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СОЦИАЛЬНО-ЭКОНОМИЧЕСКОЕ РАЗВИТИЕ

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Tu Thuy Anh, Chu Thi Mai Phuong, Truong Thi Lan Huong

Impacts of the US-China Trade Tension and RCEP on Vietnam-China Trade Balance

Abstract. The paper aims to analyze the trade balance between Vietnam and China and assess the impact of its key determinants, with a focus on the US-China trade war, using the autoregressive distributed lag model for quarterly data from Q1 2009 to Q4 2022. The statistical analysis shows that although Vietnam's trade balance with China shows increasing deficits, the US-China trade war has a positive impact on Vietnam as its export-import ratio with China increases in both the long and short run. We also find that the impact of participation in the Regional Comprehensive Economic Partnership (RCEP) is positive but not statistically significant. We also find evidence that several factors have a positive and significant impact on the trade balance, including Vietnam's growth rate, Vietnam's industrial production index, and China's population. On the other hand, some factors, such as the exchange rate between Chinese yuan and Vietnamese dong and the population of Vietnam, are found to have a significant negative impact. These findings can provide evidence to help Vietnamese businesses and policymakers formulate trade policies with China, especially in the current complex geopolitical context.

Keywords: trade balance, the US-China trade war, RCEP, Vietnam, China, geopolitics.

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Ты Тхюи Ань, Тю Тхи Май Фыонг, Чыонг Тхи Лан Хыонг

Влияние американо-китайской торговой войны и ВРЭП на торговый баланс между Вьетнамом и Китаем

Аннотация. Целью статьи является анализ торгового баланса между Вьетнамом и Китаем и оценка влияния на него ключевых факторов с акцентом на торговую войну между США и Китаем. В статье используется модель авторегрессии и рас-

пределённого лага для квартальных данных с 1-го квартала 2009 г. по 4-й квартал 2022 г. Анализ показывает, что, несмотря на растущий дефицит вьетнамо-китайского торгового баланса, торговая война между США и Китаем оказывает положительное влияние на Вьетнам, поскольку соотношение его экспорта в Китай к импорту увеличивается как в долгосрочной, так и в краткосрочной перспективе. Кроме того, приведены доказательства того, что участие в Всеобъемлющем региональном экономическом партнерстве (ВРЭП) оказывает положительное влияние, но оно не является статистически значимым. Показано, как на торговый баланс существенное положительное влияние оказывают такие факторы, как темпы роста вьетнамской экономики и индекса промышленного производства, а также население Китая. С другой стороны, такие факторы, как обменный курс китайского юаня и вьетнамского донга, а также население Вьетнама, оказывают существенное негативное влияние. Эти данные могут быть полезными вьетнамскому бизнесу и политикам в формировании торговой политики по отношению к Китаю, особенно в нынешнем сложном геополитическом контексте.

Ключевые слова: торговый баланс, торговая война США и Китая, ВРЭП, Вьетнам, Китай, геополитика.

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Introduction

Today, international trade has become a critical component of Vietnam's economy. The nation has experienced impressive economic growth, which can be attributed to its successful integration into the global market. As neighboring nations with both land and sea borders, Vietnam and China have had numerous political, cultural, and historical interactions. Trade relations between the two countries are significant, with China standing out as one of Vietnam's most important trading partners. Impressively, trade activities between Vietnam and China, including both export and import, have experienced robust growth in recent years, characterized by consistently high annual growth rates.

However, the bilateral trade balance has consistently favored China, resulting in a deficit for Vietnam. In the long run, this trend could encourage Vietnamese entrepreneurs to become more dependent on Chinese supplies, potentially reducing the competitiveness of Vietnamese products in the global market. Moreover, despite the overall improvement and surplus in Vietnam's trade balance with various countries, the continuing challenge of excessive import from China is a major concern for Vietnam. This concern has become more serious recently, especially as tensions between the United States and China have escalated. The impact of this issue could extend to the trade dynamic between Vietnam and the US, potentially causing broader damage to

international trade relations. Given the significant influence of the US, a major trading partner for Vietnam with which Vietnam maintains a surplus trade balance, the potential consequences could be detrimental to Vietnam. Therefore, a thorough analysis of the bilateral trade balance between Vietnam and China is crucial to better understand the factors influencing this trade relationship. Such an analysis is essential for drawing meaningful policy implications aimed at addressing trade imbalances and fostering a more sustainable economic interaction between the two nations.

Several studies have examined the factors affecting Vietnam's export, import, trade balance, and the structure of trade deficit. Tu and Nguyen [2011] analyzed the structure of Vietnam's trade deficit, and calculated the import penetration rate to measure the threat of Chinese import to Vietnam's domestic market during 1995—2010. Nguyen et al. [2015] analyzed the trade creation and trade diversion effects of the future EU-Vietnam FTA using the gravity approach. Phan and Ji [2015] examined the impact of real exchange rate, domestic and foreign income on bilateral trade balance between Vietnam and sixteen trading partners from 1999 to 2012. Nguyen [2019] analyzed the interdependence and complementarity of trade between Vietnam and China from 2001 to 2017. Dang [2016] used an unrestricted VAR model to examine the determinants of Vietnam's trade balance. The IMF Country Report [2006] developed the analysis of the extent to which Vietnam's favorable trade performance may have been overly dependent on regional trade, using a gravity model applied to cross-country trade data for 2002. Dinh [2017] assessed the determinants of trade relations between Vietnam and its two major trading partners, the United States and China. Tran [2017] employed the gravity model to study and analyze the determinants of Vietnam's export to ASEAN countries over nineteen years, from 1997 to 2015.

While numerous studies have examined Vietnam's overall export, import, and trade balance, there remains a dearth of research dedicated specifically to the bilateral trade balance between Vietnam and China. In particular, there is a significant gap in the literature regarding the impact of the US-China trade war and the formation of the Regional Comprehensive Economic Partnership (RCEP) on the trade balance between these two nations. This paper aims to fill this critical gap by employing an econometric model to evaluate the influences of the GDP of both countries, the exchange rate between their currencies, the industrial production of Vietnam, the formation of RCEP that includes both countries, and, importantly, the effects of the US-China trade war on the trade balance between Vietnam and China.

The paper is organized as follows. The second part presents preliminary findings on Vietnam's export, import and trade balance with China. The fourth part empirically analyzes the determinants of the trade balance between the two countries. Part 5 concludes the paper.

Trade balance between Vietnam and China

Export of Vietnam to China

According to the General Statistics Office of Vietnam (GSO), Vietnam's product export to China have undergone a significant transformation. In 2009, China was the fifth largest importer of Vietnamese goods, but in 2022 it took the second position. This

shift underscores a substantial change in the dynamics of Vietnam's export to China, highlighting a more pivotal role in Vietnam's overall export landscape.

In 2009, the US emerged as Vietnam's most important market, accounting for 19.98 % of the country's export revenue. This was attributed to the robust development of Vietnam-US relations, particularly marked by the signing of the Bilateral Trade Agreement in 2001 and the approval of the Law on Permanent Normal Trade Relations in 2007. The European Union (EU) followed closely with 16.47 %, reflecting the strengthened ties between Vietnam and the EU during the FTA negotiations. As Vietnam joined ASEAN in 1995, the member countries of ASEAN became increasingly important, making it the third largest market for Vietnam in 2009, contributing 15.34 % of export revenue. Japan ranked fourth, importing 11.1 % of Vietnam's goods in 2009. This was influenced by the Vietnam-Japan Economic Partnership Agreement and the ASEAN-Japan Comprehensive Economic Partnership, both signed in 2008. Despite numerous advantages, including proximity, low-cost transportation, a huge market with nearly one-sixth of the world's population, and the ASEAN-China Free Trade Agreement, Vietnam's export to China accounted for only 9.46 % of total export value. This underwhelming figure relative to the market's potential was not only influenced by strained bilateral relations due to events such as the nine-dash line dispute. The same period also witnessed a significant reduction in China's import activities due to the global financial crisis, which further affected Vietnam's export share to the Chinese market (fig. 1).

In 2022, there was a significant shift in the export structure for Vietnam. While the United States remained the top importer with a market share of 29.46 %, indicating a robust relationship between Vietnam and the US, China experienced significant growth, securing its position as the second largest importer with a market share of 15.54 %. The increase in export to China can be attributed to two main factors. First, the deepening economic ties between Vietnam and China prompted China to capitalize on Vietnam's advantages, especially with the implementation of new special preferential export tariff schedules under various free trade agreements. Second, there was a gradual shift in the types of goods exported to China, from mainly agricultural and low-value industrial

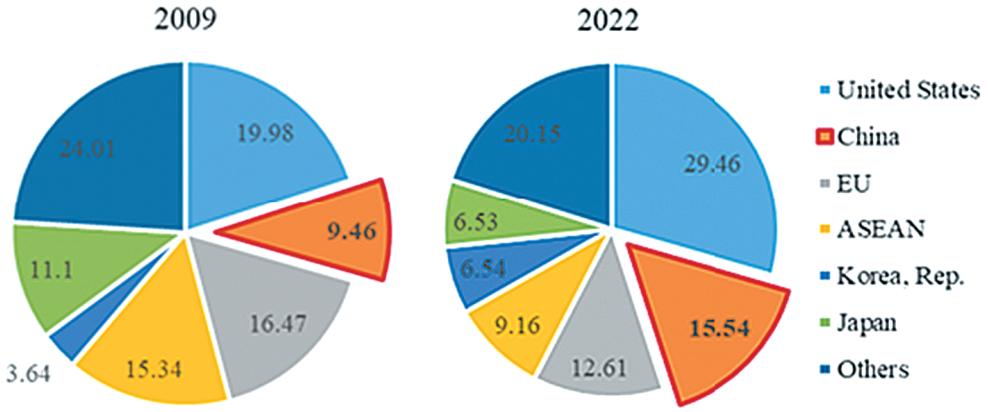

Fig. 1. The proportion of Vietnam's export to different markets in 2009 and 2022.
Source: General Statistics Office of Vietnam and Vietnam Customs.

products to a focus on high-technology goods. This shift significantly increased the total value of export to China. These changes in relationship dynamics and export structures allowed Vietnam to fully exploit the potential of the Chinese market. China was followed by the European Union, ASEAN, Japan, and South Korea with import shares of 12.61, 9.16, 6.54, and 6.53 %, respectively.

Statistically, China is gradually becoming a more important market for Vietnam. Moreover, the share of China is expected to increase further in the future. The reason for the increased importance of the Chinese market is the significant growth in export to China during this period. As a result, Vietnam's export turnover to China showed continuous annual growth from 2009 to 2022. The figures increased from USD 5.4 billion in 2009 to USD 57.7 billion in 2022, representing a more than tenfold increase compared to the 2009 statistics (fig. 2).

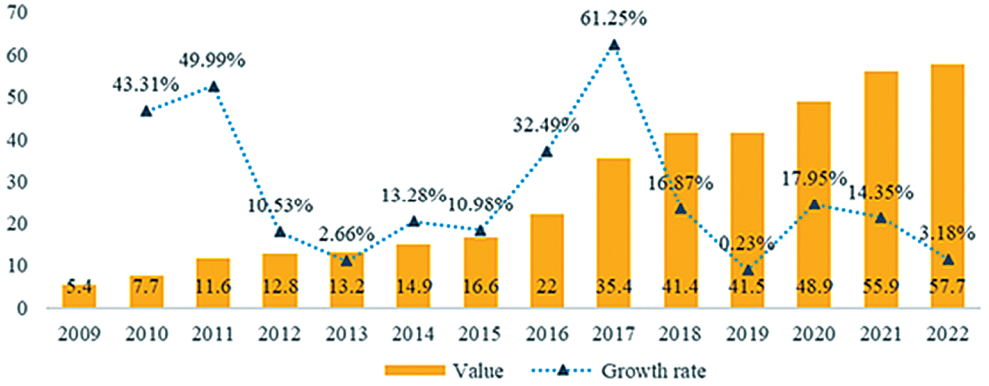

Fig. 2. Value (in billion USD) and growth rate of export to China from 2009 to 2022.
Source: General Statistics Office of Vietnam and Vietnam Customs.

It can be seen that although Vietnam's export to China has grown remarkably in recent years, Vietnam has still not tapped the full potential of this market, because the export turnover is still limited compared to the potential of the Chinese market, and if there are abnormal events, export from Vietnam to China would be severely affected. There are several possible reasons for this. First, the export structure remained unsustainable, with a continued emphasis on low-value products. Second, the competitiveness of Vietnamese products has not yet reached a significant level. Finally, Vietnamese producers have an incomplete understanding of the market, which hinders their ability to fully exploit the market's potential. This could lead to some potential risks and cause both Vietnamese and Chinese producers to be reluctant to trade with each other.

Import of Vietnam from China

China has typically been the top country of origin for goods imported into Vietnam, with the share of Chinese products in the Vietnamese market increasing steadily over time. In 2009, only about one-fifth of imported goods came from China, while in 2022, it was nearly one-third.

In 2009, the share of Chinese goods in the Vietnamese market was 22.03 %, second only to the largest ASEAN market share of 23.53 % percent. Japan ranked third with 9.77 %, followed by South Korea with 9.59 %. The figure for the EU was 7.64 %. Surprisingly, although the US was Vietnam's largest importer in 2009, US export to Vietnam accounted for only 3.87 % of Vietnam's total import. One of the main factors contributing to the low level of import from these countries is their geographical distance from Vietnam, coupled with the lack of preferential trade agreements. (Fig. 3).

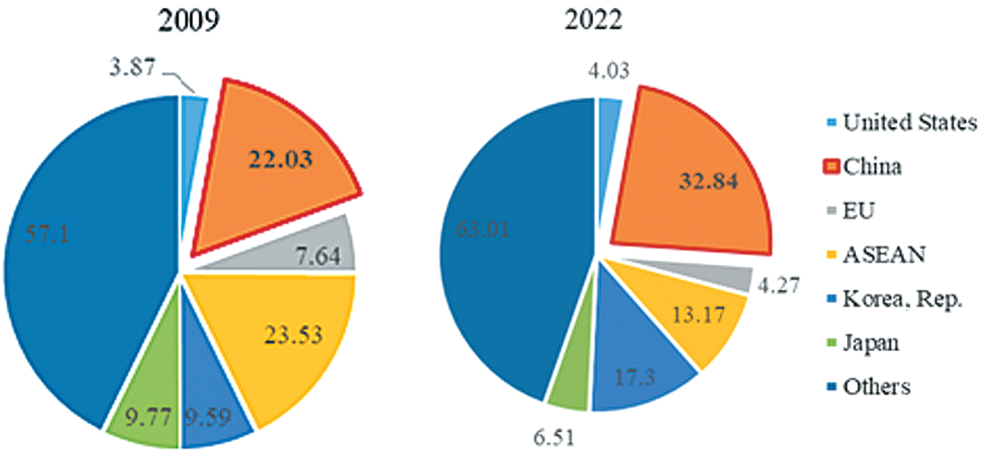

Fig. 3. The proportion of import from different countries in 2009 and 2022.
Source: General Statistics Office of Vietnam.

In 2022, there was a significant shift in the structure of import to Vietnam. In that year, China overtook ASEAN and South Korea to claim the largest share of Vietnam's market at 32.84 %. From 2009 to 2022, Vietnam's increased openness has led to larger import, especially considering that the US and other developed countries continue to impose significant restrictions on Chinese products. As a result, import from China to Vietnam have increased, serving both the direct consumption needs of the Vietnamese market and establishing Vietnam as an intermediate market for Chinese products. South Korea became the second largest source of import for Vietnam, with a market share of 17.3 %. During this period, many Korean investors recognized the potential of the Vietnamese market, which led to the initiation of numerous foreign direct investment projects, mainly focusing on high technology. However, due to the underdevelopment of supporting industries in Vietnam, the country had to rely on import, resulting in a remarkable increase in import from South Korea to Vietnam. Meanwhile, ASEAN's market share dropped to only 13.17 %. For the three other suppliers, import from these exporters accounted for only a small share of Vietnam's total import due to long geographical distances, differences in tastes and preferences of local people, and high prices. In particular, the figure for Japan fell to 6.51 % in 2022. For the EU, there was a drop in percentage to 4.27 % from 7.64 % in 2009. Although the US share increased, the US remains the smallest supplier, with a 4.03 % market share in 2022.

It is evident that China continues to maintain its position as the main supplier to Vietnam, and this pattern is expected to extend in the future. Although China has become the largest supplier to Vietnam, import from China continue to grow steadily each year. According to GSO and Vietnam Customs, in 2009, import from China were USD 15.4 billion, while in 2022, the figure will be USD 117.9 billion, nearly 8 times higher (fig. 4).

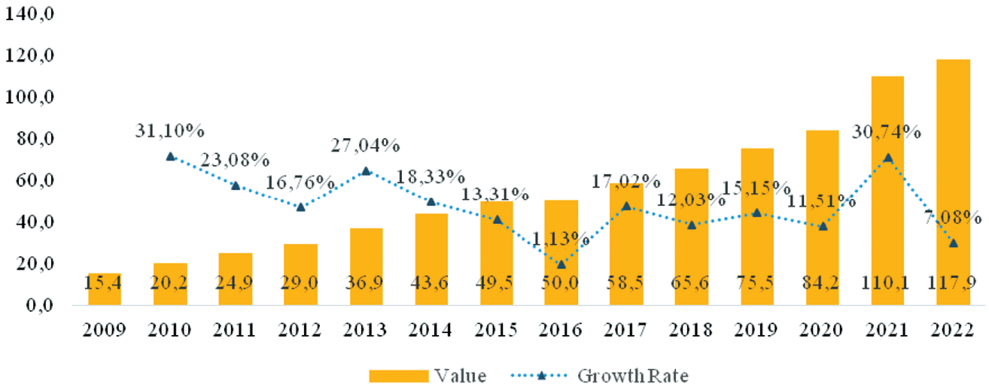

Fig. 4. Value (in billion USD) and growth rate of import from China from 2009 to 2022.
Source: General Statistics Office of Vietnam and Vietnam Customs.

In conclusion, since 2009, China has been Vietnam's largest export market. Meanwhile, import from China have remained consistently high, experiencing annual growth at a rapid pace. It is expected that the volume of import from China will continue to rise, further establishing China's role as Vietnam's main supplier in the coming years. There are several explanations. First, import from China are usually high-value. Second, Chinese products are quite competitive. Lastly, Vietnam is open to Chinese products, making them popular in the market.

Moreover, the recent issue of transshipment highlights the limited government control over the origin of products. This not only encourages Vietnamese firms to import more Chinese products at lower prices and export them at higher prices to make a profit, thereby increasing import from China, but it also diminishes the competitiveness of Vietnamese products and undermines the credibility of Vietnamese companies.

Vietnam—China trade balance

From 2009 to 2022, both export and import between Vietnam and China have increased, but not steadily and at different rates. According to data from GSO and Vietnam Customs, the bilateral trade balance between Vietnam and China has deteriorated from 2009 to 2022. In 2009, the trade deficit between Vietnam and China was only USD -10 billion, with an export-import ratio of 35.1 %. However, by 2022, the deficit had increased significantly to -USD60.2 billion, almost six times higher than in 2009, with an export-import ratio of 49 % (fig. 5).

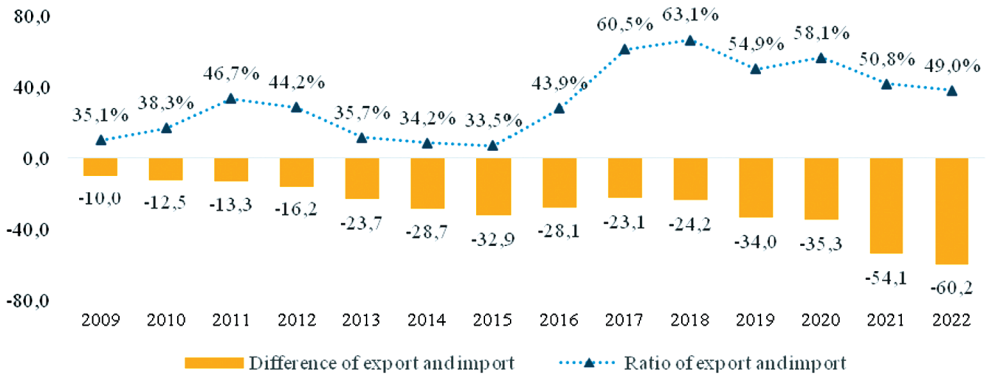

Fig. 5. Balance of trade between Vietnam and China from 2009 to 2022 (in billion USD and %).
Source: General Statistics Office of Vietnam and Vietnam Customs

As shown in Figure 5, from 2009 to 2022, the bilateral trade balance between Vietnam and China consistently remained in deficit status for Vietnam. This indicates that import from China consistently exceeded export to China. Although both import and export increased during this period, the cumulative growth of export could not match the cumulative growth of import. This imbalance can be attributed to the structure of import and export between the two countries. Specifically, most of the goods exported from Vietnam to China were domestically produced, but they were low-value products. In contrast, most of the goods imported from China were high-value products. While there has been an increase in the export of high-tech products to China in recent years, the actual benefits of these products have been limited. This is because they are mainly produced by subsidiaries of multinational companies, and the inputs used for production are also imported goods, some of which may even be sourced from China. As a result, the gains from export are offset by the costs of import, exacerbating the deficit status.

From 2009 to 2022, there were some years when the bilateral trade balance improved, but overall, it worsened throughout the period. China is considered Vietnam's most important trading partner, as it has the largest total export and import turnover. However, although Vietnam's overall trade balance has improved and turned positive in recent years, the bilateral trade balance between Vietnam and China has remained negative and worsened, negatively affecting Vietnam's overall trade balance. According to GSO and Vietnam Customs, in 2009, the overall trade deficit was higher than the trade deficit specifically between Vietnam and China, at -USD12.9 billion and -USD10 billion, respectively. However, by 2022, while the overall trade balance was positive at USD 12.4 billion, the bilateral trade balance became even worse, reaching USD -60.1 billion.

Moreover, although Vietnam has always suffered from increasing trade deficits with China, when we examine the ratio of export to import, this ratio tends to increase, with the increase starting in 2017 — a year before the US-China trade war took place. When the US-China trade war occurred in 2018, if we compare the periods before and after the war, we see that the ratio is higher after the war. It seems that Vietnam benefited from this trade war in some way. However, the trade balance, as measured by the

export-import ratio, is gradually decreasing from 2018 to 2022. This could be attributed to the diminishing impact of the US-China trade war. In addition, the world and the region are facing various complex issues, and geopolitical developments related to the interests of major countries such as the US and China in Vietnam will have a greater impact on Vietnam's overall economic development and its international trade. Therefore, Vietnam-China trade is also undergoing significant changes.

Empirical analysis

Model

Based on international trade theory and existing literature, this paper examines the key determinants of the trade balance between Vietnam and China, including the size of the two economies, the level of industrialization in Vietnam, the formation of the Regional Comprehensive Economic Partnership, and the US-China trade war. An autoregressive distributed lag (ARDL) model is applied to quarterly data from Q1 2009 to Q4 2022.

The ARDL method has several advantages over other cointegration techniques. First, its primary advantage over traditional cointegration methods is that ARDL is suitable even when the order of integration of the variables is a mixture of I (0) and I (1). Second, when the sample size is small, the ARDL approach to testing cointegration is statistically more significant than the Johansen cointegration technique, which requires a large sample size for reliability. Third, unlike conventional methods for identifying long-run relationships, the ARDL method does not estimate a system of equations but focuses on estimating a single equation. Fourth, it effectively addresses the endogeneity problem of the explanatory variables. Finally, it can simultaneously estimate the short-term dynamics and the long-term cointegration relationship between variables [Chu et al., 2021].

The regression model is therefore written as follows:

$$\Delta BOT_t = \beta_0 + \sum_{i=1}^{p} \beta_{0i} \Delta BOT_{t-1} + \sum_{i=1}^{p_1} \beta_{1i} \Delta RGRCNYOY_{t-1}$$
$$+ \sum_{i=1}^{p_2} \beta_{2i} \Delta RGRVNYOY_{t-1} + \sum_{i=1}^{p_3} \beta_{3i} \Delta IPIVN_{t-1} + \sum_{i=1}^{p4} \beta_{4i} \Delta WAR_{t-1}$$
$$+ \sum_{i=1}^{p5} \beta_{5i} \Delta RER_{t-1} + \sum_{i=1}^{p6} \beta_{6i} \Delta LNPOPCN_{t-1} + \sum_{i=1}^{p7} \beta_{7i} \Delta LNPOPVN_{t-1}$$
$$+ \sum_{i=1}^{p8} \beta_{8i} \Delta RCEP_{t-1} + + \sum_{i=1}^{p9} \beta_{9i} \Delta WAR * LNPOPCN_{t-1}$$
$$+ \sum_{i=1}^{p10} \beta_{10i} \Delta WAR * LNPOPVN_{t-1} + \theta_0 BOT_{t-1} + \theta_1 RGRCNYOY_{t-1}$$
$$+ \theta_2 RGRVNYOY_{t-1} + \theta_3 IPIVN_{t-1} + \theta_4 WAR_{t-1} + \theta_5 RER_{t-1}$$
$$+ \theta_6 LNPOPCN_{t-1} + \theta_7 LNPOPVN_{t-1} + \theta_8 RCEP_{t-1}$$
$$+ \theta_9 WAR * LNPOPCN_{t-1} + \theta_{10} WAR * LNPOPVN_{t-1} + \varepsilon_t$$

where, BOT is a trade balance, measured by export divided by import, multiplied by 100; RGRVNYOY and RGRCNYOY are the GDP growth rate of Vietnam and China compared to the same quarter of the previous year; RER is the real exchange rate between CNY and VND, also compared to the same quarter of the previous year; the dummy WAR, representing for the trade war between the US and China takes the value of 1 from the second quarter of 2018 to the last quarter of 2022; IPIVN is the Industrial Production Index of Vietnam, POPVN and POPCN are the population of Vietnam and China, they are in logged form, RCEP is a dummy variable that takes the value of 1 in all quarters of 2021, 2022 and takes the value of 0 in the remaining quarters; θi (i=1,10), β0 and βki (k=0,10) are the parameters, Δ is the first difference symbol, is the error.

This article uses the autoregressive model with lagged distribution (ARDL) developed by Im et al. [2003] and Pesaran et al. [2001]. The steps to apply the ARDL approach are as follows: (i) Unit Root Test; (ii) Bound test to determine the cointegrating relationship between variables; (iii) Results of the ARDL model for long-term and short-term relationships; and (iv) diagnosis of the ECM model.

Results

Unit Root Test

The results of the ADF unit root test in Table 1 show that the series RGRVNYOY and IPIVN are stationary at the original level I(0), while the series BOT, RGRCNYOY, IPIVN, RER, LNPOPCN and LNPOPVN are stationary at the first difference I(1). Since all the series used are stationary at order 0 or 1, and none is stationary at order 2 or higher, the ARDL regression method is suitable for empirical analysis.

Table 1. **ADF test results**

Variables	Level		1st Difference		Conclusion
	t	p	t	p	
BOT	−1.668807	0.4414	−12.33476	0.0000	I(1)
RGRCNYOY	−1.276870	0.6327	−5.445366	0.0000	I(1)
RGRVNYOY	−4.694519	0.0003	−4.744968	0.0004	I(0), I(1)
IPIVN	−3.461042	0.0126	−8.770532	0.0000	I(0), I(1)
RER	−1.381580	0.5853	−7.208026	0.0000	I(1)
LNPOPCN	−2.417956	0.1414	−10.10300	0.0000	I(1)
LNPOPVN	−1.144452	0.6921	−41.05535	0.0001	I(1)

Source: authors' calculation.

Bound test

From the results of Table 2, it can be confirmed that there is a cointegrating relationship between the BOT and the other variables in the model since the calculated F statistic value of 6.573420 is larger than the upper confidence limits at 10 %, 5 %, 2.5 %, and 1 % which are 2.94, 3.24, 3.5, and 3.86 respectively. Therefore, the hypothesis of the existence of a long-term relationship between the variables in the model is accepted.

Table 2. **The Bound test results**

	F	Critical value							
k	F — statistic	10 %		5 %		2.5 %		1 %	
		I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
9	6.573420	1.83	2.94	2.06	3.24	2.28	3.5	2.54	3.86

Source: authors' calculation.

Estimated results of long-term coefficients

Table 3 shows that the US-China trade war has a positive and statistically significant impact on the trade balance between Vietnam and China. We have statistical evidence that the US-China trade tensions lead to higher Vietnam's export-import ratio in the long run. This result is consistent with the authors' expectations and is in line with the research findings of Nidhiprabha, B. [2019] and Maghfiroh, L. [2021].

Table 3. **Estimated results of long-term coefficients**

Variables	Dependent BOT			
	Coef.	SE	t	p
RGRCNYOY	2.293118	2.071978	1.106729	0.2749
RGRVNYOY	6.575427	2.484590	2.646484	0.0115
IPIVN	0.188258	0.041822	4.501384	0.0001
WAR	46.96840	16.10640	2.916133	0.0057
RER	–0.062291	0.028215	–2.207741	0.0329
LNPOPCN	2582.498	1000.679	2.580745	0.0135
LNPOPVN	–1312.950	577.6274	–2.273005	0.0283
RCEP	11.42088	10.57197	1.080297	0.2863
WAR*RGRCNYOY	–2.038010	2.171231	–0.938643	0.3534
WAR*RGRVNYOY	–5.346112	2.479834	–2.155834	0.0370

Source: authors' calculation.

This can be explained by the fact that as two major countries in the world, the US-China trade war will have a significant impact on Vietnam's overall economic situation and its trade. The US-China trade war means that China will redirect and intensify export to other markets, including Vietnam, with major export items such as machinery, home appliances, plastic, rubber, etc. Vietnam's import from China will increase. Conversely, the U.S. faces challenges in the trade war with China as China imposes import tariffs on U.S. goods, especially agricultural products. This leads China to seek import from other potential markets, especially Vietnam with its significant agricultural position. In response to this opportunity and given the attractive factors in the Chinese market such as its population and geography, Vietnam will increase export to China in the long term, as China is Vietnam's second largest export market after the US. Vietnam's increa-

sing export to China make it the second-largest export market for Vietnam, only after the US in 2022. Although the trade balance still shows deficits for Vietnam, the growth of export outpaces the growth of import, resulting in an increased export-to-import ratio between Vietnam and China due to the US-China war. The model provides empirical evidence that Vietnam benefits from the US-China trade war in terms of trade balance. This result confirms the descriptive analysis presented in Figure 5.

Furthermore, while the establishment of the Regional Comprehensive Economic Partnership (RCEP) has had a positive impact on Vietnam's export-import ratio with China, the impact is not statistically significant. This may explain why the RCEP, despite being the world's largest free trade agreement with 15 member countries representing 32 % of the world's GDP and population, has not yet had a significant impact on Vietnam's trade with China. Trade relations between the two countries are still influenced by other bilateral agreements, such as the Cross-Border Shopping Agreement between China and Vietnam, the Agreement on Economic Cooperation between Vietnam and China, and ASEAN-China Trade Agreement (ACFTA). In addition, trade agreements typically have delays in taking effect. Thus, the empirical evidence supports the notion that RCEP's impact on Vietnam's trade balance with China is not as significant as initially expected.

Moreover, the estimation results show significant positive impacts on Vietnam's export-import ratio with China, including Vietnam's real GDP, Vietnam's industrial production index, and China's population. Meanwhile, factors indicating significant negative impacts include the real exchange rate between the Chinese yuan and the Vietnamese dong, and the population of Vietnam. Surprisingly, the impact of China's real GDP is not statistically significant.

Estimated results of short-term coefficients

The results presented in Table 4 show that the estimated coefficient of the ECT error correction term is -0.752673 and is statistically significant at the 1 % level. This coefficient indicates that about 75 % of the difference between short-run and long-run export-import ratios is adjusted within one year.

Table 4. **Estimated results of short-term coefficients**

Variables	Dependent BOT			
	Coef.	SE	t	p
C	–22716.49	2395.358	–9.483548	0.0000
D(RGRVNYOY)	3.113129	0.547078	5.690468	0.0000
D(WAR)	16.76370	6.312880	2.655475	0.0112
CointEq(-1)*	–0.752673	0.079364	–9.483861	0.0000

Source: authors' calculation.

The short-term estimation results show that the US-China trade war has a positive impact on the export-import ratio of Vietnam and China, which is statistically significant at the 5 % level. The short-run results confirm the long-run impact of the US-China trade war on the export-import ratio of Vietnam and China. Although the trade ba-

lance shows deficits with Vietnam, the export-import ratio of Vietnam and China will be higher and thus improved when the US-China trade war occurs. @ZAG2 = Conclusion

The paper examines the trade balance between Vietnam and China and its determinants. Important findings are presented. China has become the largest trading partner of Vietnam, the bilateral trade balance between two countries attracts a lot of attention from the two governments. In the last decade, both export and import between Vietnam and China have increased significantly. However, the growth of import from China is much higher than that of export to China. Therefore, the excessive import situation has increased and is expected to increase in the future. Vietnam's trade deficit with China persists and its value is increasing.

The empirical results of the paper show the impact of key determinants on the bilateral trade balance between Vietnam and China. The first and most interesting result is that the US-China trade war has a statistically significant and positive impact on Vietnam's trade balance. Although the balance is still in deficit, the trade tension is shown to improve Vietnam's trade balance with China.

Descriptive and empirical research suggests that the trade deficit with China is the combined result of several factors, with Vietnam's export to China growing more slowly than its import from China. To improve the bilateral trade balance in the future, the Vietnamese government should simultaneously implement strategies to promote export to China and regulate import from China. In this regard, solutions that promote export will play a crucial role in addressing the problem of excessive import from China in the long run. In addition, the government and domestic producers must work together to continuously improve the competitiveness of Vietnamese products in both the Vietnamese and Chinese markets. Moreover, in the current context of the US-China conflict, the government and domestic producers should work together to seize all available opportunities to increase export, stabilize the exchange rate, and maintain domestic production and consumption.

Moreover, the impact of RCEP formation on the Vietnam-China trade balance is not statistically significant. This suggests that the agreement has not yet affected the size of Vietnam's import and export to China. Trade agreements typically have implementation lags, and RCEP is no exception. Therefore, we have evidence that RCEP participation has not yet led to improvements in Vietnam's trade with China.

Finally, geopolitical dynamics regarding the interests of major economies in Vietnam may have a greater impact on Vietnam's economic development in general and international trade in particular. Changes in geopolitical dynamics, such as trade tensions or disruptions, may lead to the development of new sectors in Vietnam, such as semiconductors, an industry that has been dominated regionally and globally by Chinese producers. Vietnam has sought to attract investment in high-tech industries, including semiconductors, to gradually become a key player in the global semiconductor supply chain.

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