PROCEEDING

THE 18TH MALAYSIA INDONESIA INTERNATIONAL CONFERENCE ON ECONOMICS, MANAGEMENT AND ACCOUNTING (MIICEMA)

"Towards Economic Stability and Sustainability: Economics, Management, and Accounting Perspectives"

Bogor, October 4th-5th, 2017

18th MIICEMA

Malaysia Indonesia International Conference on Economics, Management and Accounting

WELCOMING SPEECH

the 18th Malaysia Indonesia International Conference on Economics, Management and Accounting (MIICEMA)

"Towards Economic Stability and Sustainability: Economics, Management, and Accounting Perspectives"

4-5 October 2017

Honorable Guests,

Vice Rector for Research and Colllaboration, Bogor Agricultural University

Dean of the university members of MIICEMA

Dean of Members of Cooperation Board of Public University in West Region (BKS PTN Wilayah Barat)

Esteemed resource persons, Academician, researcher, policy maker, Distinguished Guests, Dear colleagues, friends, ladies and gentlemen

Assalaamu'alaikum Wr. Wb.,

Peace be on us, all praise is due to Allah, Lord of the worlds, praise that befits Your Majesty and Sovereignty.

It is a great honour for me to welcome all of you to IPB Convention Centre - Bogor. On behalf of the organizer, Faculty of Economics and Management IPB, of the **18th Malaysia Indonesia International Conference on Economics, Management and Accounting (MIICEMA)** on **"Towards Economic Stability and Sustainability: Economics, Management, and Accounting Perspectives".** I would like to express my most sincere gratitude for your presence in this Conference as the gateway to the initiation to our discussions (and to particularly extend a warm welcome to the distinguished participants from Malaysia).

Honorables, distinguished guests, fellow participants,

Before I turn to the specific topics we will be discussing today, let me quote an interesting statement from the great British statesman Winston Churchill (1874-1965). He used to say: "I am always ready to learn although I do not always like being taught". I invite you to teach us what you know as the fruit of your research and the many hours spent in your

laboratories or in front of your computer, in trying to elucidate the mysteries of the global economy and the causes of unsustainable Economic development, particularly in the case of Indonesia and Malaysia.

Some of you maybe familiar with several TV programs such as a year million, the known earth, evacuate earth, end day and several other related programs. All of those programs are presenting the prediction of the future of our beloved earth. Indeed, these are all not 100 percent valid but we still can take a lesson from the stories, hence "we need to anticipate, we need to make our economic activities sustainable, so it can minimize the burden of our beloved earth".

Sustainability is not the only issue that will be discussed in this conference, here we also raise the issue of stability. About two months ago, the central bank of Indonesia held an international conference and the topic was about the VUCA world. VUCA is the acronym of volatility, uncertainty, complexity and ambiguity. This shows that stability is also importance and relevant to be addressed in this conference.

Dear distinguised speakers and beloved participants,

In this conference, we will have 2 plenary session with 10 distinguised speakers and 4 paralel sessions. In total, there will be 96 papers that will be presented in the paralel session. Among 96 papers, we will select 15 best papers and these paper will be published in the scopus indexed journal.

In the next two days we will have not only a conference, but also two formal meetings namely, BKS PTN Barat meeting and MIICEMA meeting. Moreover, we will also have a Workshop on Scopus indexed Journal Management. This workshop is free for all conference participants and will be held tomorrow afternoon in this ballroom.

Once again I would like to thank all of you, dear colleagues and fellow-researchers, because our success is the merit of having all of you here to show the results of your excellent daily work which is essential to the economic development of Indonesia and Malaysia. You are the real stars of this conference, and we, the organizers, are but the instruments to bring together the best minds involved in the research of these economic, management, and accounting. Therefore, thank you so much for being here.

Last but not least, I would like to say: "Have a nice and fruitful international conference and I wish all days are interesting and beneficial workshop. Have a pleasant stay in Bogor!"

Thank you for your attention.

18th Malaysia Indonesia International Conference on Economics, Management and Accounting (MIICEMA)

IPB International Convention Centre, October 4th-5th, 2017

FINAL AGENDA

Day 1: Wednesday, October 4th, 2017			
Time	Agenda		Location
08.00 – 09.00	Registration and Morning Coffee		Ballroom 1
09.00 – 09.15	Opening Ceremony	1. Vice Rector of IPB: Prof. Dr. Ir. Anas Miftah Fauzi, M.Eng 2. Head of Organizing Committee: Dr. Tony Irawan, SE, M.App.Ec	Ballroom 1
09.15 – 12.00	1st Plenary session: "Sustainable Economy for Future Directions/ Development"	1. Christopher Bennett Adjunct Professor – University of British Columbia, Canada 2. R. Edi Prio Pambudi – Indonesian Coordinating Ministry for Economic Affairs 3. Asep Suryahadi – Executive Director of SMERU Research Institute 4. Prof. Dr. Norman Mohd Saleh – Dean of Fakulti Ekonomi dan Pengurusan, Universiti Kebangsaan Malaysia	Ballroom 1
12.00 – 13.00	Lunch Break		
13.00 – 15.15	Parallel session 1		Meeting Room 1-4
	BKS PTN Barat Meeting		Ballroom 1
15.15 – 15.30	Coffee Break		
15.30 – 17.45	Parallel session 2		Meeting Room 1-4
	MIICEMA Meeting		Ballroom 1
18.30 – 20.00	Gala Dinner		Ballroom 1

Day 2: Thursday, October 5th, 2017			
08.00 - 08.45	Registration and morning coffee		Ballroom 1
08.45-09.00	Opening Speech	Dean of Faculty of Economics and Management IPB– Prof. Dr. Yusman Syaukat, M.Ec	Ballroom 1
09.00 – 12.00	2nd Plenary session "Food Security within the Framework of Economics and Technology"	1. Head of Indonesian National Agency of Drug and Food Control- Dr. Ir. Penny Kusumastuti Lukito MCP 2. Chairman of PERHEPI - Prof. Dr. Ir. Hermanto Siregar 3. Chairman of ISEI - Prof. Bustanul Arifin 4. IT Expert - Prof. Kudang B. Seminar 5. Food Security Expert - Bambang Riyanto, M.Si 6. CEO Agrisocio – Alfi Irfan, SE	Ballroom 1
12.00 – 13.00	Lunch Break		
13.00 – 15.15	Paralel Session 3		Meeting Room 1-4
	Workshop "Journal Management"		Ballroom 1
15.15 – 15.30	Coffee break		
15.30 – 17.45	Parallel Session 4		Meeting Room 1-4
	Workshop "Journal Management"		Ballroom 1
17.45 – 18.00	Clossing Ceremony		

IMPACT OF INCREASING OF FREQUENCY OF TRANSACTION IN BRANCHLESS BANKING PROGRAM TOWARDS HOUSEHOLDS BUSINESS ACTIVITIES

(Case Study in Bogor District, West Java, Indonesia)

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ABSTRACT

This study aims to analyze the economic behavior of business activities of household business actors who conduct their financial transactions through Agent in the branchless banking program, namely how the impact of changes in frequency and value of transactions on economic behavior. The model of the household economic behavior of business activities on a branchless banking system is based on a dynamic household economic model. A sample of BB Agent and the business household is determined by using purposive sampling method. Data collected from Bogor District, consist of 13 Sub-districts. Data were analyzed by the 2SLS method. The results indicate that the increase in frequency and value of transactions at BB Agent has a negative impact on investment, size of business, and credit. Therefore, it can be concluded that if a branchless banking program focuses only on increasing the frequency of transactions, it will have an impact on the sustainability of household business in the long term.

Keywords*: Branchless banking, Financial transaction, Information Technology, Household economic behavior*

JEL classification: *G20, O12, O30, R20*

THE 18th MIICEMA CONFERENCE

CERTIFICATE

Faculty of Economics and Management, Bogor Agricultural University Indonesia
presents this Certificate to

KTUT SILVIANITA MANGANI

as

Presenter

in

Malaysia-Indonesia International Conference on Economics, Management and Accounting
Towards Economic Stability and Sustainability: Economics, Management, and Accounting Perspectives
4-5 October, 2017 at IPB International Convention Center (IICC) Bogor-Indonesia

Dean of Faculty of Economics and Management
Bogor Agricultural University

Prof. Yusman Syaukat, PhD

IMPACT OF INCREASING OF FREQUENCY OF TRANSACTION IN BRANCHLESS BANKING PROGRAM TOWARDS HOUSEHOLD BUSINESS ACTIVITIES (Case Study In Bogor District, West Java, Indonesia)

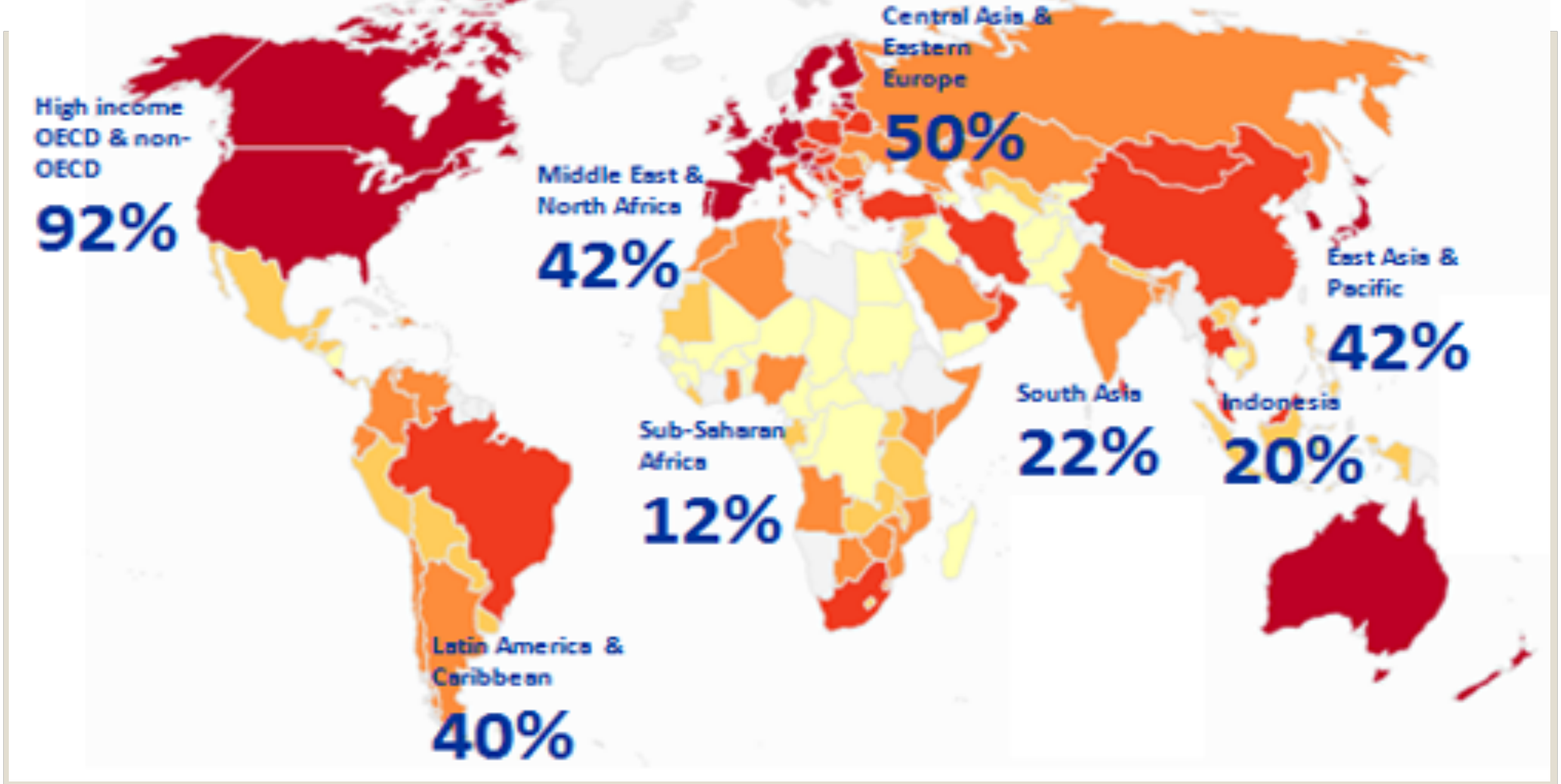
Ktut Silvanita Mangani[1], Yusman Syaukat[2], Bustanul Arifin[3], Mangara Tambunan[4]

INTRODUCTION

- Demirgüç-Kunt et al. (2008):
  - Financial sector is the parent of the development process.
  - Development of the financial sector by providing financial services and products accessible to everyone is one way to overcome poverty.

- Banking sector has ability to distribute opportunities equally, including those in remote areas

- However. ...



- World Bank survey data (2014):
  - only about 50 percent of the world's adult population has access to formal financial institutions.

- McKay and Pickens (2010):

  One form of potential financial delivery channels to serve "unbanked'' and "underbank" people, who mostly live in rural areas is Branchless Banking.

- Branchless banking is:
  - Banking service provided by financial service providers to customers **without having to come to the bank office.**
  - Bank uses a **third party or agent** as an extension of the bank.

- 'Unbanked" people:

  those who do not have ability to access the banking system due to the requirement set by the banks.

- "underbanked" people:

  those who have the ability to access the bank, but do not have access

- Branchless banking for low-income communities is a **new financial delivery channel,**
  - Banks bring its services closer to customers, especially in remote areas.

- Financial Services Authority (OJK) calls the program under the name of "Layanan Keuangan Tanpa Kantor Dalam Rangka Keuangan Inklusif "—the Non-Office Financial Services in the Framework of Inclusive Finance--or **"Laku Pandai"**

- The objective of the program:

  - **to provide simple, understandable and appropriate financial products** to meet the needs of those who are not able to reach current financial services, and

  - with the increasing number of members of various community groups in different parts of Indonesia using financial services, then the economy of the community is expected to be more smoothly so that it can **encourage economic growth** and **equitable development** among regions in Indonesia, especially **between villages and cities** (OJK, 2015).

PROBLEM STATEMENT

- People in rural areas who most likely to save their surplus funds and borrowed credits are **those who has productive activity**.
  - Their success in production can be **influenced by the availability of financial institutions** as a driving force.

- By studying their **economic behavior**, namely economic decision making of business households involved in Branchless Banking program, then it can be obtained a description of the potential development of the program.

- Household economic decisions such as production decision, consumption decision, and the decision to take credit are influenced by the amount of household income received from various sources of income, formal and non-formal loans, as well as other factors such as household characteristics (Sayaka et al., 2011 and Bernadus, 2014).

- This study will analyze the economic behavior of business household who conduct their financial transaction at the agent in branchless banking program.
  - How the change of their economic behavior if there is a change in economic variable to determine the best scenario for the development of the branchless banking program.

HOUSEHOLD ECONOMIC MODEL

- The economic behavior of business household in branchless banking program in a rural area has the same characteristics as farm households economic behavior of Bagi and Singh (1974):
  - Farm households are faced with problems in which one economic decision will depend on other economic decisions, both internal and external.
  - The farm household economic model is a **dynamic model.**
  - The economic decisions of farm households are categorized into six decisions: (1) production, (2) consumption, (3) Marketed surplus, (4) labor usage, (5) investment, and (6) credit.

MODEL SPECIFICATION

- $Q = a_0 + a_1 INV + a_2 TK + a_3 P + a_4 VCOST + \mu_1$ ..... (1)
- $INV = b_0 + b_1 Cr + b_2 SU + b_3 SAV + b_4 PFIT + b_5 FCOST + \mu_2$ ..... (2)
- $TKK = c_0 + c_1 AKK + c_2 W + c_3 SU + c_4 TKL + c_5 PFIT + \mu_3$ ..... (3)
- $TKL = d_0 + d_1 W + d_2 SU + d_3 TKK + d_4 P + \mu_4$ ..... (4)
- $TK = TKK + TKL$ ..... (5)
- $MS = e_0 + e_1 P + e_2 Q + e_3 SU + \mu_5$ ..... (6)

- SU = $f_0 + f_1 INV + f_2 Cr + \mu_6$ ..... (7)
- TRQ = P x Q ..... (8)
- TBQ = VCOST + FCOST ..... (9)
- PFIT = TRQ – TBQ ..... (10)
- PRTBB = PFIT + PLL ..... (11)
- YD = PRTBB – CS – TAX ..... (12)

- $CCPG = g_0 + g_1 YD + g_2 UK + g_3 SAV + g_4 TRSNIL + \mu_7$ ..... (13)
- $CCNPG = h_0 + h_1 YD + h_2 CCPG + h_3 SAV + h_4 ISDM + h_5 TRSNIL + \mu_8$ ..... (14)
- $ISDM = i_0 + i_1 YD + i_2 AS + i_3 SAV + i_4 INVPEN + \mu_9$ ..... (15)
- $SAV = j_0 + j_1 PFIT + j_2 YD + j_3 TRSNIL + \mu_{10}$ ..... (16)
- $CR = k_0 + k_1 R + k_2 SU + k_3 YD + k_4 PFIT + k_5 SAV + k_6 TRSNIL + \mu_{11}$ ..... (17)

METHOD

- The study was conducted in Bogor District at 13 sub-districts.
- The tasks and functions of BB agents are **homogeneous**, that is an extension of the bank offices in rural areas that **provide limited banking services.**
- 32 BB Agents are selected purposively.

- 97 household samples are selected purposively.
  - The selected business households are those known by the agents, and generally they are near or around the agent's business location.

MODEL IDENTIFICATION, ESTIMATION & VALIDATION

- The model identification was performed using **order condition** (Koutsyiannis, 1977).
  - If (K-M) ≥ (G-1), then the model is said to be identified or overidentified.

- The parameters is estimated using the **2SLS** (Two Stage Least Squares) method.

- The validation of the model is conducted to check whether the estimated model reflects the reality and fulfill the requirements of the model application objectives is using the Coefficient of Determination **(R^2)** and **U-Theil criteria**

RESULTS

- The F-test analysis shows that **all structural equations have Pr F <0.0001**
  - all explanatory variables in each structural equation are simultaneously affect endogenous variables
- The result of the determination coefficient (R^2) ranging from 27% - 99.96
- Validation result shows that 88.24 percent of endogenous variables have R^2 values more than 30 percent, and 58.82 percent have a value of U-Theil less than 20 percent.
  - the model reflects the actual state of the household economic behavior of business activity in branchless banking program.
  - Therefore, it can be used to analyze the impact of changes of important economic variables to the household economic decision.

Table 5. Analysis of Variance of Structural Equations of Household Economics Model of BB Business Actors, 2SLS Method, and SYSLIN Procedure

Name of	Equation/Variabl.	DF	F Value	Pr > F	R^2
Q	Production	96	164,58	<,0001	0,90042
INV	Investment	96	1457,04	<,0001	0,98766
TKK	Family Labor	96	18,97	<,0001	0,45194
TKL	Non-family Labor	96.	11,33	<,0001	0,33003
MS.	Marketed Surplus	96	79.066,40	<,0001	0,99961
SU	Business size	96	286,83	<,0001	0,85921
CCPG	Food Consumption	96.	44,31	<,0001	0,58834
CCNPG	Non-Food Consumption	96	27,21	<,0001	0,54192
ISDM	HR Investment	96	25.684,10	<,0001	0,99911
SAV	Saving	96	11,94	<,0001	0,27798
CR	Credit	96	27,72	<,0001	0,47209

Impact of The Increase of Frequency of Transaction

- **The higher the frequency of transactions** indicates the level of confidence of the business actors to conduct financial transactions on the BB Agents, and **describes the success of the program.**
- Data: The average frequency of financial transactions is **27.59 transactions per year per households** or **2 - 3 transactions per month per households**.
  - Therefore, to achieve the success of branchless banking program towards households of business actors to increase their business capacity, it is necessary **to increase the frequency of transactions in a large percentage.**
- In this study, the scenario of increasing the value of transactions is **150 percent**.

Table 7. Impact of Increasing in Value of Transaction (TRSNIL)

Endogen Variables	150% TRSNIL	
	Base Value	%Change
Production (Q)	282.120.000	0,82
Investment (INV)	**47.126.245**	**-1,56**
Family Labor (TKK)	714	0,13
Non-Family Labor (TKL)	339	0,62
Total Labor (TK)	1.053	0,28
Marketed Surplus (MS)	278.220.000	0,83
Business size (SU)	**369.550.000**	**-0,26**
Total Revenue of Production (TRQ)	282.120.000	0,82
Profit (PFIT)	95.309.881	2,42

Table 7. Impact of Increasing in Value of Transaction (TRSNIL)

Endogen Variables	150% TRSNIL	
	Base Value	%Change
Total Revenue of BB Households (PRTBB)	112.760.000	2,04
Disposable Income (YD)	107.730.000	2,14
Total Consumption (TCONS)	26.459.785	7,55
Food Consumption (CCPG)	14.114.496	0,82
Non-Food Consumption (CCNPG)	2.345.290	15,26
HR Investment (ISDM)	5.297.866	0,04
Saving (SAV)	24.483.037	0,17
Credit (CR)	**160.530.000**	**-0,07**

- The result shows that an increase in transaction value by 150 percent:
  - has a **high impact** on an increase in **non-food consumption expenditure** (CCNPG), with the percentages 15.26.
  - The impact on investment (INV), business size (SU), and credit (CR) are **negative**, with value -1.56, -0.26, and -0.07 percent, respectively.

- The results are in line with the conditions at the study sites.

  - The presence of BB Agents in a branchless banking program is more commonly used **for transactions related to non-food consumption expenditures**, such as paying utility bills, purchasing electric or mobile vouchers, and transaction for online shopping payments.

  - While transactions related to daily production activities such as savings and withdrawals through BB Agent are relatively rare, as the conditions described in Table 4.

Table 4. Frequency of Transaction

Type of Transaction	Frequency/year	Percent
Cash deposits	187	6,46
Withdrawals	144	4,84
Transfers	576	27,13
Electricity payment (pre/post)	1.346	45,59
Buying mobile phone vouchers	422	15,98

- The negative impact of an increase in the value of transaction by 150% on investment (INV), business size (SU), and credit (CR) is also supported by the condition in the study sites.

  - BB Agent as an extension of bank office to provide limited banking services in the rural area is **only concern with the transaction** made through them.
  - They do not know whether their existence encourages the business households or no.
  - They also **do not have ways to approach the business households** around them to conduct the financial transaction through them.

- It was indicated in the research location that the BB agent **practices moral hazard behavior**, such as charging the customers at a tariff higher than the rate set by the bank.
- There exist **other potential moral hazard behavior** that can increase transaction costs.

CONCLUSION

- **The frequency of transactions** conducted by business households through BB Agents is **still low**. It indicates that the **public confidence**, especially for business households, to conduct the financial transactions through BB Agent as an extension of the bank in the rural area is **still low.**
- Increasing the frequency of transaction has a **high impact on non-food consumption expenditure**. This is supported by conditions at study site where the type of financial transactions conducted by household businesses through BB Agent is more to pay for electricity bills and buy mobile vouchers or electric vouchers. While transaction of saving and cash withdrawal, as the types of transactions related to production activities, are very rare.

CONCLUSION

- The result of simulation shows that the development of the Branchless Banking program which **focuses only on increasing the frequency or value of transactions** will have a **negative impact on business sustainability in the long run.**

- **Moral hazard behavior** practiced by BB agents can be an obstacle for the people in the rural area as the target program, especially for the business household to conduct financial transactions through BB Agent, since it will **increase the transaction cost**, which is very sensitive to the people in rural, and may **hamper the program development.**

Agen Omang, 2016

Melayani :
TRANSFER
BAYAR CICILAN
ANGSURAN LEASING
Agen Omang 2015

No. Agen:
NAZWA CELL
BRILink
Gerai Transaksi Online
LAYANAN Tbank
• SETOR • REGISTRASI
• TARIK
Melayani Seluruh Masyarakat
Melayani: • BAYAR LISTRIK • BELI PULSA
• BAYAR TELEPON • TRANSFER
• BAYAR CICILAN • ANGSURAN LEASING
LAUNDRY &
Tbank

Agen Endrotomo, Cimahpar, Bogor Utara
No. Agen:
BANK BRI
ENDROTOMO
Agen
BRILink
Gerai Transaksi Online
LAYANAN Tbank
• SETOR • REGISTRASI
• TARIK
Melayani Seluruh Masyarakat
Melayani: • BAYAR LISTRIK • BELI PULSA
• BAYAR TELEPON • TRANSFER
• BAYAR CICILAN • ANGSURAN LEASING

No. Agen:
BANK BRI
TOKO VANS
Agen
BRILink
Gerai Transaksi Online
LAYANAN Tbank
• SETOR • REGISTRASI
• TARIK
Melayani Seluruh Masyarakat
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• BAYAR TELEPON • TRANSFER
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Cheetos
Toko Vans, Pasir Jambu, Sukaraja

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indosat
METRO CELL
Jual SP & Pulsa INDOSAT
JL. TUMENGGUNG WIRADIREJA
smartfren 4G LTE
BANK INDONESIA
METRO CELL
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Melayani Seluruh Masyarakat
LAYANAN MINI ATM
LAYANAN LAKU PANDAI
MITO
Agen Ika, Tegal Gundil, Bogor Utara

Agen Poltak, Banceuy, Babakan Madang

Agen Rikayati, Cileungsi, Ciawi

ThankYou
Merci
Salamat
Kop
Hvala
Xie
Tack
Dhanyavad
Khopjai
kun
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Gomapsupnida
Terima Kasih
Danke
Dziękuję
Shukriya
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Mamnoon
Kiitos
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Dialch
Shnorhakalutiun
Garsahapnida
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Dekuju/Dekujeme
Dziękuję
Shukran
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Gracias
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Gomapsupnida
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