FAKULTAS EKONOMI DAN BISNIS
Jl. Pawiyatan Luhur IV/1 Bendan Duwur Semarang 50234
Telp. (024) 8441555,8505003(hunting) Fax.(024) 8415429 - 8445265
e-mail:unika@unika.ac.id http://www.unika.ac.id

Unika SOEGIJAPRANATA

S U R A T T U G A S

Nomor : 00477/K.6.4/ST/FEB/XI/2020

Dekan Fakultas Ekonomi dan Bisnis Universitas Katolik Soegijapranata memberikan tugas kepada:

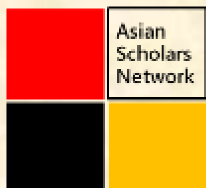
Nama	:	Dr. Angelina Ika Rahutami NIDN : 0622026802
Status	:	Tenaga Pendidik/Dosen Fakultas Ekonomi dan Bisnis Universitas Katolik Soegijapranata
Tugas	:	Presenter Konferensi Internasional dengan judul artikel The Impact Of Economic Openness And Growth On Poverty Alleviation In Indonesia pada 2nd Penang International Conference on Economics, Society and Technology (PICEST2020), Kuala Lumpur
Tempat	:	Secara Daring / Online
Waktu	:	28 November 2020
Keterangan	:	Harap melaksanakan tugas dengan baik dan penuh tanggung jawab, serta memberikan laporan setelah melaksanakan tugas.

Semarang, 28 November 2020
Dekan,

DRS. THEODORUS SUDIMIN, MS
NPP : 058.1.1990.074

Telah melaksanakan tugas
Mengetahui,

( )



CERTIFICATE OF PARTICIPATION

This certificate is presented to

ANGELINA IKA RAHUTAMI

as

PRESENTER

for paper entitled

THE IMPACT OF ECONOMIC OPENNESS AND GROWTH ON POVERTY ALLEVIATION IN INDONESIA

at the

2nd Penang International Conference on Economics, Society and Technology (PICEST2020)

Kuala Lumpur, MALAYSIA
28 November 2020

Ts. Dr. Zahari Abu Bakar
Chairman

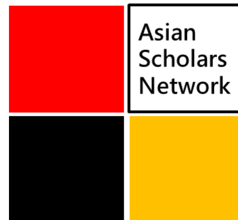
Conference Proceeding

Penang, Malaysia

28 November 2020

eISBN: 978-967-2476-03-0

2nd Penang International Conference on Economics, Society and Technology (PICEST2020)



Copyright © 2020
Asian Scholars Network

All rights reserved. No part of this proceeding may be reproduced in any form, except for the inclusion of brief quotations in review, without permission in writing from the author / publisher.

eISBN: 978-967-2476-03-0

Table of Contents

1) **Applying Servant Leadership Approach And Influence To Overcome Problematic Personnel At The Workplace 1**
2) **Blockchain Secure Biometric Access Systems (BSBAS) 11**
3) **Covid 19 - How To Drive Teams to Sustain Performance In Virtual Working Environment Through Authentic Leadership in Tenaga Nasional Berhad: Literature Survey 18**
4) **COVID-19 and Movement Control Order (MCO): Literature Study on Measuring the Effectiveness of Team Leadership Approach in Tenaga Nasional Berhad 26**
5) **Culture and Leadership: Challenges and Consequences for Leader Attributes Fronting Pandemic 40**
6) **Effectiveness of Product Placement 50**
7) **Effects of Late Payments to Small Contractors in Malaysia 54**
8) **Study on the Impact of Heavy Metals Towards Sediment and Water Quality at Marin Lake 73**
9) **Identification of Mangrove Area using Landsat Image In Kuala Selangor Nature Park 81**
10) **Influences Of Women's Leadership Performance Towards The Corporate, Political And Social Success: A Review And Research Agenda 90**
11) **Integration MOOC-Based Learning: Student's Activities and Experiences at Higher Education 105**
12) **Leadership Theories in COVID-19 Outbreak Management 113**
13) **Low Morality among Employee Due To Pandemic Covid-19 and Leadership Challenge: A Literature Survey 121**
14) **Modified Intellectual Capital and Firm Performance Bank in Indonesia 134**
15) **Ownership Concentration and Firm Value: A Case of Indonesian Banking 143**
16) **Pre-Treatment of Waste Cooking Oil using Continuous Microwave-Assisted Glycerolysis Reaction 152**
17) **Situational Approach: Training Package For Talent Entrepreneur Development During Pandemic 161**
18) **Study On Attitude In Affecting Student Achievements On Pneumatic & Hydraulic Courses (DJJ5123) At Polytechnic Kota Bharu 172**
19) **The Contribution Factor of CSR Expenditure Reflects in Future Sustainability 177**
20) **The Impact of Economic Openness and Growth on Poverty Alleviation in Indonesia 189**
21) **The Role of Personality Traits On Cyber Entrepreneurial Intention: Entrepreneurial Drive As A Mediator 199**
22) **The Use of Technology for Motivating EFL Students in the 21st Century 206**
23) **Aplikasi Teori Pengkaedahan Melayu Dalam Kumpulan Cerpen Melamar Rindu Oleh Osman Ayob Melalui Dakwah Islamiah 212**

24) **Medium Pembelajaran Sokongan: Kesediaan Pelajar Diploma Pengurusan Logistik Dan Rangkaian Bekalan Terhadap Penggunaan Aplikasi iHUB...........................225**

25) **Pembelajaran Atas Talian: Tinjauan Terhadap Kesediaan Dan Motivasi Dalam Kalangan Pelajar Diploma Logistik Dan Pengurusan Rantaian Bekalan, Politeknik Seberang Perai, Pulau Pinang 241**

PICEST

2nd Penang International Conference on Economics, Society and Technology (PICEST2020)
eISBN: 978-967-2476-03-0
Penang, Malaysia

The Impact of Economic Openness and Growth on Poverty Alleviation in Indonesia

Angelina Ika Rahutami

Faculty of Economics and Business, Soegijapranata Catholic University, Semarang, Indonesia

*Corresponding Author: ika@unika.ac.id

Abstract: *Poverty is a concern for almost all countries, including Indonesia. Many poverty reduction policies have been implemented and have brought significant results for poverty reduction. Another approach to poverty reduction is through the effects of economic openness and economic growth. This study uses secondary data from 2000-2018 with an Error Correction Model of regression. This study aims to describe the conditions of economic openness and poverty in Indonesia and analyze how economic openness and growth contribute to poverty reduction. The study results show that foreign direct investment inflow does not significantly impact poverty because it may not provide employment suitable for the conditions of poor families. In the short and long term, international trade and economic growth are crucial factors in poverty reduction. The study results also show that government policies are the primary key to reducing poverty.*

Keywords: Poverty alleviation, economic openness, government role, Error Correction Model

---

1. Introduction

Poverty is a big problem for developing countries like Indonesia. The Indonesian government tries to reduce poverty through many policies and strategies. Apart from the various poverty reduction strategies commonly used, one interesting approach to poverty reduction is economic openness. The economic openness approach in reducing poverty is indeed indirect. Several previous studies have shown that economic openness will have a significant impact on poverty reduction. Another alternative approach to poverty alleviation strategies is economic openness. Economic openness will encourage economic growth, which would increase public welfare and is finally believed to reduce poverty.

Ames et.al. (2002) and Ravallion (1997) found a negative correlation between economic growth and poverty, but the growth alone is insufficient for poverty reduction. Theoretically, the openness of the economy is believed to reduce poverty, although empirically, results are ambiguous. Economic openness can be seen from the magnitude of the flow of goods and the flow of capital entering and exiting in a country or indicated through trade and investment. The trade can affect poverty through several channels, notably through macroeconomic and microeconomic mechanisms.

Some previous studies show that economic openness has a significant influence on poverty reduction. Some researchers explain that the relationship is significant but is indirect and partly shows a different magnitude of the short-run and long-run impact of economic openness poverty reduction.

Indonesia experiences the challenges of openness and globalization. The Gross Domestic Product Indonesia experienced good growth. However, in the first quarter of 2020, Indonesia's year on year growth eased to 2.97 percent, below the government target of 4.04 percent (Statistics Indonesia, 2019). This condition is the weakest pace since 2001. Household consumption is the main factor of Indonesian economic growth. Based on the sectoral data, the industry has an enormous contribution to GDP. The most important is manufacturing, which has been contributing 24 percent of the total GDP within the industry. Since 2000, Indonesia has been recording consistent trade surpluses due to robust export growth. However, from 2012 to 2014, Indonesia started recording trade deficits, as exports shrank due to the global economic crisis. After that crisis, the trade balance was getting better, and recording the surplus trade balance.

On the other hand, even though it has a good track record on poverty alleviation strategies, Indonesia still experiences income disparity and poverty in urban and rural areas. As of 2019, Indonesia's poverty rate stood at 9.4 percent of the total population, lower than 2018 (9.66 percent). This data means that around 25 million people live below the poverty line (Statistics Indonesia, 2019). Poverty remains an ingrained problem in Indonesia despite its success in cutting its poverty rate to a single-digit level in 2018.
Based on the background, this study proposes economic openness as an essential policy option to reduce poverty through economic growth. The research objectives are:

- to describe the condition of poverty and economic openness in Indonesia
- to analyze how economic openness and growth in Indonesia have contributed to its poverty reduction.

Because previous research shows differences in long-run and short-run effects, this study applies the Johansen Co-integration approach for the long run and the standard Error Correction Method (ECM) for the short run. This study's practical contribution shows the current condition of the relationship between economic growth, openness, and poverty, based on time-series data. It will fill the gap of empirical studies that depend on cross-section regression analysis. The result has an important policy implication and lesson learned for Indonesia.

2. Literature Review

There are various definitions of poverty - from the simplest indicators to more complex and comprehensive indicators. In general, households' purchasing power per capita or expenditure in expenditure quintiles is a measurement of poverty. These monetary indicators of poverty used the amount of household income or consumption. According to this definition, people are categorized as poor if and only if they do not have sufficient income to meet a certain welfare level.

The World Bank (2000) measures poverty lines based on one's income. Someone who has an income of less than USD 1 per day is categorized as poor. If their income or consumption does not exceed the defined poverty line, they are said to be poor. Ames et.al. (2002), UNDP (2000), and BAPPENAS (2002) state that poverty is a situation where a person has no income to meet his daily needs (especially food) and without the ability to support basic human needs for a sustainable life.

Thus, poverty is a multidimensional problem: an economic problem and a social, political, and cultural problem.

The relationship between poverty, economic openness, and economic growth is an impressive thing to discuss. Two arguments show a strong correlation between economic growth and poverty reduction. First, Economic growth is significant, so only targeted policies to increase growth can reduce poverty. Second, only policies that succeed in reducing poverty can produce higher aggregate growth (Rodrik, 2000).

The poor's income growth is strongly correlated with economic growth, although the relationship will vary in each country depending on government policies and social and economic conditions (Hoekman, 2017). On the other hand, a critical economic policy element is trade openness. The openness of trade is a necessary step towards achieving poverty reduction because openness promotes the efficient allocation of resources through comparative advantage, allows the dissemination of knowledge and technological progress, and encourages competition in domestic and international markets (McCulloch, Winters & Cirera, 2001; Hoekman, 2017, pp. 33-34; Chang, Kaltani, & Loayza, 2009). Trade liberalization can reduce poverty because it will increase the average income and provide more resources to tackle poverty (McCulloch, Winters, & Cirera, 2001; Hoekman, 2017).

Theoretically, trade can influence poverty reduction through two paths: macroeconomics and microeconomics (Brambila & Porto, 2017). In macroeconomics, trade affects economic growth and will be beneficial to the poor. While in microeconomics, trade affects poverty through the impact on household behavior. Trade liberalization changes prices. This price change will affect consumption decisions. Higher prices reduce real spending, while lower prices increase it.

Previous studies on the relationship between economic growth, economic openness, and poverty reduction showed mixed results and had no general relationship since the impact on poverty. The impact of openness on poverty depends on the structure of poverty (Hertel et.al., 2003), the structure of trade (Harrisson, 2007), and the poverty policy (Aksoy & Beghin, 2005; Anderson & Martin, 2005; Bhagwati & Srinivasan, 2002; Dollar & Kraay, 2002). Several studies show that trade makes a crucial contribution to poverty reduction.

Developing countries need to integrate into international markets is also very important to end poverty and not leave anyone behind. Previous research found that trade and economic openness play an important role in reducing poverty due to increased transfer of knowledge and technology, ultimately creating employment opportunities. Higher foreign direct investment will impact technology in new business practices and domestic companies to increase productivity, encourage economic growth, and ultimately reduce poverty (Ferreira & Rosi, 2001; UNCTAD, 2013). In contrast to other findings, several studies have not shown a significant positive correlation between economic openness and poverty (UNCTAD, 2013; Rodrik, 2000). Akmal et.al. (2007) found that the process of trade liberalization in Pakistan did not have a significant impact on poverty.

3. Methodology

This paper is a quantitative descriptive study. This study used secondary data from 2000-2018 to see the effect of growth and economic openness in reducing poverty. Secondary data used is sourced from the Indonesian Statistics Agency. The variables used in the study are (i) poverty Headcount index, (ii) Gross Domestic Product, (iii) Trade openness is measured by net export divided by GDP (NX/Y), (iv) Foreign direct investment is measured by ratio outward FDI to GDP (FDIo/Y) and ratio inward FDI to GDP (FDIi/Y), (v) Government expenditure to GDP, and (vi) Gini Coefficient.

The model is estimated by the Error Correction Model (ECM) and developed from Tsai & Huang's (2007) and Pozveh (2010) papers. The equation is:

$$Poverty=f(GDP,X/GDP,M/GDP,FDI/GDP,G,Gini) \quad \ldots 1)$$

$$Poverty= \alpha_0+\alpha_1 GDP+\alpha_2 X/GDP+ \alpha_3 M/GDP+ \alpha_4 (FDI\ i)/GDP+ \alpha_5 G+\alpha_6 Gini+e_t \quad \ldots 2)$$

When the data are co-integrated, there is a long-run relationship between variables. So the ECM can be formulated as

$$\Delta poverty= \alpha_0+\alpha_1 \Delta GDP+\alpha_2 \Delta X/GDP+ \alpha_3 \Delta M/GDP+ \alpha_4 \Delta (FDI\ i)/GDP+ \alpha_5 \Delta G+\alpha_6 \Delta Gini+\alpha_8 [EC]_{(t-1)}+e_t \quad \ldots 3)$$

$$ECT=(Poverty-\beta_0-\beta_1 GDP-\beta_2 X/GDP-\beta_3 M/GDP-\beta_4 (FDI\ i)/GDP-\beta_5 G-\beta_6 Gini \quad \ldots 4)$$

In this case, coefficient α_i is a short-run coefficient while is the β_i long-run coefficient. OLS's coefficient shows the short-run effect, while in the ECM model, it shows the long-run effect. ECT shows the adjustment process towards the equilibrium point.

The hypothesis is the export, FDI, and economic growth is generally conducive to poverty reduction in the short run and long run. Import has a negative impact on poverty in the long run. After all, the import can jeopardize job creation, but not in the short run because import can reduce price levels. Inflation and the Gini coefficient has a negative effect on poverty.

4. Discussion and Result

Indonesia Economic Openness Condition

Indonesia's trade balance from year to year marks the Indonesian economy's openness. As an activity prone to world economic shocks, the value of Indonesia's exports and imports also experienced a decline in performance in the years when the global monetary and crisis occurred. Export performance declined significantly in 2009 when the global crisis was more significant than the 1998/1999 monetary crisis.

The growth of export and import fluctuate on a similar pattern. When export increases, so does an import. In 2013, exports fell by 3 percent while imports fell by 4 percent. In the following two years, the decline in imports was much sharper than the decline in exports. In 2017, Indonesia's exports increased by 16.2 percent, while imports increased by 15.6 percent. This increase still occurred in 2018 and 2019 at a smaller percentage. Indonesia's trade balance experienced a deficit in 2012, 2013, 2014, and 2018. The deficit trade balance in 2018 was -8.75 billion USD due to the vast growth of imports.

Table 1: Indonesia Trade Balance 2000-2019

Year	Trade balance (billion USD)	Growth of Export (%)	Growth of import (%)
2000	28.60	27.65	39.62
2001	25.35	-9.34	-7.61
2002	25.87	1.48	1.05
2003	28.50	6.82	4.03
2004	25.06	17.24	42.92
2005	27.95	19.66	24.02
2006	39.73	17.67	5.83
2007	39.62	13.19	21.95
2008	7.82	20.08	73.48
2009	19.68	-14.96	-25.05
2010	22.11	35.42	40.10
2011	26.06	28.97	30.79
2012	-1.66	-6.62	8.03
2013	-4.07	-3.93	-2.64
2014	-2.19	-3.60	-4.52
2015	7.67	-14.55	-19.91
2016	9.53	-3.44	-4.93
2017	11.83	16.21	15.65
2018	-8.57	6.71	20.22
2019	3.50	-6.78	-8.85

Source: Indonesian Statistics

On the other hand, in general, the value of FDI entering Indonesia tends to fluctuate. Similar to Indonesia's trade activities, the value of FDI also suffered from the monetary crisis of 1998/1999 and the global crisis of 2008/2009. Before the crisis, namely the period 1990-1997, the value of FDI in Indonesia reached the highest value in 1996 with a total FDI of USD 6,194 million. In the period 1995-1997, the value of FDI in Indonesia reached over USD 4 billion. The increasing interest of foreign investors to invest in Indonesia cause the FDI to increase. The increase in interest was allegedly related to Government Regulation No. 20/1994 imposed by the government on foreign investment in Indonesia during this period. This statistic shows the value of foreign direct investment (FDI) net inflows in 2019 amounted to approximately 23.56 billion US dollars.

Indonesia Poverty Condition

This article used the word bank indicator to measure poverty, namely, the poverty gap and the Headcount index. Based on World Bank (2000) indicator, there are four categories of poverty gap (i) Poverty gap at $1.90 a day, (ii) Poverty gap at $3.20 a day, (iii) Poverty gap at $5.50 a day, and (iv) Poverty gap at national poverty lines.

Table 2: Indonesia Poverty Gap (%)

Year	Poverty gap at $1.90 a day (2011 PPP) (%)	Poverty gap at $3.20 a day (2011 PPP) (%)	Poverty gap at $5.50 a day (2011 PPP) (%)	Poverty gap at national poverty lines (%)
2000	9.1	31.1	55.9	
2001	7.7	29.0	54.0	
2002	4.2	21.2	46.0	
2003	4.3	20.7	44.9	3.1
2004	5.2	21.5	45.5	3.0
2005	4.3	19.8	43.8	2.9
2006	6.3	23.4	47.1	3.7
2007	4.7	19.9	42.6	5.1
2008	4.3	18.8	41.7	2.8
2009	3.5	17.4	40.3	2.5
2010	2.9	15.1	36.0	2.2
2011	2.3	13.7	33.8	2.1
2012	1.9	12.7	32.8	1.9
2013	1.4	11.3	30.8	1.8
2014	1.2	10.2	29.0	1.8
2015	1.2	9.0	27.0	1.8
2016	1.0	8.3	24.7	1.8
2017	0.9	7.1	22.7	1.8

Source: World Bank

Table 2 shows in 2017, the poverty gap at $1.90 a day (2011 PPP) is already below 1 percent. This condition shows that the most profound poverty is getting lower. On the Poverty gap at $3.20 a day (2011 PPP), Indonesia's poor is still about 7 percent in 2017. On the Poverty gap at $5.50 a day (2011 PPP), decreasing in poverty decreased significantly since 2000. In 2000 around 50% of Indonesian people were still in this category, but in 2017 there was only 22.7 percent. This condition shows the efforts of the Indonesian government to reduce poverty successfully.

Table 3: Indonesia Poverty headcount ratio (%)

Year	Poverty headcount ratio at $1.90 a day (2011 PPP) (% of the population)	Poverty headcount ratio at $3.20 a day (2011 PPP) (% of the population)	Poverty headcount ratio at $5.50 a day (2011 PPP) (% of the population)	Poverty headcount ratio at national poverty lines (% of the population)
2000	39.3	79.9	95.7	18.9
2001	35.5	77.6	94.8	18.4
2002	23.0	65.2	89.7	18.2
2003	22.6	62.7	88.6	17.4
2004	23.9	63.0	88.6	16.7
2005	21.1	61.3	87.5	16.0
2006	27.4	65.7	89.3	17.8
2007	22.5	58.5	84.8	16.6
2008	21.4	56.6	84.6	15.4

Year	Poverty headcount ratio at $1.90 a day (2011 PPP) (% of the population)	Poverty headcount ratio at $3.20 a day (2011 PPP) (% of the population)	Poverty headcount ratio at $5.50 a day (2011 PPP) (% of the population)	Poverty headcount ratio at national poverty lines (% of the population)
2009	18.2	54.7	83.7	14.2
2010	15.7	48.1	77.8	13.3
2011	13.3	45.0	74.4	12.5
2012	11.7	43.5	73.6	12.0
2013	9.4	40.7	71.0	11.4
2014	7.9	37.8	69.0	11.3
2015	7.2	33.1	67.0	11.2
2016	6.5	30.9	62.3	10.9
2017	5.7	27.2	58.6	10.6
2018	4.6	21.5	73.9	9.6

Source: World Bank

Another poverty criterion used is the poverty headcount ratio, which is a percentage of the population. Table 3 shows that the poverty headcount ratio at $ 1.90 a day, $ 3.20 a day, $ 5.50 a day, and the national poverty line tends to decrease yearly. This data indicates that poverty in Indonesia is decreasing over time. In 2017, the poverty headcount ratio at the national poverty line had reached 10.6 percent, much smaller than in 2000, 18.9 percent.

Indonesia is a successful example of government intervention in reducing poverty despite running a relatively slow decline. Formulation of development policies in Indonesia itself is influenced by the world's thoughts such as growth strategy, growth distribution, Appropriate technology, basic need development, sustainable development, or empowerment.

Regression Result Discussion

This paper uses the ECM regression method to analyze how Indonesia's economic openness and growth have contributed to its poverty reduction. The ECM regression requires DF and ADF tests at the level and first difference. The DF and ADF test results in table 4 show that all variables co-integrate at the first difference level so that this study can use the ECM model.

Table 4: DF and ADF test result

Variable	Level		First difference	
	DF	ADF	DF	ADF
export_idn	-0.9816	-1.5527	-3.5168	-3.4610
fdii_idn	-0.5190	-1.4263	-1.4263	-2.8791
g_idn	-1.3252	-2.0853	-2.0358	-2.0294
gdp_idn	-5.0192	-2.1174	-4.0850	-3.9279
gini_idn	-1.1915	-0.9416	-3.4224	-3.4996
import_idn	-0.7712	-1.8368	-3.7492	-3.6220
poverty_idn	-0.7621	-2.0160	-4.1529	-4.0255

Source: data processed

Because the data are co-integrated, it can do short-term and long-term regression. Regression results show that there are only two significant variables in the short run, namely exports/GDP and imports/GDP. If the ratio of exports to GDP rises by 1 percent, poverty will increase by 0.8 percent. The increase in exports (while GDP is constant) or a decrease in GDP (while exports constant) caused the increase of export/GDP. In the case of Indonesia, the proportion of the increase in exports on average is small. Indonesia's export growth tends to be stagnant. So, the increase in this ratio is more due to a decrease in GDP. GDP depicts welfare, so if GDP falls, on average, it will drive poverty to increase. Besides, because Indonesia's index competitiveness is relatively low, exports are usually driven by depreciation. When a currency weakens, poverty on average will also increase.

On the other hand, an increase in the ratio of imports to GDP would reduce poverty by 0.47 percent. This situation is because the increase in imports indicates an increasing purchasing power. The increase in purchasing power is in line with the poverty reduction. In the long run, the export/GDP variable no longer has a significant effect. While imports/GDP still have a significant effect. An increase in the import/GDP ratio by 1 percent will reduce poverty by 0.18 percent.

Another indicator of economic openness, namely FDI, does not significantly affect poverty reduction in Indonesia. This finding is likely because the incoming investment did not provide new employment for workers from low-income families. FDI entering Indonesia, on average, brings new technology that requires skilled labor. Low-income families, as we know, are usually trapped in vicious circles. Low-income families do not have access to education, so it will be difficult to enter employment, which results from FDI.

Table 5: Regression Result

Variable	OLS		ECM	
	Coefficient	t-statistic	Coefficient	t-statistic
C	2.516950	1.109529	-0.041151	-2.498640
LOG(GDP_IDN)	-0.165485	-0.444442	-0.188710	-1.163019
LOG(EXPORT_IDN/GDP_IDN)	0.801912*	2.599182	0.200552	1.311182
LOG(IMPORT_IDN/GDP_IDN)	-0.475369*	-2.216585	-0.183318*	-1.946742
LOG(FDII_IDN/GDP_IDN)	-0.009128	-0.152771	-0.004316	-0.154955
LOG(G_IDN)	0.175444	0.576958	0.305276*	2.200356
LOG(GINI_IDN)	-0.744054	-1.131384	-0.180053	-0.500366
ECT(-1)			-0.558594*	-3.167687

Source: data processed

In the long run, the role of government is significant. The significant coefficient of government expenditure indicates this condition. Increase government spending by 1 percent will reduce poverty by 0.3 percent in the long run. This result shows that the government has a massive role in reducing poverty. In general, the government's effort to reduce poverty was successful, although it has not suppressed it to under 5 percent.

From the policy side, the Indonesian government has created various programs to reduce poverty and provide social security for low-income families. The Government of Indonesia has

implemented various programs in efforts to reduce poverty. These programs purpose to meet basic needs, improve socio-economic conditions, and improve poor families' welfare. There are three clusters of Indonesian poverty programs.

1. Cluster I is an Integrated family-based social assistance program. This program provides social assistance and protection to meet basic human needs. This program guarantees that everyone has access to food, health services, and education.
2. Cluster II is Community development poverty alleviation programs. This program aims to empower communities to use their potential and resources to get out of poverty and take a broader role in their area. This program is group-based community empowerment.
3. Cluster III is a micro-enterprise, empowerment poverty alleviation program. The program aims to support micro and small enterprises through financial access, business and management training, and entrepreneur counseling.

Based on the regression results, it appears that FDI is not a factor that drives poverty reduction. International trade is a more dominant factor compared to foreign investment. The role of export and import factors are critical factors in this model. This study shows that the GDP element as a numerator in the international trade ratio has a more substantial effect. Thus, exports must be pushed towards creating value-added income for poor families.

5. Conclusion

Indonesia's economic openness is evident from the sound trade balance and net foreign capital inflows. This economic openness encourages stable and robust economic growth. A significant result in this study is that FDI, both in the short and long term, is not a factor that reduces poverty. This finding shows that the incoming FDI does not create enough employment opportunities for low-income families. Net foreign capital inflow tends to bring in new technology that requires an educated workforce, even though most of the poor families are families with low education.

The regression results show that in the short-term openness of the economy with the indicator of the ratio of exports and imports to GDP has a significant effect on poverty reduction. Because the proportion of Indonesia's exports is relatively small, this condition also shows that a decrease in GDP or welfare will encourage poverty to rise. Moreover, because the Indonesian products' competitiveness index is relatively small, depreciation is suspected of raising poverty. This finding shows that the government needs to safeguard people's welfare and the rupiah exchange rate to provide more stable conditions for poverty reduction programs.

In the long run, the ratio of imports to GDP and government spending has a significant impact. As reflected in government spending, the government's role in poverty reduction is the primary strategy for reducing poverty. The four poverty reduction programs: (i) enhancing and developing social protection programs, (ii) increasing access to basic services, (iii) empowering the poor, and (iv) prioritizing inclusive development are appropriate policies and strategies. The poverty reduction program could not be a burden to the government only. The support of all stakeholders will optimize the impact of the poverty alleviation program.

References

_________, BAPPENAS (2002)
_________, Statistics Indonesia (2019)
_________, UNCTAD (2013)
_________, UNDP (2000)
_________, World Bank (2000). World Development Report. New York

Akmal, MS., Ahmad, QM., Ahmad, MH., & Butt, MS. (2007). An empirical investigation of the relationship between trade liberalization and poverty reduction: a case for Pakistan. The Lahore Journal of Economics 12: 1 (Summer 2007) p. 99-118

Aksoy, M.A., & Beghin, J.C. (2005). Global agricultural trade and developing countries. The World Bank. Washington DC.

Ames et.al. (2002). Macroeconomic issues. a sourcebook for poverty reduction strategies. World Bank

Anderson, K., & Martin, W. (2005). Agricultural trade reform and the Doha development agenda. The World Economy. Volume 28, issue 9, p. 1301-1327

Bhagwati, J., & Srinivasan, T. N. (2002). Trade and poverty in poor countries. American Economic Review Papers and Proceedings, 92(2), 180-183

Brambila, I, & Porto, G. (2017). Trade and poverty reduction, in Win-Win: How International Trade Can Help Meet the Sustainable Development Goals. p 61-87

Chang, R., Kaltani, L., & Loayza, N. (2009). Openness can be good for growth: The role of policy complementarities. Journal of Development Economics 90 (2009) 33–49

Dollar, D. & Kraay, A. (2002). Growth is good for the poor. Journal of Economic Growth, 7(3), 195-225.

Ferriera, PC. & Rossi, L. (2001). New evidence on trade liberalisation and productivity growth. Ensaios Economicos da EPGE 433

Harrisson, A. (2007). Globalization and poverty, an introduction. The University of Chicago Press, Chicago

Hertel, T.W., M. Ivanic, P.V. Preckel, & Cranfield. (2003). Trade liberalization and the structure of poverty in developing countries, paper prepared for the Conference on Globalization, Agricultural Development and Rural Livelihoods, Cornell University, Ithaca, 11-12 April.

Hoekman, B. (2017). Trade and the post-2015 development agenda, in Win-Win: How International Trade Can Help Meet the Sustainable Development Goals, p 32-60

McCulloch, N. Winters, A. & Cirera, X. (2001). Trade Liberalization and Poverty: A Handbook. Centre for Economic Policy Research Handbook.

Pozveh, S.H.H. (2010). Trade and Poverty: The case of Iran. Master Thesis, Spring 2010 School of Economics and Management Lund University

Ravallion, M. (1997). Can high-inequality developing countries escape absolute poverty? Policy Research Working Paper 1775. World Bank, Washington, DC.

Rodrik, D. (2000). 'Trade policy reform as institutional reform', mimeo, Harvard University.

Tsai, PL, & Huang, CH. (2007). Openness, growth, and poverty: The case of Taiwan. World Development, 35(11), 1858-1871.