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IMPACT OF PREFERENTIAL TRADE AGREEMENT (PTA) ON THE EXPORT OF ASEAN+4

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ABSTRACT
This research aims to examine and analyze the impact of the trade agreement on the export of ASEAN member countries (Indonesia, Thailand, Cambodia, Laos, Viet Nam, Malaysia, Singapore, Brunei Darussalam, Philippines and Myanmar) and four ASEAN dialogue partners (RRT, Republic of South Korea, Japan, and India) during 1984-2017. This research is estimated using Poisson Pseudo-Maximum Likelihood (PPML) method. The result shows that Trade Agreement significantly affect the export.

Keywords: Export, GDP, distance, trade agreement, and PPML.

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BACKGROUND

The formation of the North American Free Trade Agreement (NAFTA), integration of European Union (EU), and the slowdown of negotiations at multilateral level caused world countries making bilateral agreements as a new international trade interest for the last two decades. International treaties with limited membership and include all articles that only apply to members to secure or increase their respective market access (Limão, 2016). Trade agreements in Balassa (2013) cover the five categories of discriminatory arrangements classified by the World Trade Organization (WTO), namely Partial Scope Agreements (PSAs), Free Trade Agreements (FTA), Custom Unions (CU), common markets, and economic unions. Bilateral agreements are a stepping stone for free trade throughout the world (Baldwin, 1997).

Bilateral agreements are a reformation source trade policy that is very important in 20 years for most countries, especially countries that are members of the FTA and CU (Foster et al., 2011; Chang and Xiao, 2015). The proliferation of bilateral agreements continues after the formation of WTO in the period when the Most Favored Nation (MFN) tariffs are decreased. Some of the biggest growth has occurred in the last decade although the average of MFN tariffs is at its lowest with an average of less than 8% in 2009 (Limão, 2016). This happened because of tariff reduction under the bilateral agreement was more promising than the MFN. Furthermore, the MFN tariff is as the highest (the most stringent) tariff charged by WTO members with each other, so that almost all countries in the world join at least one bilateral agreement that contains an agreement to give tariffs on other countries' products lower than their MFN tariff (WITS, 2018).

Trade agreements are divided into some bilateral parts (between two countries), plurilateral (more than two countries), and country-bloc (countries from the different continents but forming bloc such as communist blocs) (Asia-Pacific Trade and Investment Report, 2016). The slowing down of negotiations in the multilateral level caused many world countries starting to pursue regional and bilateral liberalization, includes member countries of the Association of Southeast Asian Nations (ASEAN). At present, ASEAN has 11 dialogue partners include the United States, Australia, Japan, Canada, India, South Korea (Republic of South Korea), Russia, New Zealand, the People's Republic of China (PRC), the European Union and the United Nations (UN). According to Lamy (2012), the attractiveness of trade close relations between countries has been a driving force for bilateral and regional free trade agreements. After the increasing trade agreement from the 1990s, especially bilateral, the recent research beginning to reconsider the influence on trade international development. The agreement existing give some impact on the trade flows. Some researches (Koo et al., 2006; Eicher and Henn, 2011; Egger and Larch, 2008; Egger et al., 2011; Foster et al., 2011; Gil-Pareja et al., 2014; Cheong et al., 2015 and 2018) concerning agreements have also been done to find out their impact on trade.

The research related to the impact of trade agreement mostly done with the gravity model because it can estimate the trade flows of a particular country with other countries based on economic characteristics from two trading partners (Husted and Melvin, 2010: 8). The pioneer of this model are Tinbergen (1962) and Pöyhönen (1963) to estimate the trade flows of UE bilateral. Some of the empiric research also increasing the theoretical foundation for this model, such as Anderson (1979), Bergstrand (1985), Mátyás (1997), and Anderson and Van Wincoop (2003). In the Asian context, several studies also support this model such as Polak (1996), Sharma and Chua (2000), Lee and Park (2005), Kien and Hashimoto (2005) and Pusterla (2007). To estimate this gravity model many researchers used the Ordinary Least Square (OLS) method. Research that used Ordinary Least Square (OLS) method are Koo et al. (2006); Eicher and Henn (2011); Egger et al. (2011); Foster et al. (2011); Gil-Pareja et al. (2014); Cheong et al. (2015 and 2018). However, the use of OLS is not accurate to estimate the trade flows with zero value. That is because the OLS method will export data with zero value due to undefined zero logarithms (Silva and Tenreyro, 2006). Saucier and Rana's research (2017) used the Poisson Pseudo-Maximum Likelihood (PPML) approach to calculate trade flows because that method allows and proper which is not sensitive to trade flows with zero values (Westerlund and Wilhelmsson, 2011; Head and Mayer, 2014). Besides, PPML estimator which naturally includes observation with zero trade value, the estimator is also consistent with the existence of fixed effects that can be included as dummy variable such in OLS and coefficients interpretation of PPML model is very easy and follows the same pattern as under OLS (Silva and Tenreyro, 2003).

Based on the explanation above, the research is held about the effect of agreement on export among ASEAN countries (Indonesia, Thailand, Cambodia, Laos, Vietnam, Malaysia, Singapore, Brunei Darussalam, the Philippines, and Myanmar) and four ASEAN dialogue partner countries that are People's Republic of China (China / China), South Korea, Japan, and India. This research chooses ASEAN member countries because this research related to the agreements in ASEAN that mostly only uses a few ASEAN member countries because of data limitation (Sen et al., 2013). Furthermore, this research also has four ASEAN dialogue partners because RRT and India represent an emerging market country in Asia and Japan and South Korea represent a developed country in Asia. This research uses dependent variable namely exports, as used in the research of Koo et al. (2006), Egger et al. (2011), Foster et al. (2011), Sen et al. (2013), and Gil-Pareja et al. (2014) to capture trade creation due to agreements (Choi, 2004: 297). Independent variable (trade agreement, GDP of the importing country, GDP of the exporting country and distance) and control variable (colonial ties, language, boundaries) are use in this research as used in Sen et al. (2013) except colonial ties variable, Koo et al (2006), Egger et al. (2011), Gil-Pareja et al. (2014),

Cheong et al. (2015 and 2018), and Saucier and Rana (2017). This research used the PPML method. So far the similar research has never been carried out in ASEAN and four ASEAN dialogue partners use the PPML method.

RESEARCH METHODS
DATA AND MODEL

The data used in this research are secondary in the form of panel data that combines cross-section and time series. Cross-section that is used is 10 ASEAN member countries and 4 ASEAN dialogue partners, namely the People's Republic of China, Japan, South Korea, and India in the period 1984 to 2017. Export value data are obtained through the United Nations Commodity Trade (UN-COMTRADE) and the International Trade Center (INTRACEN). Importers' GDP and exporter GDP data are obtained through the World Development Indicator (WDI). Distance data, colonial ties, languages, and territorial boundaries are obtained through Centre d'Etudes Prospectives et d'Informations Internationales (CEPII). Agreements data are obtained through the World Integrated Trade Solution (WITS), especially in the Global Preferential Trade Agreements Database (GPTAD). Some methods can be used in analysis technique panel data, there are Pooled Least Square (PLS), Fixed Effect Model (FEM), dan Random Effect Model (REM). However, this research used Poisson Pseudo Maximum Likelihood (PPML), whereas PLS, FEM, dan REM will be used as a comparison and reinforce estimation results uses the PPML method. Model that use in this research:

$$lnX_{ijt} = \beta_0 + \beta_1 Agreement_{ijt} + \beta_2 lnGDP_{it} + \beta_3 lnGDP_{jt} - \beta_4 lnDistance_{ij} + \beta_5 Col_{ij} + \beta_6 Lang_{ij} + \beta_7 Border_{ij} + \varepsilon_{ijt}$$

X_{ijt} is export of country i to country j in year t, $Agreement_{ijt}$ is dummy variable with 1 value when country i and j trade according to the agreement in year t and ε_{ijt} is error term, GDP_{it} is Gross Domestic Product country i in year t, GDP_{jt} is Gross Domestic Product country j in year t, $Distance_{ij}$ is demography distance country i and j, Col_{ij} is dummy variable with nilai 1 value when country i and j have the same colonial ties, $Lang_{ij}$ is dummy variable with 1 value when country i and j have the same language, $Border_{ij}$ is dummy variable with 1 value with 1 value when country i and j have the same boundaries.

POISSON PSEUDO-MAXIMUM LIKELIHOOD

Silva and Tenreyro (2006) stated that to estimate the gravity equation using standard empirical method was not accurate. It due to the log-linearization of the empirical model that faces an inconsistent heteroscedasticity problem. Furthermore, log-linearization is not appropriate with zero value in trade data that cause some unsatisfactory solution, includes sample cutting (elimination of trading pairs with zero values).

To overcome various estimation problems, so this research used PPML simple model. This method is a strong and more consistent heteroscedasticity different pattern. Besides, this method provides a natural way to handle zero in trade data. PPML method used to bring back the gravity equation and shows a significant difference from the obtained result through log-linear. On the other hand, in the traditional specification both Anderson and Wincoop (2003) from the gravity equation, OLS estimation overestimate the results of the estimator. Monte Carlo simulation and Poisson regression result show that that heteroscedasticity can cause a significant bias, but the results show that when there is evidence of heteroscedasticity, PPML estimators should be used as a substitute standard log-linear model (Silva and Tenreyro, 2006). Furthermore, the best choice for research is to use the PPML command developed by Silva and Tenreyro (2011).

PLS, FEM, AND REM

Pooled-Least Square estimates the model with the Ordinary Least Square (OLS) method that combines all-time series and cross-section data. This approach does not care about the nature of time series and cross-sections of data. Assuming that all objects have the same regression coefficient, the explanatory variables are non-stochastic and very exogenous. Besides, error terms are independently distributed, on the average equal to zero, and its variance is constant (Gujarati, 2014: 239). The PLS equation model can be written as follows:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \ldots + \beta_n X_{nit} + \varepsilon_{it}$$

Then, the Equation model of Model FEM in Greene (2012: 360) can be written as follows:

$$y = X\beta + D\alpha + \varepsilon$$

This model is usually known as the least square variable model. There is an interception difference between cross-sections that used as model basic, however, that intercept is constants between time (time-invariant). This panel data estimation technique used a dummy variable to capture differences between intercepts. This panel data estimation technique uses dummy variables to capture differences between intercepts.

The last is equation REM model can be written as follows:

$$y_{it} = \beta_0 + \beta_1 x_{it1} + \ldots + \beta_k x_{itk} + \alpha_i + u_{it}$$

The REM model according to Woolridge (2013:492) is the model to estimate the unobservable effect (α_i). REM model appropriates when the unobservable effect is considered to be uncorrelated with all explanatory variables. Then, can be ignored in error term and all serial correlation that generated over time can be handled by the estimation of the least common square (GLS). The ideal REM assumption includes all fixed effects added by the additional requirement that does not depend on all explanatory variables in all periods.

DISCUSSION

AGREEMENT ENFORCEMENT

Table 1 provides lists of trade agreements that involve 10 ASEAN+4 member countries that are signed from 1984 to 2017. Based on that table, it can be concluded that among nineteen trade agreements, thirteen agreements are bilateral. The India-Japan Comprehensive Economic Partnership Agreement (India-Japan CEPA) is the earliest bilateral agreement applicable since 1958. While the ASEAN Free Trade Area (AFTA) is the earliest plurilateral agreement

Table 1
Trade Agreements Conducted By ASEAN + 4

Name	Member	Scope	Year
ASEAN *Free Tade Area* (AFTA)	Indonesia, Thailand, Cambodia, Laos, Viet Nam, Malaysia, Singapore, Brunei Darussalam, Philipine, and Myanmar	Plurilateral	1992
ASEAN-China *Free Trade Area* (ACFTA)	ASEAN and People's Republic of China (PRC)/ China	Plurilateral	2003
ASEAN-Korea *Free Trade Area* (AKFTA)	ASEAN and Republic of South Korea	Plurilateral	2006
ASEAN-Japan *Comprehensive Economic Partnership* (AJCEP)	ASEAN and Japan	Plurilateral	2003
ASEAN-India *Free Trade Area*	ASEAN and India	Plurilateral	2005
Brunei Darussalam-Japan *Free Trade Area*	Brunei Darussalam and Japan	Bilateral	2008
RRT-Singapore *Free Trade Area*	People's Republic of China (PRC) and Singapore	Bilateral	2009
Indonesia-Japan *Economic Partnership Agreement* (IJEPA)	Japan and Indonesia	Bilateral	2008
Japan-Singapore *Free Trade Area*	Japan and Singapore	Bilateral	2002
Japan-Thailand *Free Trade Area*	Japan and Thailand	Bilateral	2007
Japan-Viet Nam *Free Trade Area*	Japan and Viet nam	Bilateral	2007
Japan-Philipine *Free Trade Area*	Japan and Philipine	Bilateral	2008
Laos-Thailand *Free Trade Area*	Laos and Thailand	Bilateral	1991
Singapore-Republic of South Korea *Free Trade Area*	Singapore and Republic of South Korea	Bilateral	2006
RRT-India *Free Trade Area*	People's Republic of China (PRC) and India	Bilateral	1984
India-Japan CEPA	India and Japan	Bilateral	1958
India-Republic of South Korea *Free Trade Area*	India and Republic of South Korea	Bilateral	2010
India-Singapore *Free Trade Area*	India and Singapore	Bilateral	2005
RRT-Japan-Korea *Free Trade Agreement*	PRC, Japan, and South Korea	Plurilateral	2010

Source: Global Preferential Trade Agreement Database (2018)

It is important to be noted that the number of agreements in table 2 has been applied in different years. Realistically still developing and giving an impact on the bilateral trade in 2018. Furthermore, it can be observed that some countries have more than FTA with trading partners, one bilateral and other regionals. The India-Japan Comprehensive Economic Partnership Agreement (India-Japan CEPA) became the earliest bilateral agreement because these two countries share historical ties and pride in the legacy of civilization. The current Indian-Japanese relations is rooted in their common perceptions about the environment that is developing in the region and the world at large. One of the contents of their agreement is mutual respect for each other's contribution in promoting peace, stability, and development in Asia and beyond.

RESULT

This research aim is to analyze the effect of the GDP of the exporting country, the GDP of the importing country, distance, colonial ties, language, and territorial boundaries on export flows between ASEAN member countries (Indonesia, Thailand, Cambodia, Laos, Vietnam, Malaysia, Singapore, Brunei Darussalam, the Philippines, and Myanmar) and four dialogue partner countries (People's Republic of China, Japan, South Korea, and India) from 1984 to 2017. That data is estimated using the Poisson Pseudo-Maximum Likelihood Method (PPML).

Table 2 shows the PPML regression. These results indicate that the GDP variable of exporting country has positive relation and significant on the export value with a coefficient value of approximately 0.057 with 0,000 probability. GDP variable of importing also has positive relation and significant on export value with coefficient value and probability respectively of 0.064 and 0,000. The distance variable has a negative relationship on the export value with a coefficient value of 0.014 and a probability of 0.058. The colonial ties have a positive relationship with coefficient value with the value of exports with a coefficient of 0.066 and a probability of 0.000. Language variables have a positive relationship with the value of exports with a coefficient value of 0.109 and a probability of 0,000. Territorial boundary variables do not significantly affect the value of exports. The agreement variable has a positive relationship with the value of exports with a coefficient of 0.063 and a probability of 0.000, which means significant.

Table 2. PPML, PLS, and REM Estimation results

Variable	PPML	PLS	REM
Agreement	0,063***	0,173***	0,174***
LnGDPi	0,057***	1,146***	1,348***
LnGDPj	0,064***	1,269***	1,186***
LnDistance	-0,014*	-1,534**	-1,485***
Col	0,066***	0,544***	0,815**
Lang	0,109***	1,031***	1,139***
Border	0,015	0,229***	0,115
Constanta	-0,171*	-31,68***	-35,269***
Number of obs.	6188	5628	5628
Pseudo log-likelihood	-20257,069	-	-
R-Square	0,558	0,729	0,715
LM-*test*			33.573,31***

Note: The significance level (α) is marked with ***for 1%; ** for 5%; dan * for 10%.

Table 2 also shows the estimation results use PLS method. Estimation results used PLS indicates that all independent and control variables influence the dependent variable significantly. The GDP variable of the exporter country has a positive relationship with the value of exports with a coefficient of 1.146. The GDP variable of the importer country has a positive relationship with the export value with a coefficient of 1.269. The distance variable has a negative relationship with the export value with a coefficient of 1.534. Besides, the colonial ties variables, language, boundaries, and trade agreements also have a positive relationship with the export value and coefficient value consecutively 0.544, 1.031, 0.229; and 0.173. Besides, estimation using PLS, the estimation results use FEM. It shows that all independent variables used in this research significantly influence the value of exports. Unfortunately, four variable models cannot be estimated (omitted) so it is quite risky to use estimation from this model. Furthermore, the estimation results using REM in Table 2 shows that all independent variables (accept the regional boundary) significantly influence the value of exports. The GDP variable of the importer country has a positive relationship with the value of exports with a coefficient of 1.348. The GDP variable of the exporter country has a positive relationship with the export value with a coefficient of 1.186. The distance variable has a negative relationship with the export value with a coefficient of 1.485. For the colonial, language, and AGREEMENT variables have a positive relationship to the exports value with coefficients successively 0.815; 1,139; and 0.174.

After estimating models using PLS, FEM, and REM, the next step is to choose which estimation model is more appropriate to use. Three tests were used to select the PLS, FEM, and REM, estimation models. The tests

comprise of F-statistics, Hausman-test, and LM-test. To choose the PLS or FEM estimation model uses the F-statistic test. Next, the selection of FEM or REM estimation models is done by Hausman-test. Finally, for the selection of PLS or REM estimation models is using the Lagrangian Multiplier (LM-test).Based on the estimation results that had done before, in the previous point, it indicates that the estimation model using FEM is not appropriate to use because several variables are omitted. This causes the test cannot be done using F-statistics and Hausman-test so that it can only be done LM -test. LM-test is used to select the PLS or REM estimation model. This test has two criteria. If the probability of chi-square (Prob> chi2) is greater than the level of significance (α) then the best model used is PLS. If Prob> chi2 is smaller than the level of significance (α) then the more appropriate model to use is REM. Based on the LM-test results with STATA software, the Prob> chi2 value of 0,000 was obtained. This means that it is smaller than its significance.

The GDP variable of the importer countries can describe as the market size of the importer country and describe the demand side. The higher GDP the importer country, the higher of country's ability to buy or import goods (Appleyard and Field, 2014: 195). The results of this research show that the GDP of importer countries has a positive and significant effect on the exports of 10 ASEAN member countries and 4 ASEAN dialogue partner countries, specifically the People's Republic of China, Japan, South Korea, and India, from 1984 to 2017. This research is consistent with the theory of gravity models and in line with studies that conducted by Anderson (1979), Bergstrand (1985), Polak (1996), Matyas (1997), Sharma and Chua (2000), Anderson and van Wincoop (2003), Kien and Hashimoto (2005)), Lee and Park (2005), Eicher and Henn (2011), Pusterla (2007), Foster et al. (2011), Sen et al. (2013) and Gil-Pareja et al. (2014) examined that the GDP of the importer country can increase the trading.

The GDP variable can also represent national income besides assessing a country's market size (Appleyard and Field, 2014: 195). This time the country's GDP can draw offers side. When an exporter county's income increases, the country's ability to produce goods to be exported also increases. The results of this reasearch examined that the GDP of the exporter countries impact positively and significantly to the exports of 10 ASEAN member countries and 4 ASEAN dialogue partner countries, especially the People's Republic of China, Japan, South Korea, and India from 1984 to 2017. This research is agrees with the theoretical model and cross with researches conducted by Anderson (1979), Bergstrand (1985), Polak (1996), Matyas (1997), Sharma and Chua (2000), Anderson and van Wincoop (2003), Kien and Hashimoto (2005), Lee and Park (2005), Eicher and Henn (2011), Pusterla (2007), Foster et al. (2011), Sen et al. (2013) and Gil-Pareja et al. (2014) which cites the country's GDP can increase trading.

Geographical distance (distance) is one of the variables that are very important in the gravity model. Distance negatively affects international trade according to the theory of gravity models (Husted and Melvin, 2010: 8 and Appleyard and Field, 2014: 195). The results of this study found that distance has a negative and significant effect on exports of 10 ASEAN member countries and 4 ASEAN dialogue partner countries, particularly the People's Republic of China, Japan, South Korea, and India during 1984 to 2017. This research is consistent with the theory of gravity models and agrees with the previous researches done by Krugman (1980), Koo et al. (2006), Egger et al. (2011), Sen et al. (2013), Gil-Pareja et al. (2014), Cheong et al. (2015), Saucier and Rana (2017), and Cheong et al. (2018) which stat that distance has affect trading negatively.

The variable of colonial ties is taken into account in the gravity model as an indication between importer and exporter countries that are members of trade agreements have the same colonial history (Feenstra, 2015: 75-178). Countries with the same colonial ties have strong ties because their feeling is the same, because of the same destiny so it will be easier to do trade agreements and ultimately can increase the volume of trades. The results of this research show that colonial ties have a positive and significant effect on exports of 10 ASEAN member countries and 4 ASEAN dialogue partner countries, namely the People's Republic of China, Japan, South Korea, and India from 1984 to 2017. This research in line with researches conducted by Koo et al. (2006), Egger et al. (2011), and Gil-Pareja et al. (2014) which states that when two countries have the same colonial history, then the country is easier to involve in an agreement.

The language variable can also be easily entered into a gravity model. This variable shows that between importer and exporter countries that are members of a trade agreement have the same language (Feenstra, 2015: 75-178). If importer and exporter countries have the same language, it will be easier to communicate in making agreements. The results of this study point out that language has a positive and significant effect on exports of 10 ASEAN member countries and 4 ASEAN dialogue partner countries, specifically the People's Republic of China, Japan, South Korea, and India from 1984 to 2017. This research coherent with researches conducted by Koo et al. (2006), Egger et al. (2011), Gil-Pareja et al. (2014), Cheong et al. (2015), and Cheong et al. (2018) which states that languages similarities can facilitate agreements under the agreement which can increase interstate trading.

Such the previous variables that are colonial and language ties, the boundary variable can also be included in the gravity model when the importer and exporter countries incorporated in the agreement have the same boundary (Feenstra, 2015: 75-178). The results of this research examine that the boundary variables do not significantly influence the exports of 10 ASEAN member countries and 4 ASEAN dialogue partner countries, they are the People's Republic of China, Japan, South Korea, and India during 1984 to 2017. These results show the agreement with the research of Sen et al. (2013). Despite having the proximity of the boundaries, but this variable has no significant effect on trades. Based on this, it can be concluded that the boundary variables do not affect the export of ASEAN member countries and the four ASEAN dialogue partners.

Trade agreements variable can encourage more bilateral trade among member countries and allow the creation of trade agreements (trade creation) under trade agreements (Bhagwati et al., 1998). The results of this research indicate that the agreement variable has a positive effect on the exports of 10 ASEAN member countries and 4 ASEAN dialogue partner countries, especially the People's Republic of China, Japan, South Korea, and India during 1984 to 2017. These results are in line with research conducted by Aitken (1973), Koo et al. (2006), Eicher and Henn (2011), Egger et al. (2011), Foster et al. (2011), Sen et al. (2013), Gil-Pareja et al. (2014), Cheong et al. (2015), Saucier and Rana (2017), and Cheong et al. (2018) which states that an under an agreement can encourage trade creation.

CONCLUSION

Based on the estimation result that has been done using PPML, it can be concluded that the GDP variable importer country effect on exporter country of ASEAN member countries and four ASEAN dialogue partners positively and significantly. It happens because when the increasing of exporter countries will cause that country to buy or import more goods that other countries or exporter countries. GDP variable of exporter country effect on the export of ASEAN member countries and four ASEAN dialogue partners positively and significantly. It occurs because if exporter country's GDP increase as a result the ability of exporter country to produce export goods will also increase. Distance variable effects negatively and significantly on the country's export of ASEAN members and four ASEAN dialogue partners. This occurs due to the farther distance among countries it will cause the increasing cost of transportation. In the end, if the cost of transportation increase the export will decrease. Colonial ties variable effect on exporter country of ASEAN member countries and four ASEAN dialogue partners positively and significantly. If between country has the same colonial history will cause those countries to have the same stronger feeling, as a result, it will be easier to do export and import agreement. The language variable positively and significantly affects ASEAN member countries and four ASEAN dialogue partners. If between countries have the same language it will be easier for them to communicate. Consequently, it will easier to do export and import agreement. Boundaries variable does not affect significantly export ASEAN countries' members and four ASEAN dialogue partners. The trade agreement variable affects positively and significantly on the export of ASEAN member countries and four ASEAN dialogue partners. It happens under an agreement that can encourage more bilateral trade among member countries and increase trade volume among member countries.

Based on the conclusions explained, the recommendations that can be recommended in this research are for ASEAN+4 countries and other countries are expected to be able to increase agreements with other countries as well. Each country needs to involve in an agreement under a bilateral agreement to encourage trade and increase market access to avoid losing the competition with other countries that have involved in an agreement previously. Importer country and the exporter country should increase the GDP in order to increase the goods to be imported by the importer country and the goods produced by the exporter country.

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