TRADE LIBERALIZATION AND ECONOMIC GROWTH: PANEL DATA ANALYSIS IN THE SHORT AND LONG TERM

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Abstract. The debate over trade liberalization decisions for a country continues. This study aims to provide insight into trade liberalization decision making. This study analyzes the effect of trade liberalization on economic growth, both in the short and long term. The data used is panel data in 216 countries in the world from 1960 to 2020. Using the Generalized Method of Moment for Dynamic Panel Data, it was found that trade liberalization has a positive and significant effect on economic growth after controlling for variables of human condition and capital, both in the long term and in the long term. short or long term. Based on these results, it can be concluded that trade liberalization can be used as a source of economic growth for a country, both in the short and long term.

Keywords: economic growth, trade liberalization, GMM-DPD

INTRODUCTION

High and sustainable economic growth is one of the macroeconomic indicators coveted by every country in the world. High economic growth can provide good spillover for other macro indicators. High economic growth reflects the country's increasing productivity level. Therefore, more and more input factors will be needed, including labor to meet the production capacity. With more and more workers being absorbed, the unemployment rate will decrease (Okun, 1962).

Currently, several countries have passed the golden age of economic growth. So that the country is starting to find it difficult to maintain its economic growth or experience stagnation (Hansen, 2018). So it is necessary to search for new sources of economic growth as an effort so that the country can continue to grow. International trade can be used as an alternative source of economic growth for a country.

International trade can be used as an instrument to boost a country's economic growth, as the Export Led Growth hypothesis (Diebold and Krueger, 1979). International trade can provide benefits that cannot be obtained if the country does not do so. When a country conducts international trade, that country can increase the capacity of its production scale which makes the country more productive. Until finally the country's economic growth has increased.

As evidence of this, it can be seen that several developing countries have enjoyed soaring economic growth thanks to trade liberalization. Call them India, China, South Korea, Taiwan, Hong Kong, and Singapore (Krugman, Obstfeld and Melitz, 2005). After lowering the tariff level, which shows that the more liberal the



country is in conducting international trade, the economic growth in these countries tends to increase.

By conducting international trade there will be a normalization of prices. Price differences in various countries will experience a price equalization factor or the price equalization of goods and their input factors after international trade (Samuelson, 1948). Countries that have a high level of prices on certain goods will experience a decline along with the entry of goods from abroad. With a fixed amount of demand but on the supply side there is an increase it will have implications for the decline in the price of these goods. Of course this is what consumers expect. So that indirectly the purchasing power of consumers will increase as a representation of their level of welfare.

In addition, international trade also presents a tendency for producers to continue to innovate (Posner, 1961). The more producers, the tighter the competition in the goods market. This condition will encourage producers to innovate more so as not to lose to compete with other producers. This is the consequence of international trade, producers who are not able to innovate in the sense of not being able to attract consumers, then they will be kicked out in a competitive market.

Apart from the large potential benefits that can be obtained from trade liberalization, there are also various disadvantages that can be generated. The argument to protect domestic producers is often used as a counter argument to this policy. Developing countries have difficulty competing with producers from developed countries. In terms of costs, producers in developing countries still find it difficult to reduce costs, while developed countries are able to produce products at lower costs. In terms of innovation, developed countries are able to diversify products while developing countries are relatively less able to do this. Considering this difficulty in competing, developing countries protect their domestic producers by further tightening trade liberalization (Kinzius et al., 2019)

International trade with the Absolute Advantage and Comparative Advantage models requires a country to specialize in products that can be produced more efficiently than other countries. This will lead to inequality between sectors in the country. When a country specializes in a particular sector, that sector will skyrocket while other sectors are not given much attention in that country (Helpman et al., 2017). Various other arguments that can be considered in order to tighten trade liberalization are to reduce the trade balance deficit and increase government revenues. By tightening trade liberalization, these countries will reduce dependence on supplies from abroad so that not much foreign exchange needs to be spent to pay for these supplies. So that the trade balance deficit can be reduced. In addition, tightening trade liberalization by imposing barriers in the form of tariffs. If the government imposes a tariff on each imported good, it means that the government will earn income from the imposition of the tariff.

It is suspected that trade liberalization has a positive effect on economic growth, as in international trade theory. The Solow Growth model focuses on human and capital factors as determinants of a country's economic growth (Solow, 1956). So



in this study it is necessary to control by including these two factors into the model. Human condition variables which include population growth participation and life expectancy are thought to have a negative and positive effect on economic growth, respectively. The variables of capital conditions which include capital formation and foreign direct investment have a positive effect on economic growth (Foster, 2008; Anh D. Khan et al., 2015; Yusoff and Noah, 2015; Huchet-Bourdon et al., 2018).

The main objective of this research is to answer the question of whether trade liberalization encourages the economic growth of countries in the world. Specifically, this study will analyze how the impact of trade liberalization on economic growth in high, middle and low income countries, both in the short and long term.

This study presents a more comprehensive analysis involving all countries in the world and a long time span. In addition, this research is more up to date because it presents the latest data in its analysis. No less important is this study analyzing the impact of trade liberalization on economic growth in developing and developed countries

LITERATURE

International Trade Theory

According to the theory of absolute advantage, international trade can occur when each country has an absolute advantage (produces more) in producing a good compared to other countries. Then the theory was developed more through the theory of comparative advantage (comparative advantage). The theory reveals that even though a country does not have an absolute advantage in producing an item, international trade can still be carried out when a country is able to be more efficient in producing an item. Based on these two theories, a country should specialize by producing goods that have an absolute or comparative advantage and then exchange them for other goods that are less efficient if produced domestically. From the exchange of goods between countries, the two countries will gain from trade.

Both theories are categorized as classical theories, where both theories only focus on the supply side of a country. This classical theory was later developed in Neo Classical theory, in which the demand side is also involved in determining the decision to conduct international trade. Similar to classical theory, this theory states that countries will benefit from international trade. The gain from trade (gain from trade) is obtained when the country specializes in goods that can be produced more efficiently than other countries, then these goods are exchanged for goods that are less efficient if produced by the country itself. The gain from specialization is called the income effect and the gain from the exchange is called the substitution effect.

Furthermore, Classical and Neo Classical theories were developed through the Hecksher-Ohlin theory. In contrast to previous theories, this theory assumes that there are factors of production other than labor, namely capital. This theory states that differences in the abundance of resources owned by countries are the reason for

international trade. A country that is relatively abundant in labor factors will be more efficient when producing labor goods and similarly when a country that is relatively abundant in capital will be more efficient when producing capital intensive goods. Through international trade, the difference in the price of goods between countries will be normalized and from there the gain from trade will be obtained.

Barriers to International Trade

Behind the benefits derived from international trade, there is a difference in the amount of profits that a country gets. So for countries that get lower profits, it presents a tendency to carry out trade barriers. Apart from these considerations, there are other considerations that make countries apply barriers to international trade such as protecting domestic industries, reducing trade balance deficits, increasing government revenues, and eliminating market failures such as unemployment.

Various types of trade barriers that can be carried out by the state, both in the form of tariffs and non-tariffs. Import tariffs are one type of trade barrier that is commonly used by various countries. Currently, all countries apply tariffs on each imported goods, because of the existence of import tariffs which are believed to be able to maximize a country's profits. The difference between the price before and after the imposition of the tariff is the government's profit. Other obstacles can be in the form of import quotas, namely limiting the quantity of a country's imports, Voluntary Export Restraint, in which a country limits the number of export goods so that the export price of these goods is expensive because the availability of supply in the world is limited, Local Content Agreement, which requires the presence of a portion of imported goods that sourced from the importing country in the process of producing the goods.

Empirical Overview

Dao Anh Tung (2014), Khan Jadoon et al. (2015) and Modeste (2016) examined the relationship between trade liberalization and economic growth. Their results show that there is a significant positive relationship between trade liberalization and economic growth. This result implies that countries that have not fully opened their economies can start opening their economies to pursue potential economic growth through international trade. Supporting these findings, Tahir and Hayat's (2020) research for a case study in Brunei Darussalam shows that economic growth can be boosted through trade openness. In addition to trade, service liberalization also has a positive impact on per capita income for both low-income and high-income countries (Briggs and Sheehan, 2018). Even trade between regions can affect economic growth (Okoro et al., 2020)

Research with the same objectives as previously conducted by Foster (2008), Kwanga (2015), and Huchet-Bourdon et al. (2018). However, their findings were different. It was found that there is a relationship with a non-linear pattern between trade liberalization and economic growth. In the short term, trade liberalization has a



negative effect on economic growth and has a positive effect in the long term. The findings of Rakshit (2021) show that trade openness has a negative impact on economic growth. Furthermore, the effect of trade openness on economic growth varies, depending on the type of sector. Trade openness has a positive effect on the agricultural and industrial sectors while the service sector has a negative effect (Tahir et al, 2019).

METHODOLOGY

This study uses panel data, which is a combination of cross-sectional data in 216 countries (79 high-income countries and 137 middle- and low-income countries) and time series data from 1960 to 2020. The study includes short-term and long-term analysis (5 years aggregation). The data sources for this research are from the World Bank in its publication in the World Development Indicators. Due to data limitations, the panel data used in this study is unbalanced. So that in the estimation process there are several observations that are discredited in the analysis.

The data analysis method used in this research is the Generalized Method of Moments for Dynamic Panel Data. The consideration in using this method is that the variables used in the study are macro-level data, so there is a high potential for violations of the strict exogenity assumption. This method can anticipate the problem of endogeneity that can bias the research results. Another advantage of this method is that no external instrument is needed to overcome the endogeneity problem (Arellano and Bover, 1995; Blundell and Bond, 2000).

The variables involved in this study are economic growth as the dependent variable, trade liberalization as an interest variable and several control variables such as the human condition (population growth and life expectancy) and capital conditions (capital formation and foreign direct investment). Population growth is proxied by the percentage of population growth, life expectancy is proxied by the life expectancy of a baby at birth, capital formation is proxied by the ratio of investment to GDP, and foreign direct investment is proxied by the ratio of foreign direct investment to GDP. The operational definition of each variable can be seen in Table 1 below.

Table 1. Operational Definition of Each Variable

Variable	code	Operational definition	Data Used
Economic Growth	g	Percentage of annual GDP growth at constant U.S. prices Dollars in 2010 in their respective currencies	GDP growth (annual %)
Trade Liberalization	tl	Contribution of total exports and imports of goods and services to GDP	Trade (% of GDP)

Population growth	pg	Percentage of population growth	Population growth (annual %)
Life expectancy	le	Average number of years of life expectancy for newborns	Life expectancy at birth, total (years)
Capital Formation	i	Percentage of additional fixed goods and changes in inventory in an economy to GDP	Gross capital formation (% of GDP)
Foreign Direct Investment	fdi	Percentage of foreign capital inflows into a country to GDP	Foreign direct investment, net inflows (% of GDP)

The specifications for this research estimate are as follows:

$$g_{it} = c_i + \alpha g_{it-1} + \beta_1 t l_{it} + \beta_2 p g_{it} + \beta_3 l e_{it} + \beta_4 i_{it} + \beta_5 f d i_{it} + \varepsilon_{it}....(1)$$

Where i is country, t is year, g is GDP growth, tl is trade liberalization, pg is population growth, le is life expectancy, i is investment, fdi is foreign direct investment, c is unobserved heterogeneity, and is idiosyncratic error.

RESULTS AND ANALYSIS

The estimation results of the effect of trade liberalization on economic growth in all countries in the world in the short term are shown in Table 2.

Table 2. Short-Term Estimates in All Countries					
	(PLS)	(RE)	(FE)	(DPD-SYS)	
VARIABLES	g	g	g	g	
tl	0.00351***	0.00468**	0.00854***	0.0194**	
	(0.00136)	(0.00214)	(0.00309)	(0.00982)	
pg	0.565***	0.563***	0.626***	0.519**	
	(0.0494)	(0.0637)	(0.0776)	(0.224)	
le	-0.00802	-0.0215**	-0.0435***	-0.0988**	
	(0.00720)	(0.0106)	(0.0143)	(0.0469)	
i	0.124***	0.133***	0.136***	0.137***	
	(0.00770)	(0.00898)	(0.00981)	(0.0500)	
fdi	0.00727	0.00144	-0.000959	0.00498	
	(0.00538)	(0.00550)	(0.00561)	(0.00759)	

L.g				0.155** (0.0755)
Constant	0.0259	0.601	1.636*	(====,
	(0.505)	(0.733)	(0.950)	
Observations	6,487	6,487	6,487	6,244
R-squared	0.066		0.045	
Number of Country		177	177	176

Source: Author's Results

By using the Pooled Least Square model and the Fixed Effect Model, it is estimated that trade liberalization has a positive and significant effect on economic growth with a significance level of 1 percent by controlling the human condition and capital. The coefficients of estimation using the two models are 0.00351 and 0.00854 respectively. Meanwhile, by using the Random Effect Model, it is obtained that trade liberalization has a positive and significant effect on economic growth at a significance level of 5 percent by controlling the human condition. The estimation coefficient using this model is 0.00468. Furthermore, using the Dynamic Panel Data-System, the same results are obtained, namely trade liberalization has a positive and significant effect on economic growth at a significance level of 5 percent by using a one-year economic growth time lag and controlling the condition of people and capital. The estimation coefficient using this model is 0.0194. With the estimated coefficient, it can be interpreted that every 10 percent increase in trade liberalization to GDP will increase economic growth by 0.194 percent. From the four models used, it can be emphasized that trade liberalization has a positive and significant effect on economic growth in all countries in the short term.

The estimation results of the effect of trade liberalization on economic growth in high-income countries in the short term are shown in Table 3.

Table 3. Short-Term Estimates in High-Income Countries

	(PLS)	(RE)	(FE)	(DPD-SYS)
VARIABLES	g	g	g	g
tl	0.00880***	0.00912***	0.0139***	0.0130*
	(0.00140)	(0.00221)	(0.00370)	(0.00738)
pg	0.388***	0.398***	0.415***	0.302
	(0.0565)	(0.0710)	(0.0901)	(0.291)
le	-0.148***	-0.228***	-0.307***	-0.382*
	(0.0187)	(0.0237)	(0.0285)	(0.210)
i	0.0987***	0.0794***	0.0685***	0.0997*
	(0.0150)	(0.0169)	(0.0186)	(0.0520)
fdi	-0.00217	-0.00558	-0.00697	-0.00581
	(0.00457)	(0.00461)	(0.00466)	(0.00585)
L2.g				0.0218

				(0.0570)
Constant	10.84***	17.21***	23.10***	
	(1.475)	(1.860)	(2.164)	
Observations	2,096	2,096	2,096	1,995
R-squared	0.111		0.087	
Number of cc		58	58	57

Source: Author's Results

By using the Pooled Least Square model, Random Effect Model, and Fixed Effect Model, it is found that trade liberalization has a positive and significant effect on economic growth at a significance level of 1 percent by controlling for human and capital conditions. The estimated coefficients obtained using the three models are 0.008; 0.009, and 0.013. Meanwhile, by using the Dynamic Panel Data-System method, the results show that trade liberalization has a significant positive effect on economic growth at a significance level of 10 percent by using a two-year time lag of economic growth and controlling human and capital conditions. The estimated coefficient of the effect of trade liberalization on economic growth is 0.013, which means that every 10 percent increase in trade liberalization will increase economic growth by 0.13 percent. From the four models used, it can be emphasized that trade liberalization has a positive and significant impact on economic growth in high-income countries in the short term.

The estimation results of the effect of trade liberalization on economic growth in middle and low-income countries in the short term are shown in Table 4.

Table 4. Short-Term Estimates in Middle and Low-Income Countries

	(PLS)	(RE)	(FE)	(DPD-SYS)
VARIABLES	g	g	g	g
L.g				0.125
				(0.0871)
tl	-0.00380	0.00249	0.00970**	0.0195
	(0.00253)	(0.00366)	(0.00473)	(0.0124)
pg	0.708***	0.744***	0.823***	0.908**
	(0.0761)	(0.0977)	(0.115)	(0.443)
le	0.0242**	0.0111	-0.00580	-0.0174
	(0.00998)	(0.0139)	(0.0169)	(0.0706)
i	0.111***	0.117***	0.117***	0.117**
	(0.00946)	(0.0112)	(0.0123)	(0.0563)
fdi	0.138***	0.137***	0.137***	0.0983***
	(0.0214)	(0.0231)	(0.0243)	(0.0351)
Constant	-1.728**	-1.597*	-1.153	



	(0.685)	(0.936)	(1.090)	
Observations	4,391	4,391	4,391	4,230
R-squared	0.070		0.057	
Number of cc		119	119	119

Source: Author's Results

The results of the estimation of the effect of trade liberalization on economic growth in all countries in the world in the long term are shown in Table 5.

Table 5. Estimates in the Long-Term in All Countries

	(PLS)	(RE)	(FE)	(DPD-SYS)
VARIABLES	g	g	g	g
tl	0.00255	0.00281	0.00896*	0.0243**
	(0.00214)	(0.00260)	(0.00512)	(0.0102)
pg	0.606***	0.571***	0.528***	0.732*
	(0.0790)	(0.0881)	(0.129)	(0.379)
le	0.00415	0.00108	-0.0174	-0.0634
	(0.0112)	(0.0133)	(0.0224)	(0.0447)
i	0.120***	0.124***	0.128***	0.104***
	(0.0128)	(0.0139)	(0.0176)	(0.0291)
fdi	0.00786	0.00354	-0.00420	-0.00142
	(0.0104)	(0.0105)	(0.0113)	(0.0135)
L.g				0.0318
				(0.0506)
Constant	-0.759	-0.629	0.130	
	(0.790)	(0.924)	(1.484)	
Observations	1,355	1,355	1,355	1,122
R-squared	0.110	·	0.065	-
Number of cc		178	178	173

Source: Author's Results

By using the Pooled Least Square model and the Random Effect Model, it is found that trade liberalization has no significant effect on economic growth by controlling human and capital conditions. Furthermore, by using the Fixed Effect Model, it is found that trade liberalization has a positive and significant effect on economic growth at a significance level of 10 percent by controlling for human and capital conditions. The estimated coefficient obtained by using the model is 0.009. Finally, using the Dynamic Panel Data-System method, the results show that trade liberalization has a positive and significant effect on economic growth at a significance level of 5 percent by using a one-year time lag of economic growth and controlling for human and capital conditions. The estimation coefficient using this model is 0.0243 which means that every 10 percent increase in trade liberalization



will increase economic growth by 0.243 percent. So it can be concluded that trade liberalization has a positive and significant impact on economic growth in all countries in the world in the long term.

The results of the estimation of the effect of trade liberalization on economic growth in high-income countries in the long term are shown in Table 6.

Table 6. Long-Term Estimates in High-Income Countries					
	(PLS)	(RE)	(FE)	(DPD-SYS)	
VARIABLES	g	g	g	g	
tl	0.00905***	0.00884***	0.0114**	0.0210**	
	(0.00212)	(0.00280)	(0.00539)	(0.00973)	
pg	0.380***	0.334***	0.181	0.345	
	(0.0868)	(0.0989)	(0.138)	(0.301)	
le	-0.145***	-0.200***	-0.294***	-0.411***	
	(0.0277)	(0.0316)	(0.0404)	(0.0615)	
i	0.0603**	0.0395	0.0109	0.00830	
	(0.0244)	(0.0262)	(0.0311)	(0.0615)	
fdi	-0.00843	-0.0139*	-0.0180**	-0.0149*	
	(0.00850)	(0.00833)	(0.00854)	(0.00874)	
L.g				-0.159***	
				(0.0491)	
Constant	11.56***	16.30***	24.04***		
	(2.202)	(2.521)	(3.118)		
Observations	435	435	435	354	
R-squared	0.182		0.161		
Number of cc		58	58	56	

Source: Author's Results

By using the Pooled Least Square model and the Random Effect Model, it is found that trade liberalization has a positive and significant effect on economic growth at a significance level of 1 percent by controlling for human and capital conditions. The estimated coefficients using the two models are 0.009 and 0.008, respectively. Furthermore, by using the Fixed Effect Model, the same results are obtained, namely trade liberalization has a significant effect on economic growth at a significance level of 5 percent by controlling for human and capital conditions. The estimation coefficient using the model is 0.01. Finally, using the Dynamic Panel Data-System method, the results show that trade liberalization has a positive and significant effect on economic growth at a significance level of 5 percent by using a one-year time lag of economic growth and controlling for human and capital conditions. The estimated coefficient of the effect of trade liberalization on economic growth is 0.021, which means that every 10 percent increase in trade liberalization



will increase economic growth by 0.21 percent. It can be concluded that trade liberalization has a positive and significant effect on economic growth in high-income countries in the long term.

The estimation results of the effect of trade liberalization on economic growth in middle and low-income countries in the long term are shown in Table 7.

Table 7 Long-Term Estimates in Middle and Low-Income Countries

	(PLS)	(RE)	(FE)	(DPD-SYS)
VARIABLES	g	g	G	g
tl	-0.00673*	-0.00469	0.0106	0.0175
	(0.00391)	(0.00462)	(0.00794)	(0.0153)
pg	0.790***	0.795***	0.912***	0.897*
	(0.120)	(0.134)	(0.189)	(0.467)
le	0.0321**	0.0282	0.00329	-0.0162
	(0.0156)	(0.0182)	(0.0264)	(0.0401)
i	0.111***	0.110***	0.0921***	0.0971***
	(0.0156)	(0.0172)	(0.0218)	(0.0355)
fdi	0.196***	0.230***	0.303***	0.228***
	(0.0399)	(0.0416)	(0.0488)	(0.0785)
L.g				0.00392
				(0.0596)
Constant	-2.448**	-2.438**	-1.931	
	(1.066)	(1.227)	(1.699)	
Observations	920	920	920	768
R-squared	0.137		0.131	
Number of cc		120	120	117

Source: Author's Results

By using the Pooled Least Sqaure model, it is found that trade liberalization has a negative and significant effect on economic growth by controlling human and capital conditions. The estimation coefficient using this model is -0.0067. Furthermore, by using the Random Effect and Fixed Effect Model, different results are obtained, where trade liberalization has no significant effect on economic growth by controlling human and capital conditions. Finally, using the Dynamic Panel Data-System method, the results show that trade liberalization does not have a positive effect on economic growth by using a one-year time lag of economic growth and controlling human and capital conditions. It can be concluded that trade liberalization has no significant effect on the economic growth of middle- and low-income countries in the long term.



CONCLUSIONS AND RECOMENDATIONS

In the short term, the results of this study indicate that trade liberalization has a positive and significant impact on economic growth in all countries in the world. This finding supports the results of research by Dao Anh Tung (2014), Khan et al. (2015), and Modeste (2016), although they are not in line with Foster (2008), Kwanga (2015), Huchet-Bourdon (2018). The impact is also quite large on economic growth, namely 0.19 for every 10 percent increase in trade liberalization on GDP. It can be concluded that in the short term, countries can use trade liberalization as a source of economic growth.

More specifically, by analyzing based on the level of state income in the short term, it is found that trade liberalization only has a positive and significant effect on economic growth in high-income countries, while in middle and low-income countries it has no significant effect. In the short term, trade liberalization can encourage economic growth in high-income countries by 0.13 percent for every 10 percent increase in trade liberalization to GDP. Efficiency in production in high-income countries so that they are able to take advantage of trade liberalization to encourage economic growth. However, low-income countries are not efficient enough in producing so that trade liberalization has not been able to encourage economic growth.

Likewise in the long term, the results of the study show that trade liberalization has a positive and significant impact on economic growth in all countries in the world. This finding supports the research results of Dao Anh Tung (2014), Foster (2008), Khan et al. (2015), Kwanga (2015); Modeste (2016), and Huchet-Bourdon et al. (2018). The impact is also higher than in the short term on economic growth, which is 0.243 percent for every 10 percent increase in trade liberalization on GDP. It can be concluded that in the long term, trade liberalization countries are still relevant to serve as a source of economic growth.

More specifically, by analyzing based on the income level of a country, the same results are found that trade liberalization has a positive and significant effect on economic growth in high-income countries, but has no significant effect on middle and low-income countries in the long term. The results of this study are in line with the research of Dao Anh Tung (2014), Foster (2008), Khan et al. (2015), Kwanga (2015); Modeste (2016), and Huchet-Bourdon et al. (2018). In the long term, trade liberalization can encourage economic growth in high-income countries by 0.21 percent for every 10 percent increase in trade liberalization to GDP. In the long term, the impact of trade liberalization on the economic growth of high-income countries can be almost doubled compared to the short term. So that high-income countries can maximize the potential for trade liberalization to encourage economic growth. Meanwhile, for middle- and low-income countries, trade liberalization has not been optimally utilized as an alternative for long-term economic growth.

It can be concluded that trade liberalization is a very relevant variable to be used as a source of economic growth for high-income countries in the short and long term. Meanwhile, for middle- and low-income countries, trade liberalization has



not been able to encourage economic growth. So that middle and low income countries need to evaluate especially in the aspects of economic activity (production, consumption, and distribution) of international trade in order to take advantage of trade liberalization as an alternative driver of economic growth, as in developed countries.

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