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The Impact of Tariffs on Vietnam's Trade in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)

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Abstract

The study assesses the impact of tariffs on Vietnam's trade in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Research data was conducted between 2001 and 2018 on the official website of the Uncomtrade and the World Bank. This paper uses the gravity model to estimate the relationship between data series and considers the impact of factors on Vietnam's trade with CPTPP countries. The results have proven that tariff reductions have a positive effect on Vietnam's trade. Besides, the trade openness of Vietnam and CPTPP countries has positive impacts on Vietnam's trade. The study also shows that Real Effective Exchange Rate (REER) between Vietnam's and CPTPP countries' currencies has no strong effect on Vietnam's trade. Based on these findings, the article also suggests a number of policies to promote Vietnam's trade in future. In order to support businesses to better utilize opportunities and promote exports to CPTPP countries, the government of Vietnam should: (1) focus on reducing costs and time to participate in the market for production and business investors; (2) improve business investment environment to mobilize resources for production; and (3) continue to organize information campaigns to raise businesses' awareness of how to take advantage of CPTPP preferences.

Keywords: Trade, Tariff, Gravity Model, CPTPP, Vietnam

JEL Classification Code: C22, F14, F15, H72, O24

1. Introduction

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) is a new generation of free trade agreement, consisting of 11 member countries: Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam. The Agreement was signed on 8 March 2018 in Santiago Chile, and officially entered into force on December 30, 2018, for the first group of six countries to complete the Agreement ratification procedures include Mexico, Japan, Singapore, New Zealand, Canada, and Australia. For Vietnam, the Agreement takes effect from January 14, 2019. The CPTPP Agreement will create the largest free trade area in the world with a market size having a total GDP of about 10,567 billion USD, accounting for about 13.5% of global GDP and covering vast markets spread across many continents.

Understanding the importance of the Agreement, right after the CPTPP officially took effect for Vietnam, the Prime Minister issued Decision No. 121 dated January 24, 2019 on the CPTPP Agreement Implementation Plan with specific groups of tasks and implementation roadmap. So far, the National Assembly, the Government, ministries and branches of Vietnam have issued 15 legal documents to implement the CPTPP Agreement, including: two laws, three decrees, nine circulars, and one decision of Prime Minister. The Government of Vietnam has also directed ministries and agencies to continue to review existing or newly-issued legal documents to ensure their compatibility with the CPTPP Agreement.

Besides, both in Vietnam and other countries, there are many researchers discussing the impact of CPTPP on trade of a particular country. Typical examples include the studies by Lu (2018), Maliszewska, Olekseyuk, and Osorio-Rodarte (2018), Cooper and Manyin (2013), Armstrong (2011), Trung (2017), Nguyen (2019), Nguyen (2015), Hoi (2015),

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Hoi (2014), Bui (2017), Le (2015), and Phuong (2016). However, these studies only focus on analyzing the general opportunities and challenges of the CPTPP to the economies of member countries, or a specific industry in a certain country. There has been no research to estimate the level of change in import-export turnover of a particular country in the CPTPP when the Agreement's tariff elimination commitment is implemented. Basically, CPTPP's strong tariff elimination commitments can contribute to positive effects in boosting the export and import turnover of member countries, but each country will be impacted with varying degrees. Therefore, in order to have accurate estimates and forecasts about the change of Vietnamese trade in the CPTPP, the author conducts this study, thereby helping businesses and the government to better understand the importance of the CPTPP and have a more specific plan for the foreign trade development strategy of Vietnam in the coming years.

2. Overview of Vietnam's Trade

Import-export turnover of Vietnam with CPTPP member countries increased gradually in the period from 2001 to 2018. However, the trade balance is always in deficit, although this deficit does not grow rapidly in the 2001–2018 period. In addition, the share of Vietnam's import-export turnover in the CPTPP bloc compared to Vietnam's import-export turnover to the world has tended to decrease sharply from 2001 to 2018, from 35% down to 15%.

Thus, in general, trade between Vietnam and CPTPP member countries has steadily increased and accounts for a high proportion of about 20% of Vietnam's trade with the world in recent years. However, this proportion tends to decrease over time. For CPTPP members, Vietnam has major and steady trade exchanges with countries such as Japan, Australia, Singapore, Malaysia, and Canada. Vietnam has a trade deficit with most of the countries in this group except Canada. Vietnam's trade exchange with the remaining group of countries, including Mexico, Brunei, Chile, New Zealand and Peru is quite small, but always has a trade surplus during the period 2001–2018.

3. Literature Review

According to Scitovszky (1942), as per the theory of tariffs, import taxes tend to increase prices on the domestic market, reducing the amount of imports of a country. This shows that a 1% increase or decrease in tariffs can lead to changes in a country's import and export turnover. But the degree of this change also depends on many factors, including state management policies, domestic supply and demand, exchange rates, openness of the economy, import and export costs.

Laffer (2004) has showed the relationship between tax rate and total tax revenue, which is called the Laffer curve. Based on a theoretical curve, Laffer proved that tax increases in the US will negatively impact social productivity, that is, at a reasonable tax rate, total tax revenues will be maximized. When the tax rate changes, it affects the tax revenue because it changes the amount of imports and exports of a country.

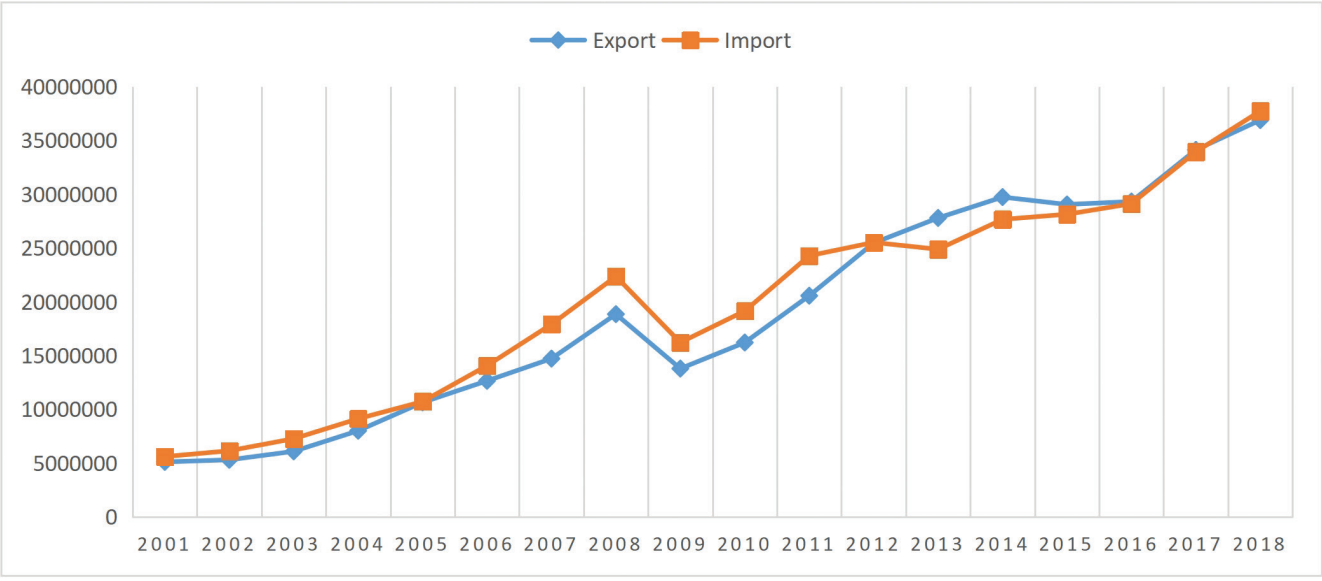

Figure 1: Import – Export Turnover of Vietnam with CPTPP Countries

Source: Calculated by the Author Based on UNComtrade Data

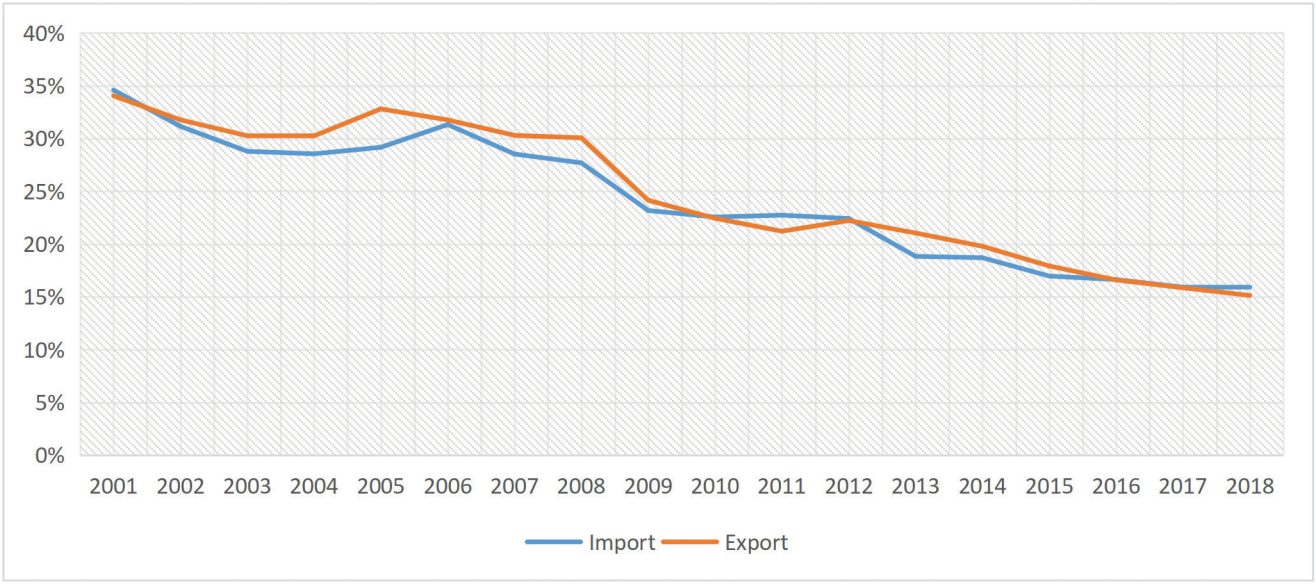

Figure 2: Proportion of Import-Export Turnover of Vietnam in CPTPP Compared with the World

Source: Calculated by the Author Based on UNComtrade Data

Uysal and Mohamoud (2018) studied the factors and their impact on exports of seven East African countries including Ethiopia, Madagascar, Kenya, Sudan, Mozambique, Tanzania, and Zambia. The authors used a panel data regression model through Stata 12 software, with secondary data from 1990 to 2015 for estimation. The research results show that the workforce has a positive relationship, accounting for 26% of the export volume of countries. Inflation is inversely correlated, increasing inflation leading to a decrease in export performance. Besides, foreign direct investment has a positive effect, accounting for up to 29% of export volume. Meanwhile, GDP is the only variable that does not affect the export value of East African countries. Finally, the positive effect of exchange rates on exports is seen to be around 14%.

Yang and Martinez-Zarzoso (2014) introduced a gravity model to study the factors affecting the export turnover of countries participating in free trade agreements in the period 1995–2010. The author uses variables such as GDP, population, common border, language, and free trade agreement ACFTA to evaluate the impact of joining free trade agreements, which has a huge effect on a country's merchandise exports.

Thai (2006) researched on factors affecting trade between Vietnam and the EU. The study using table data for the period 1993–2004 and using REM method identified factors that have a positive impact on Vietnam-EU trade including GDP and population of the exporting country, GDP and population of the importing country. Besides, one factor that has the opposite effect is the exchange rate.

Nguyen (2010) uses gravity model to analyze Vietnam's export performance. The research results show that the variables of income, exchange rate and ASEAN have a positive effect. On the contrary, the variable distance has a negative impact.

Tu and Giang (2018) studied the factors affecting Vietnam's exports. The paper uses mixed table data from 70 major export partners of Vietnam in the period 2001-2013 and the Hausman-Taylor estimation method. The research results show that Vietnam's GDP, the GDP of the importing country, the population of the importing country and the trade openness of the importing country are the factors that have positive effects on Vietnam's exports. Meanwhile, export costs have the opposite effect.

Allayarov, Mehmed, and Nurmatov (2018) investigated the factors that affect Kyrgyzstan's bilateral trade flows with its main trading partners and attempts to predict trade potential for Kyrgyzstan. Using panel data, the gravity model is applied to estimate Kyrgyzstan's trade from 2000 to 2016 with its 35 main trading partners. The coefficients derived from the gravity-model estimation are then accustomed predict trade potential for Kyrgyzstan. Results proved the success achieved and explained 63% of the fluctuations in Kyrgyzstan's trade. In step with the results, Kyrgyzstan's and its partners' GDP have a positive effect on trade, while distance and partners' population sway have a negative effect.

Predicted trade potential reveals that neighboring countries (China, Kazakhstan, Uzbekistan, and Tajikistan) and Russia still have a big trade potential. Kyrgyzstan, being a less developed economy, even by Central Asia standards, can only achieve its goals of reducing poverty and becoming more developed by increasing its overall trade with the remainder of the planet. Therefore, it is essential to review the main determinants of Kyrgyzstan's bilateral trade.

Through a review of studies of Vietnam as well as other countries, the author makes the following comments: To assess the factors affecting trade between countries, there are many studies using gravity model; there are no studies to estimate the change in trade between Vietnam and CPTPP countries when there is a tariff adjustment. Therefore, the author proposes a study on Vietnam's trade and CPTPP with the core factor being tariffs and some other factors based on the gravity model as follows:

(1) Gross Domestic Product (GDP) per capita shows a country's GDP divided by its total population. It shows the economic size or market size. According to economic theory, the larger the size of the economy or the greater the income level, the higher the trade volume. Tran et al. (2020) analyzed the event and determinants of China-ASEAN trade relations over the period 2000–2018. Employing both qualitative and quantitative approaches, the results show that the trade relations between China and the Association of South East Asian Nations (ASEAN) have remarkably developed and rapidly grown over times, with a significantly important concentration on the segments of high technological and medium technological products. This study also finds that China's economic scale is crucially impacting on the China-ASEAN trade relations under both the combination and sub-sector level. Therefore, the economic scale of Vietnam and the CPTPP countries is expected to have an impact on Vietnam's trade with these countries.

(2) Population size (POP) is a factor that directly affects a country's production capacity. This is also a factor that directly affects the production capacity of a country from different angles, namely, from a labor source perspective, the size of the labor force will increase as the population increases. From there, contributing to increase production capacity leading to an increase in exports. Similarly, when the population of the partner countries increases, the consumption of products increases, leading to an increase in the volume of goods imported. But, in addition, when the population increases, the ability to produce goods in the country also increases, this affects the turnover of imported goods. Thus, theoretically, the population of the exporting country and the partner countries can have a positive or negative effect on the trade volume of a country with that partner countries.

(3) Real Effective Exchange Rate (REER): The real exchange rate between the Vietnamese currency and the importing countries' currencies is calculated using the nominal exchange rate and the consumer price index. In which, the nominal exchange rate is calculated indirectly by dividing VND / 1 USD by X / 1 USD, where X is the currency unit of country X, so the real exchange rate is expressed as follows:
REER between VND and partner country currency = Nominal Exchange Rate × CPIx / CPIvn
In theory, when the real exchange rate falls, the value of the domestic currency increases against the foreign currency, causing domestic exports to decrease, imports of goods from abroad increase and vice versa.

(4) Economic openness factor in Vietnam and partner countries (OPEN). Ever since Adam Smith and David Ricardo published their work, economists have recognized the positive role of openness in international trade in exports and imports. The higher the trade openness, the greater the demand for international trade. Hye, Wizarat, and Lau (2016) contribute to the literature by developing trade openness index. An autoregressive distributed lag approach to cointegration and rolling regression method are employed. This study also employs the rolling window regression method so as to look at the soundness of coefficients throughout the sample span. The empirical findings indicate that trade openness is positively associated with economic process within the long term and short term. These results indicate that trade openness as measured by individual trade indicator and composite trade openness index are positively associated with economic process within the future and short run.

(5) The Liner Shipping Connectivity Index (LSCI) shows the degree of integration of a country into the global shipping network. A country's ability to access the world market depends largely on its transport connectivity, especially on regular shipping services to import and export manufactured goods. The degree of shipping connection with the world market greatly affects shipping costs in import and export. Therefore, the LSCI index of Vietnam and other countries in the CPTPP is expected to have a positive impact on Vietnam-CPTPP trade.

4. Research Model and Method

The proposed model of factors affecting trade between Vietnam and CPTPP countries is as follows:

$$\begin{aligned}\ln Tradet = {} & \beta_0 + \beta_1\ TRFcptpp + \beta_2\ lnGDPcptpp \\ & + \beta_3\ lnPOPcptpp + \beta_4\ lnOPENcptpp \\ & + \beta_5\ lnLSCIcptpp + \beta_6\ TRFvn \\ & + \beta_7\ lnGDPvn + \beta_8\ lnPOPvn \\ & + \beta_9\ lnOPENvn + \beta_{10}\ lnLSCIvn + \varepsilon\end{aligned}$$

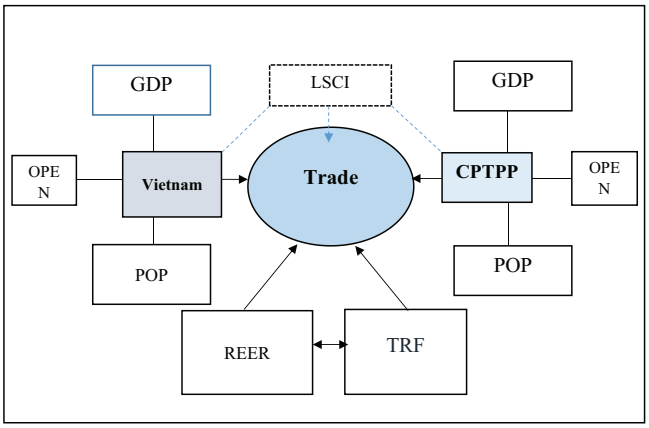

Figure 3: Factors Affecting Vietnam's Trade in CPTPP

Source: Suggested by the Author

The model of factors affecting Vietnam's export turnover to CPTPP countries is proposed as follows:

$$\begin{aligned}\ln EXPt = {} & \beta_0 + \beta_1\ TRFcptpp + \beta_2\ lnGDPcptpp \\ & + \beta_3\ lnPOPcptpp + \beta_4\ lnOPENcptpp \\ & + \beta_5\ lnLSCIcptpp + \beta_6\ lnGDPvn \\ & + \beta_7\ lnPOPvn + \beta_8\ lnOPENvn \\ & + \beta_9\ lnLSCIvn + \varepsilon\end{aligned}$$

The proposed model of factors influencing Vietnam's imports from CPTPP countries is as follows:

$$\begin{aligned}\ln IMPt = {} & \beta_0 + \beta_1\ lnGDPcptpp + \beta_2\ lnPOPcptpp \\ & + \beta_3\ lnOPENcptpp + \beta_4\ lnLSCIcptpp \\ & + \beta_5\ TRFvn + \beta_6\ lnGDPvn + \beta_7\ lnPOPvn \\ & + \beta_8\ lnOPENvn + \beta_9\ lnLSCIvn + \varepsilon\end{aligned}$$

Table shows data of scale in time and space. Table data structure is combined from time-series data, convenient in analyzing the variation of research object over time. Table data regression model is used to quantify the impact of the factors affecting Vietnam's trade with the CPTPP members through the model: pure regression (Pool OLS), fixed effects model (FEM), random effects (REM) and model suitability tests, and the Hausman test with defects in the model. A pure regression model is a regression model using the least squares method (POOL OLS). In the model, the coefficients do not change over time and

Table 1: A summary of the Variables in the Model

Variable	Interpretation and unit	Expected Sign of the Regression Coefficient	Data Sources
$lnTrade_t$	Import and export turnover of Vietnam and CPTPP countries in year *t* (taken logarithmic value)	/	Uncomtrade
$lnEXP_t$	Export turnover of Vietnam to CPTPP countries in year *t* (taken logarithmic value)	/	Uncomtrade
$lnIMP_t$	Export turnover of Vietnam to CPTPP countries in year *t* (taken logarithmic value)	/	Uncomtrade
TRF	Weighted average tariffs of CPTPP countries and Vietnam year *t* (%)	−	World Bank
lnGDP	Gross Domestic Product per capita of CPTPP countries and Vietnam year *t* (taken logarithmic value)	+	World Bank
lnPOP	Population of CPTPP countries and Vietnam in year *t* (taken logarithmic value)	+	World Bank
lnOPEN	Trade openness of CPTPP countries and Vietnam in year *t* (take logarithmic value)	+	World Bank
lnLSCI	Transport connection index of CPTPP countries and Vietnam year *t* (take logarithmic value)	+	World Bank

space, regardless of the existence of spatial and temporal specific effects of the data series. Therefore, this estimate often gives erroneous and ineffective results. The FEM overcomes the disadvantages of POOL OLS, allowing a different combination of all cross observations to be represented at the intercept. The downside of the model, however, is that it removes time-constant variables from the equation. Similar to the FEM model, REM can determine the different intercept coefficients of each cross unit, the general effects of the explanatory variables. However, unlike FEM, with REM the intercept coefficients of each cross unit are derived from a common coefficient that is constant with respect to object and time and a random variable. Thus, FEM assumes that the objects and intercept are fixed, while REM assumes that the cross units differ in error. So, when to use FEM? When to use REM? The Hausman test is used when choosing between two FEM and REM models.

The Hausman test is a statistical hypothesis test in econometrics. This algorithm is used to compare two methods of FEM and REM estimation. In other words, to consider a more suitable FEM or REM model, we use the Hausman test. In essence, the Hausman test to consider whether there exists similar correlation between ε_i and the independent variables.

Assumptions:

H0: ε_i and the independent variable are not correlated
H1: ε_i and the independent variable are correlated

When the value *P*-value < 0.05 we reject H0, then m, ε_i and the independent variable are correlated and we use the fixed effects model. In contrast, we use the random effects model.

Then, the study will apply the *F*-test to evaluate the suitability of the model. In addition, to find and fix the defects of the model, in this study the author also applies the heteroskedasticity test, the Multiple Collinearity test, and determines the chain correlation phenomenon. If the variance of variable error occurs, use Robust Standard Errors to fix it. If multicollinearity occurs, the model is sub-etched by adding or removing variables or taking the first difference.

5. Empirical Results and Discussion

5.1. Descriptive Statistics

The variables LnTrade, LnIMP, LnEXP, TRFcptpp, TRFvn, LnREER had high standard deviation, 2.3138; 2.5223; 2.3787; 3.1328; 3.6001; 2.0974, respectively. It means that these variables fluctuate very strongly.

Table 2: Descriptive Statistics of the Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
LnTrade	179	13.61676	2.31378	6.386879	17.44979
LnIMP	177	12.76	2.522233	2.197225	16.7621
LnEXP	179	12.85057	2.378712	6.289716	16.75116
TRFcptpp	170	4.323353	3.132855	0	15.57
LnGDPcptpp	162	1.030161	0.8673372	−2.951949	2.675915
LnOPENcptpp	170	4.301839	0.7106949	2.985587	6.090413
LnPOPcptpp	180	16.59564	1.632161	12.7368	18.66809
TRFvn	170	9.065294	3.600174	4.98	15.29
LnGDPvn	180	7.04392	0.6078099	6.003413	7.850336
LnOPENvn	170	5.007168	0.158584	4.714081	5.300238
LnPOPvn	180	18.28925	0.0516726	18.20678	18.37506
LnLSCICPtpp	150	3.4972	0.8306385	1.241269	4.708018
LnLSCIvn	150	3.521757	0.500228	2.554122	4.100657
LnREER	130	7.799618	2.09749	2.552775	10.18716

5.2. Model Estimation Results

Hausman test results of three models all show that the FEM regression model will better control the variables. Simultaneously, after testing and overcoming the model defects, the estimated results of the FEM models after adjustment are as follows.

According to the results of quantitative research, there are some points to note:

First, the variable TRFcptppt (average tariffs of CPTPP countries) has a negative impact on the total trade volume between Vietnam and CPTPP countries, as well as with Vietnam's export turnover to CPTPP countries at a level 1% statistical significance. Thus, this variable results in accordance with the expectations from the originally proposed model. With other unchanged conditions, when the average tariff of the CPTPP countries decreases by 1%, the trade volume of Vietnam with the CPTPP countries and Vietnam's export turnover to the CPTPP countries increases by 0.0978% and 0.1102%, respectively.

Second, the variables OPENcptpp and OPENvn also have a positive impact on the total trade volume between Vietnam and CPTPP countries, and Vietnam's exports to CPTPP countries are statistically significant at 1%. Thus, these variables showed consistent results with expectations from the originally proposed model. With other constant conditions, when the trade openness of CPTPP countries increases by 1%, the trade volume of Vietnam with CPTPP countries and Vietnam's export turnover to CPTPP countries increases by 1.3826% and 1.0540%. Similarly, with other constant conditions, when Vietnam's trade openness increases by 1%, Vietnam's trade volume with CPTPP countries and Vietnam's export turnover with CPTPP countries increases 3.1272% and 3.2432%, respectively.

Table 3: Model Estimation Results

Independent Variables	Dependent Variable								
	LnTade			LnEXP			LnIMP		
	POOL	FEM	REM	POOL	FEM	REM	POOL	FEM	REM
TRFcptpp	0.0174 [0.31]	−0.0247 [−0.84]	0.0174 [0.31]	−0.0087 [−0.14]	−0.0500* [−1.92]	−0.0087 [−0.14]	–	–	–
lnGDPcptpp	−0.1248 [−0.86]	0.0959 [1.33]	−0.1248 [−0.86]	−0.2403 [−1.44]	0.1181** [1.88]	−0.2403 [−1.44]	−0.4884 [−2.36]	−0.1481 [−0.88]	−0.4884 [−2.36]
lnPOPcptpp	−0.4017** [−2.12]	−4.4340* [−2.57]	−0.4017* [−2.12]	−0.2765*** [−1.30]	−5.1410*** [−3.39]	−0.2765*** [−1.30]	−0.3828 [−2.13]	1.7854 [0.46]	−0.3828 [−2.13]
lnOPENcptpp	−1.0101*** [−3.84]	0.1124 [0.21]	−1.0101* [−3.84]	−1.1250 [−3.76]	0.0765 [0.16]	−1.1250 [−3.76]	−0.4228 [−1.44]	3.8236*** [3.34]	−0.4228 [−1.44]
lnLSCIcptpp	3.5123*** [9.84]	1.0815* [2.96]	3.5123* [9.84]	3.2314*** [8.04]	1.4689*** [4.60]	3.2314*** [8.04]	3.1484 [8.94]	0.8407 [1.06]	3.1484 [8.94]
TRFvn	−0.0018 [−0.02]	−0.0147 [−0.39]	−0.0018 [−0.02]	–	–	–	0.0288 [0.20]	0.0347 [0.39]	0.0288 [0.20]
lnGDPvn	1.3946 [0.59]	1.5304 [1.60]	1.3946 [0.59]	0.6869 [0.29]	1.8287 [2.37]	0.6869 [0.29]	0.6150 [0.18]	0.7212 [0.32]	0.6150 [0.18]
lnPOPvn	−26.0810 [−1.06]	−5.3959 [−0.45]	−26.0810 [−1.06]	−13.2720 [−0.47]	−0.0529 [−0.01]	−13.2720 [−0.47]	−20.1195 [−0.56]	−27.7209 [−1.00]	−20.1195 [−0.56]
lnOPENvn	1.0543 [0.42]	0.5923 [0.60]	1.0543 [0.42]	1.6527 [0.59]	0.3757 [0.43]	1.6527 [0.59]	1.4057 [0.39]	0.3539 [0.15]	1.4057 [0.39]
lnLSCIvn	0.6691 [0.86]	0.3580 [1.15]	0.6691 [0.86]	0.3354 [0.42]	−0.1644 [−0.63]	0.3354 [0.42]	1.3789 [1.23]	0.8108 [1.11]	1.3789 [1.23]
lnREER	0.0317 [0.63]	−0.3612 [−0.80]	0.0317 [0.63]	0.0877 [1.55]	−0.2890 [0.88]	0.0877 [1.55]	−0.0574 [−0.78]	1.6494* [1.69]	−0.0574 [−0.78]
ε	471.8149 [1.07]	170.507 [0.81]	471.8149 [1.07]	239.1491 [0.48]	82.5956 [0.46]	239.1491 [0.48]	362.76 [0.57]	447.3379 [0.92]	362.76 [0.57]
R^2	0.6109	0.8135	0.6109	0.6533	0.8557	0.6533	0.344	0.5644	0.344

Table 4: FEM Model Estimation Results after Defect Correction

Independent Variables	LnTrade	LnEXP	LnIMP
TRFcptpp	−0.0978*** [−3.30]	−0.1102*** [−4.39]	–
lnGDPcptpp	0.0392 [0.53]	0.0278 [0.659]	−0.0339 [−0.25]
lnPOPcptpp	1.3780 [0.81]	1.0788 [0.75]	1.0750 [0.32]
lnOPENcptpp	1.3826*** [2.75]	1.0540*** [2.47]	4.0257*** [3.77]
lnLSCIcptpp	–	–	0.7285 [1.00]
TRFvn	–	–	–
lnGDPvn	–	–	–
lnPOPvn	–	–	–
lnOPENvn	3.1272*** [3.12]	3.2432*** [3.82]	0.5253 [0.30]
lnLSCIvn	–	–	–
lnREER	0.3926* [1.78]	0.3620** [1.94]	1.1391*** [3.04]
ε	−33.7585 [−1.29]	−28.4076 [−1.28]	−36.9164 [−0.70]
R^2	0.7647	0.8151	0.5508

Third, the variable of the real exchange rate VND on the partner country currency (REER) is positively correlated with the trade volume between Vietnam and the CPTPP countries, Vietnam's export turnover to the CPTPP countries and the Vietnam's imports from CPTPP countries are at the statistical significance of 10%, 5% and 1%, respectively. When other factors remain unchanged, the real VND exchange rate per dong to the importing country increases by 1%, the trade volume between Vietnam and CPTPP countries and Vietnam's export turnover to CPTPP countries and turnover. Vietnam's imports from CPTPP countries increased by 0.3926%, 0.3620% and 1.1391%, respectively. This is completely consistent with the theoretical basis.

Fourthly, the remaining variables such as TRFvn, GDP, Population, maritime connectivity of Vietnam and the CPTPP countries are excluded from the model due to the phenomenon of multicollinearity and meaninglessness in the model. So, this is considered a limitation in the research results of the article, unable to explain the impact of these variables on trade in goods between Vietnam and CPTPP countries.

6. Conclusion and Policy Implications

According to the results of this study, when the average tariff of the CPTPP countries decreased by 1% in the trade volume of Vietnam with the CPTPP countries, Vietnam's export turnover to the CPTPP countries increased by 0.0978. % and 0.1102%. This is a good sign that allows Vietnam to expect merchandise trade between Vietnam, especially exports to CPTPP countries will increase quite rapidly in the near future. Because CPTPP countries pledge to completely eliminate from 97% to 100% of import tariff lines for goods originating from Vietnam, depending on each country's commitment. Nearly all of Vietnam's exports to other CPTPP countries will be completely eliminating import duties as soon as the Agreement comes into effect or according to the roadmap. This is the highest level of commitments that Vietnam has received from existing FTAs.

When the trade openness of the CPTPP countries (OPENcptpp) increases by 1%, the trade volume of Vietnam with the CPTPP countries and Vietnam's exports to the CPTPP countries increase by 1.3826% and 1.0504%, respectively. Similarly, when Vietnam's trade openness increases by 1% in Vietnam's trade volume with CPTPP countries, Vietnam's exports to CPTPP countries increase by 3.1272% and 3.2432%, respectively. As can be seen, trade between Vietnam and CPTPP countries depends on trade openness of Vietnam and its partner countries in the CPTPP. The implementation of the CPTPP Agreement also shows that Vietnam and other CPTPP countries have been very active in opening up their economies. Since joining the World Trade Organization (WTO) in 2007 until now, Vietnam has participated in negotiating and signing 16 FTAs. Out of 13 FTAs signed, 12 were in put in effect, one was signed and ratified, but has not come into effect and three FTAs are negotiating. Within a year since the CPTPP officially took effect, Vietnam saw it as positive. Specifically, in terms of export growth, except with Australia and Singapore that was kept the same level (because Vietnam had a previous FTA relationship), exports to other markets in 2019 all increased sharply. Among the six partners that implemented the CPTPP, exports to Canada increased the most (29.8%) followed by Mexico (26.3%); these are also the two partners with new FTA relations. In 2019, Vietnam has issued 21,163 certificates of origin form CPTPP for Vietnamese goods exported to countries under this agreement with a total value of goods of nearly 600 million USD. This result, adds empirical evidence to show prospects for trade growth between Vietnam and CPTPP countries.

The real VND-to-currency exchange rate (REER) increased by 1%, the trade volume between Vietnam and CPTPP countries and Vietnam's export turnover to CPTPP countries and Vietnam's import turnover from CPTPP countries increased by 0.3926%, 0.3620% and 1.1391%, respectively. This tells me that if Vietnam implements the VND devaluation

policy, it will have a positive impact on trade between Vietnam and CPTPP countries. However, it is necessary to consider and choose an appropriate level of dumping because the impact of this devaluation is not too strong on the import-export turnover between Vietnam and the CPTPP countries.

In summary, the CPTPP Agreement will open up opportunities to help Vietnam restructure its export and import markets. Currently, Vietnam's import and export activities are mainly with the Asia region (accounting for about 80% of import turnover and 50% of export turnover). New FTAs such as CPTPP will help businesses to penetrate and exploit new markets with great potential. However, the implementation of the CPTPP Agreement also poses many challenges. In order to enjoy the tariff preferences under the CPTPP, Vietnam's exported goods must meet the criteria of origin. This is a challenge because perceptions of enterprises, especially small- and medium-sized enterprises, related to integration in general and the tax reduction schedule, in particular origin criteria are incomplete as well as export goods still depends much on raw materials imported from foreign countries. On the other hand, the trend of protecting the domestic production of the importing countries is increasing. Regulations, requirements on environmental standards, product quality and rules of origin will be a challenge for Vietnamese exports.

Therefore, in order to support businesses to better utilize opportunities and promote exports to CPTPP countries, an important solution is to strengthen anti-origin fraud measures to protect export industries of Vietnam facing the risks of trade remedies evasion lawsuits. At the same time, the government should continue to organize information campaigns to raise businesses' awareness about FTA incentives, directions to take advantage of and how to take advantage of FTA preferences, especially rules of origin. At the same time, the Government also focuses on reducing costs and time to participate in the market for production and business investors, and improve business investment environment to mobilize resources for production. Creating quality goods for production, meeting standards, quality, and matching the needs and tastes of international markets should also be seen as an important solution. On the other hand, the Government needs to promote the development of logistics services for export by perfecting policies to promote investment attraction in logistics infrastructure, and focus on improving logistics infrastructure associated with e-commerce, combining logistics with e-commerce according to current development trends in the world and the region.

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