash. Upon receipt of cash, BB Agents transfers it to the destination account via EDC machine using agent ATM card. As a result, the agent account balance is reduced and replaced by cash. Mechanisms for changes in cash and agent account balances can also occur for payment and purchase transactions made by customers through agents using EDC machines. Successful transactions indicate that financial transactions are conducted on BB program using cash and funds in the account BB Agents. Therefore, BB Agents must have sufficient funds and must be able to balance between money and funds in his account. If the cash is excessive, the agents must go to the bank to deposit it in a savings account. Conversely, if existing cash is insufficient to serve financial transactions in the community, they must go to the bank to withdraw their savings.

For financial services provided by BB Agents to customers, the Bank grants the right of incentives or commissions from any transactions conducted using EDC machines. The Bank gives a commission of 50% refund of the bank administrative fee charged for each financial transaction using the agents' ATM card on an EDC machine. To cover such costs, BB Agents receive payments from customers for each transaction service with the rates set by the bank. Official tariffs charged to the customer for frequent transactions conducted through the BB Agents are described in Table 4. Field observations show that even though the BB agents have been equipped with an official tariff list, no agent has placed the list of tariffs so that it can be seen by the

customer. In-depth discussions reveal that BB agents charge a higher rate than the official tariff set by the bank. This behavior is moral hazard behavior (hidden action), in which they perform actions that are not in accordance with the wishes of the bank as principal (Gailmard, 2012). This behavior can become an impediment and negatively impacts the achievement of program objectives.

Table 5 shows the frequency of financial transactions taking place in the BB agents in the last three consecutive days, i.e. Friday, Saturday, and Sunday. The results show that 56% have less than 20 transactions, and 31% have less than 10 transaction. On the other hand, 44% of them have more than 20 transactions in three consecutive days or on average of seven transactions per day. This meets the minimum transaction as the Break-Even Point (BEP) of BB program set by Bank, i.e. 200 transactions per month. Those who have more than 80 transactions in three days, i.e. 135, 261 and 603 transactions are very active agents.

Table 4. Tariffs of frequent transactions

Type of Transaction	Tariff (Rp)
Balance Info of Bank BRI	0
Balance Info of other Banks	1,000
Electricity payment (Pre/Post-Paid)	3,500
Transfer between BRI accounts	2,000
Transfer to other accounts (Bersama, Prima, Link)	2,500
Cash deposit	3,500
Cash withdrawal	3,500

Source: List of tariff on Agent, Bank X, October 2016

Table 5. Frequency of transaction at BB Agents in the last three consecutive days

Frequency	No. of Agent	%
< 20	18	56.25
20 - 39	6	18.75
40 - 59	4	12.50
60 - 79	1	3.12
≥ 80	3	9.38

Theoretically, economic activities that do not meet the BEP are not profitable (Mankiw, 2009). Based on the transaction frequency data, it can be said that the BB program has not given a profit yet because more than 50% of agents have not met the BEP, i.e. the minimum transactions set by the Bank.

Table 6 explains the distance of agent's location to the nearest bank office. A large number of BB Agents (71.25%) have a distance less than 4 km to the nearest bank office. The location can be reached easily by motorcycle. 12.5% have a distance less than 500 meters away, and 31.5% have less than 2 km of distance. The proximity to the bank's office has a positive impact for customers. Long period of waiting and parking fees to be borne by customers when going to transactions in the bank office encourage them to perform the simple financial transactions at the BB Agents. However, such condition could have a negative impact on the bank, as the bank customer will turn to the agent so that the income from the administrative costs of the bank shifts by the number of transactions that move from the bank office to the BB Agents.

The Bank in this study authorizes each bank unit office in each sub-district to recruit a BB Agent without specifying the location of the agent's residence. As much as 32% of BB agents have a distance of 50 to 100 meters among the agents, and 10 % have distance of 100 to 200 meters, while 58% have more than 1 km of distance among them (Table 7). Conditions of the proximity of locations among agents can be a positive factor for the people around who do financial transactions through BB Agents. Competition between agents located in adjacent locations will make the BB Agents consider a number of additional transaction costs imposed outside the official rate. Agents living close to each other charge a lower transaction fee than those living in a far distance. This lowers the real transaction costs that agents incur to consumers. On the other hand, the proximity of location among agents may cause pseudo transactions, i.e. the transactions happen among agents and their family. The location of BB agent closes to the mini-mart causes the competition in serving payment transactions, thus discouraging the agent. However, BB agents have an advantage because they have limited banking services that are not provided by mini-mart.

Table 6. The distance to the nearest bank office

Distance (km)	%
< 2.0	31.25
2.0 – 3.9	40.00
4.0 – 5.9	7.00
6.0 – 7.9	10.00
8.0 – 9.9	8.75
> 10.0	3.00

Table 7 The distance between agents

Distance (km)	%
< 2.0	31.25
2.0 – 3.9	40.00
4.0 – 5.9	7.00
6.0 – 7.9	10.00
8.0 – 9.9	8.75
> 10.0	3.00

The proximity of the agent's location to the bank office, the mini-mart, and between agents show that the bank has several problems in conducting agent recruitment. These problems have a negative impact on the achievement of program objectives, i.e. the transactions do not describe exactly the target group of the program.

In addition to financial transactions, BB program of Laku Pandai also provides other financial products such as micro-insurance and micro-credit. In this case, the role of BB Agent is to provide information about the products to the community and provide recommendations to banks, especially regarding the credibility of those who apply for credit. Thus, it is expected that the public feels comfortable to deal with the bank. Through recommendations from BB agents, Bank is able to identify potential borrowers/creditors so that allowing the bank to provide a loose of formal requirements. Thus, it is expected to reduce rural community interest to non-formal loans. However, conditions in the study area indicate that micro-insurance and micro-credit products through BB Agents have not been provided. Digital money using the mobile phone (T-Bank) and BSA products are also not available yet at BB Agents.

Characteristic and Transaction Activities of the Business Households

The portrait in the fields shows that there are a great number of micro-small business households around the area where the agents live. However, only few of them have conducted financial transactions through agents; therefore, on average, there are three business households per BB Agent. Most of the households that have conducted a transaction at BB Agents are housewives, who generally conduct a transaction to make an electricity payment and do the top-up of mobile phone credit. The others include the public society such as migrant workers, who conduct financial transactions through agents to transfer money to their families in their hometown. The characteristics of the business household respondents were explained in Table 8. It describes the performance or potential of the business household activities.

The average age of business actors involved in the transactions at BB Agents is 37 years included in the category of productive age, with the average level of education equivalent to the graduate of the junior high school. The family size is relatively small consisting of head of household, housewife and two children. Generally, the production activity is managed by the head of household and housewife. The most types of business of the household in rural areas are stall businesses, most of which are selling basic daily necessities or staple goods. Other types of stalls are food stalls and stalls selling different types of goods. Each of business households has one or more business activities.

Business household respondents do not belong to the group of unbanked people since they generally have bank accounts, although some are inactive. However, some of them can be categorized as underbanked people because they never get credit from the bank. They tend to use cash when conducting their transaction with BB Agents (69%), and only 31% respondents who used ATM card. The digital money by using a mobile phone (T-Bank) and the product of BSA (Basic Saving Account) in a BB program has not been running, as can be seen in Table 9.

The most frequent types of transaction conducted by the business households are the transactions to pay bills such as electricity payment (45.59%), and transfer transaction (27.13%). Transfers transactions are generally made by entrepreneurs coming from other regions; they send their income to the family living in different areas. Other types of transfer transactions are transfers of online payments, such as payments on purchases of goods online and paying credit installments. Another type of transaction that is also frequently conducted by the household business at the BB Agents is a transaction to top-up the cell phone credit (15.98%), while transactions of cash deposit (savings) and cash withdrawals take place rarely as described in Table 10. The data show that types of transactions conducted by the business households at BB agents are transactions that are not directly related to business activities, but more related to non-food consumption. Type of transaction which is expected to occur associated with production activities, such as cash deposits of their daily or weekly income (savings transaction) or cash withdrawals is rarely conducted. Table 10 also explains that the number of transactions conducted by business households through BB Agents is low, with an average of 27.59 transactions per household per year or two to three transactions per month.

In addition, the expected credit proposals conducted through BB agent do not exist yet. Besides due to certain matters, the decisions of business actors are not included in the focus of this study, and the unfavorable channeling of credit through the agent can also be caused by the low number, type, and value of transactions conducted by the customers through BB agents, so the bank does not have enough information regarding their eligibility. The existing credits, generally in the form of loans are obtained directly from the bank office or lease loans for motorcycle purchases, as well as loans from family or loans to purchase household items paid in installments. Thus, the role of BB agents related to credit is still limited as a means of transfer for installment payments to leasing companies, whereas bank installment payments are carried out by automatically debiting customer accounts.

Table 8. Characteristic of business household respondents

Characteristic	Average	Min	Max
Age (year)	37	19	73
Education (year)	10	3	15
Family size (person)	3.86	2	5
Number of family workforce (person)	2.36	1	3
Number of School children (person)	0.99	0	3

Table 9. Instruments used in the transaction

Instruments	No. of Respondents	%
ATM	30	31
Cash	87	69
T-Bank	0	0
BSA	0	0

Table 10. Frequency of transaction

Type of Transaction	Frequency/year	%
Savings (cash deposits)	187	6.46
Withdrawals	144	4.84
Transfers	576	27.13
Electricity payment (pre/post)	1,346	45.59
Top-up cell phone credits	422	15.98
Credit proposal	0	0
Average transaction/year/Hhs	27.59	
Average transaction/month/Hhs	2.33	

Managerial Implication

The portrait of BB program implementation implies that Bank Institutions need to provide adequate education and information, as well as do socialization to increase public trust to BB agents and to encourage the society to utilize the financial services provided through BB Agents. Furthermore, OJK and BI need to encourage the penetration of BSA products through BB Agents as an effort to attract the society, especially the household micro and small business to access banking services, as well as to provide education and socialization intensively to bring up the culture of digital money in rural areas.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The existence of BB Agents and a number of transactions conducted by the society at the agent in the rural area indicate that the program has been running in accordance with the program objectives, namely, reaching the community in rural areas. BB Agents as an extension of bank offices in rural areas have functions to provide limited banking services to the community in rural areas. However, most of the agents still do not meet the minimum transactions set by the bank. In addition, some agents practice moral hazard behavior which becomes an impediment in achieving the program goals.

The proximity of agent's location to the bank office, mini-mart and among the agents explained that there are some problems in the selection process of BB agents, thus discouraging the agents, and the transactions that happened do not reflect the program target group.

The portrait shows that the rural communities as program targets have utilized such the limited banking services through agents. However, the number of transactions conducted by business households through agents is still very minimal, and most of which are in the form of transactions related to non-food expenditures, such as electricity payment, transfers to families, and top-up cell phone credit while transactions in the form of savings and cash withdrawals are still rare. It shows that the implementation of BB program is not yet related to production activities.

In conducting transactions at the agents, most people used cash money (cash basis) and no transactions are carried out using digital money (T-Bank) as well as BSA (Basic Saving Account) as a simple banking product addressed to the unbanked people. On the other hand, microcredit and micro-insurance through BB Agents do not exist yet. The condition indicates that the BB program in rural areas is still functioning for the benefit of cash payment, while the provided banking services have not run optimally.

Recommendations

This research does not analyze the implementation of the BB program on business households units that have not been involved in the program. Therefore, this study

suggests further research to analyze the behavior of business households around the BB Agents that are not yet involved in the program.

REFERENCES

- Aduda J, Kalunda E. 2012. Financial inclusion and financial sector stability with reference to kenya: a review of literature. *Journal of Applied Finance & Banking* 2: 95–120.
- [BI] Bank Indonesia. 2014. Booklet keuangan inklusif Bank Indonesia. <http://www.bi.go.id/id/perbankan/keuanganinklusif/edukasi/Contents> [2014 September 25].
- Chuchuen C. 2016. The perception of mobile banking adoption: the study of behavioral, security, and trust in Thailand. *International Journal of Social Science and Humanity* 6(7): 547–550. <https://doi.org/10.7763/IJSSH.2016.V6.708>.
- Frani O. 2017. The impact of branchless banking as a financial inclusion strategy against the competition level of Indonesian banking industry. *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya* 5(2): 1–7.
- Gailmard S. 2002. *Multiple Principals and Outside Information in Bureaucratic Policy Making*. Irving B. Harris Graduate School of Public Policy Studies, University of Chicago.
- Hishigsuren G. 2006. Information and communication technology and microfinance: Options for Mongolia (No. 42). *ADB Institute Discussion Papers* 42.
- Ivatury G, Mas I. 2008. *The Early Experience with Branchless Banking*. Focus Note 46. Washington: CGAP.
- Jain CS, 2015. A study of banking sector's initiatives towards financial inclusion in India. *Journal of Commerce and Management Thought* 6(1): 55–77. <https://doi.org/10.5958/0976-478x.2015.00004.X>.
- Kelkar V. 2014. Financial inclusion for inclusive growth. *ASCI Journal of Management* 39(1):55–68.
- Khanan and Pujiyono. 2016. Juridical aspect of agent presence in branchless banking model in Indonesian banking system. *Jurnal Privat Law* IV (1):13–20.
- Khattab I, Balola Y, Eldabi T. 2012. Factors influencing branchless banking for microfinance in Sudan: theoretical perspectives and future directions.

- European, Mediterranean and Middle Eastern Conference on Information Systems. <http://www.iseing.org/emcis/emcis2012/EMCISWebsite/proceedings/154.pdf> [2014 September 25].
- Mankiw G. 2009. *Principles of macroeconomics*. Cengage Learning. New York, USA: Worth Publishers. 41 Madison Avenue.
- McKay C, Pickens M. 2010. *Branchless Banking 2010: Who's Served? At What Price? What's Next?*. CGAP. 1825 I Street, NW 7th floor Washington, DC 20006.
- Montazemi AR, Qahri-Saremi H. 2015. Factors affecting adoption of online banking: a meta-analytic structural equation modeling study. *Information & Management* 52(2): 210–226. <https://doi.org/10.1016/j.im.2014.11.002>.
- [OJK] Otoritas Jasa Keuangan. 2015. Laporan Kinerja OJK 2015. http://www.ojk.go.id/id/berita-dan-kegiatan/publikasi/Documents/Pages/laporan-kinerja-ojk-2015/FA_LaporankinerjaOJK2015rev070116_II.PDF [10 April 2016].
- [OJK] Otoritas Jasa Keuangan. 2015. *Seputar Informasi Mengenai Layanan Keuangan Tanpa Kantor Dalam Rangka Keuangan Inklusif (Laku Pandai)*. Jakarta; Departemen Penelitian dan Pengaturan Perbankan, OJK.
- Permadi AD. 2017. Persepsi masyarakat desa pendem berubah terhadap teknologi branchless banking [Thesis]. Management Study Program, Economic Faculty. Universitas Negeri Yogyakarta.
- Phonthanakitithaworn C, Sellitto C, and Fong M. 2015. User intentions to adopt mobile payment services: a study of early adopters in Thailand. *The Journal of Internet Banking and Commerce* 20(1): 1–29.
- Secioktaviany ZA. 2016. Optimization of risk management as a preventive of the legal risk of branchless banking organizer bank in Indonesia. *Privat Law* 4(2): 87–93.
- Shadikin R. 2017. Tinjauan Maqashid Asy-Syari'ah terhadap sistem keamanan perbankan pada program branchless banking [Thesis]. Law of Syariah Economic Study Program. Faculty of Syariah and Law.
- Shaikh AA, Karjaluoto H. 2015. Mobile banking adoption: a literature review. *Telematics and Informatics* 32(1): 129–142. <https://doi.org/10.1016/j.tele.2014.05.003>.
- Siddik MNA, Sun G, Yanjuan CUI, Kabiraj S. 2014. Financial Inclusion through Mobile Banking: A Case of Bangladesh. *Journal of Applied Finance and Banking* 4(6): 109–136.
- Untoro, Widodo PR, Yuwono W, Dewi K, Christina R. 2014. Layanan keuangan digital; hambatan dan faktor-faktor penentu keberhasilan. *Working Paper*. Bank Indonesia, Desember 2014.
- [WB] The World Bank. 2014. Global financial development report 2014. <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23489619~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html> [2015 Juni 25].
- Wibowo PP. 2013. Branchless banking setelah multilicence: ancaman atau kesempatan bagi perbankan nasional. Disampaikan dalam rangka memenuhi salah satu persyaratan Sekolah Staf Pimpinan Bank Indonesia (SESPIBI) Angkatan XXXI, Jakarta.
- Yuwono M. 2017. Strategy of farmers interest improvement in using formal financial products and services in the framework of financial inclusion [dissertation] Bogor: Institut Pertanian Bogor.