

IMPACT OF THE EVFTA AGREEMENT: A STUDY ON VIETNAM'S EXPORTED GOODS

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Abstract

The research aims to assess the quantitative impact of the Vietnam-European Union Free Trade Agreement (EVFTA) on Vietnam's export growth to the EU market. The study employs quantitative analysis using the SMART model with data on export turnover and scenarios of tariff reduction to 0% when EVFTA takes effect. Based on the export turnover data and necessary parameters, the analysis results show an increase in Vietnam's exports to the EU market when EVFTA becomes effective. As a result, the research proposes some implications to promote Vietnam's export activities to the EU in the future.

Keywords: impact, EVFTA, exports, Vietnam, EU.

1. INTRODUCTION

The Vietnam-European Union Free Trade Agreement (EVFTA) was signed with the spirit of comprehensive cooperation and a balance of interests between Vietnam and the European Union (EU). This is one of the new-generation FTAs expected to bring strategic benefits to Vietnam through the development of trade and investment relations with one of its largest and most important partners. EVFTA helps diversify export markets within the EU. Immediately after EVFTA took effect on August 1, 2020, the Vietnamese government, along with relevant ministries and departments, issued a series of guidance documents and implementation plans for EVFTA. After one year of its implementation, 19 ministries, departments, and 57 provinces and cities nationwide have issued plans for implementing EVFTA. Although Vietnam's legal system had made important adjustments even before the agreement was signed to meet EVFTA's requirements, there are still some shortcomings related to specialized laws and law enforcement. Notably, issues related to intellectual property and environmental standards remain different in regulations and interpretations between the two sides. Furthermore, concerning labor rights, the EU emphasizes that Vietnam should ensure freedom of association (under Convention No. 87) and collective bargaining rights (under Convention No. 98) for workers. Looking back on what Vietnam has done before and after one year of signing EVFTA, it can be noted that Vietnam is following a strategy of "easy first, difficult later." Therefore, it can be predicted that the pace of legal reform in Vietnam will gradually slow down compared to EVFTA's requirements in the future. Assessing the impact after one year of implementing EVFTA on Vietnam's economy and trade effectiveness faces significant obstacles because this period coincides with the outbreak of the COVID-19 pandemic, causing many negative

consequences. Overall, in the first year, Vietnam's total export turnover to the EU market increased by only 6.2% compared to the same period the previous year, reaching USD 39.75 billion. Particularly, the export turnover of key traditional export items from Vietnam to the EU market (before EVFTA took effect), such as phones and components and textiles, decreased, showing the severe impact of COVID-19 (Figure T1). However, the total export turnover still increased, indicating the diversification effect on export products thanks to the agreement. Some industries that enjoyed almost complete exemption from import duties to the EU market experienced strong growth, such as iron and steel products and plastic or rubber products. In the case of iron and steel products, besides benefiting from reduced tariffs, the price of raw iron materials increased, leading to almost double the price of finished steel products in 2021. This contributed to the remarkable growth in the export turnover of this product, offsetting the decline due to COVID-19. The goal of this research is to demonstrate the quantitative impact of EVFTA on Vietnam's export activities to the EU market.

The research focuses on analyzing the trade creation and trade diversion effects of EVFTA on Vietnam's exports to the EU market. Additionally, some management implications related to the actions of export businesses to leverage the advantages of EVFTA and policy implications for supporting Vietnamese enterprises by relevant state agencies are drawn from the research results to promote Vietnam's export activities to the EU in the future.

2. SECTORS, POTENTIAL PRODUCTS, AND DIRECTIONS FOR PROMOTING EXPORTS TO THE EU MARKET

Vietnam's economy is characterized by a high level of openness and export-oriented development. Therefore, increasing the competitiveness of Vietnamese goods in large export markets through the signing and implementation of Free Trade Agreements (FTAs) is of utmost importance.

This is a long-term strategy aimed at enabling Vietnamese businesses, especially small and medium-sized enterprises, to become deeply involved in regional value chains, enhance production and export capabilities, and compete effectively.

The Vietnam-European Union Free Trade Agreement (EVFTA), signed on June 30, 2019, and currently undergoing approval by the National Assembly, is a new-generation FTA expected to have a positive impact on various aspects of the economy, promoting Vietnam's exports to the European Union (EU) market.

2.1. EU Market Demand and Scale

The European Union (EU) is one of the three largest export markets for Vietnam, alongside the United States and China. Among these, the EU28 market ranks second, following the United States and surpassing the Chinese market. In 2019, Vietnam's exports to the EU-28 market reached \$41.54 billion, accounting for 15.7% of Vietnam's total export turnover.

The trade relationship between Vietnam and EU28 has developed rapidly and effectively. From the year 2000 to 2019, bilateral trade between Vietnam and EU28 increased nearly 13.8 times,

from \$4.1 billion in 2000 to \$56.45 billion in 2019. Specifically, Vietnam's exports to EU28 increased nearly 15 times, from \$2.8 billion to \$41.54 billion. EU28 is a market where Vietnam maintains a trade surplus position, with a trade surplus of \$26.63 billion in 2019.

EU28 is the world's second-largest import market, accounting for 14.9% of the global total import value, reaching approximately \$2.338 trillion (in 2018). Therefore, despite being the second-largest export market for Vietnam, Vietnam's share accounts for only about 2% of EU's total imports. This indicates significant opportunities for export growth.

Vietnam exports various products to the EU, alongside products from large foreign direct investment (FDI) enterprises, such as phones, machinery, and computers. There are also many important product categories from Vietnam's small and medium-sized enterprises (SMEs), including textiles, footwear, bags, seafood, coffee, wood and wood products, and more.

2.2. Industries and Potential Products

2.2.1. Textiles and Garments

a) Opportunities

The EU is the largest market in terms of demand for textiles and garments, with a market size of \$250 billion. Within the EU, 40% of consumption is from domestic trade, while the remaining imports come from non-EU countries, mainly developing nations. Vietnam currently holds a modest market share in the EU market, approximately 2% of total imports from outside the EU. In 2019, Vietnam's textile and garment exports to the EU reached \$4.3 billion, a 3.8% increase from the previous year.

With the EVFTA, Vietnamese textiles and garments will have a competitive advantage over China and will compete equally in terms of price with countries currently enjoying a 0% tariff rate, such as Cambodia and Bangladesh. Vietnam has an advantage over these countries in terms of higher craftsmanship and quality assurance.

Currently, Bangladesh, Cambodia, and Pakistan all have advantages in terms of preferential tariff rates compared to Vietnam when exporting to the EU. Bangladesh and Cambodia benefit from duty-free access under the Everything but Arms (EBA) program, while Pakistan enjoys duty-free access under the Generalized System of Preferences Plus (GSP+). Although Vietnam also benefits from the GSP tariff preference, it is at a standard GSP rate of 9.6%. The application of GSP+ and EBA tariff preferences allows these beneficiary countries to have a significant price competitiveness advantage over Vietnam.

According to commitments in the EVFTA, tariffs on textile and garment products entering the EU will be immediately reduced to 0% for approximately 42.5% of tariff lines, with the remainder gradually reduced to 0% over 5-7 years.

Products with a 0% tariff rate upon the EVFTA's entry into force will focus on raw materials and textile products such as underwear, swimwear, pajamas, loungewear, swimwear, towels, neckties and cravats (excluding silk varieties), gloves, stockings, children's clothing, knitwear blouses or shirts for women or girls, etc.

After the EVFTA takes effect, textile and garment products that were previously benefiting from the Generalized System of Preferences (GSP) will continue to enjoy these benefits for an additional 2 years. Therefore, during this period, businesses can choose which program offers more favorable tariff rates to apply.

b) Challenges

Rules of origin under the EVFTA are relatively strict, specifically "from yarn forward." This means that the fabric used to make clothing must be woven in Vietnam or EU member countries. Additionally, textile and garment products must meet specific processing criteria as outlined in the Agreement. This poses a significant challenge to the industry as it currently relies heavily on imported fabrics and raw materials due to a lack of domestic supply. Many businesses also depend on using fabrics and materials specified by foreign clients.

A significant hurdle in the development of the textile and garment industry in Vietnam is the absence of textile dyeing and finishing projects in localities, making it difficult for the industry to secure raw materials to meet the origin and tariff requirements.

Some short-term challenges include intense competition from countries still enjoying a 0% tariff rate, changes in consumer behavior due to the COVID-19 pandemic, a decrease in consumer spending, Vietnam's limited participation in the high-end value chain, and more.

2.2.2. Leather Shoes

a) Opportunities

The EU market is an important export market (second only to the United States) for Vietnam's leather shoe industry. With a population of over 400 million people and a high average income per capita, the EU is considered a significant export market for countries with export potential.

In 2019, Vietnam's exports to the EU included \$965 million worth of handbags, wallets, suitcases, hats, umbrellas, and \$5.03 billion worth of footwear, totaling approximately \$6 billion for the leather shoe sector.

Upon the implementation of the EVFTA, 37% of the footwear tariff lines will enjoy a 0% import tariff, and the remaining lines will gradually decrease to 0% over a period of 3-7 years, depending on the specific product.

Products with a 0% tariff rate upon the EVFTA's entry into force will focus on sports shoes, fabric shoes, and rubber shoes. These are strong export products for Vietnam.

Footwear products using non-originating materials from outside the Agreement are exempted, except for footwear with an attached insole or other sole parts. This origin criterion is considered stricter compared to some other FTAs, but it is not new for the leather shoe industry, as Vietnamese shoe companies have been exporting to the EU with similar criteria under the GSP.

b) Challenges

Technical standards and trade barriers for leather shoes in the EU are very high. This poses a significant challenge for Vietnam's exports when entering the EU market. Many EU standards relate to high levels of consumer health and safety, environmental friendliness, corporate social responsibility, product labeling, and the origin of goods.

2.2.3. Seafood

a) Opportunities

The EU is the world's largest seafood consumption market, importing nearly 9.3 million tons of seafood annually with a value of about 50 billion EUR.

The EU is the third-largest export market for Vietnamese seafood, after the United States and Japan. In 2019, Vietnam's seafood exports to the EU reached 1.25 billion USD, accounting for approximately 15% of the country's total seafood exports.

With the EVFTA, reduced import tariffs enhance Vietnam's competitiveness in the seafood sector:

Shrimp: Vietnam enjoys a significant advantage with frozen black tiger shrimp and frozen whiteleg shrimp exports. The tariff for black tiger shrimp drops from the GSP rate of 4.2% to 0% immediately upon the EVFTA's implementation, and the tariff for frozen whiteleg shrimp will gradually decrease to 0% over 5 years. Meanwhile, competing countries like Thailand (no GSP, 12% basic tariff), India (GSP rate of 4.2%), Indonesia (GSP rate of 4.2%), and Ecuador (basic tariff of 12%) face higher tariffs.

Tuna: The EU will eliminate tariffs for fresh/frozen tuna products immediately upon the EVFTA's entry into force, with the exception of certain tuna loins/fillets (HS code 030487), which will follow a 3-year tariff reduction schedule. Tuna loin/fillet for canning (raw material for canned tuna production) will have tariffs eliminated over 7 years, starting from a basic tariff of 24%. Additionally, processed tuna products packed in cans (such as canned tuna in oil or water, canned tuna in pouches, and other canned tuna products) will have a tariff rate quota of 11,500 tons per year, and these products will be exempt from tariffs.

Pangasius: The EU's tariff on Vietnamese pangasius under the EVFTA will decrease from the current 5.5% to 0% in the third year after the agreement takes effect.

Other seafood items: Some processed seafood products with relatively high basic tariffs (20%), such as clams, oysters, squid, octopus, scallops, mussels, and abalone, will experience growth opportunities due to the immediate tariff reduction to 0% upon the EVFTA's implementation. There are also significant opportunities for frozen squid and octopus products (reduced from 6-8% to 0%), surimi fish paste (from 14.2% to 0%), and other frozen/processed marine products (from 7.5% to 0%).

b) Challenges

The "yellow card" warning issued to Vietnam's seafood exports by the EU since 2018 has negatively impacted export activities. Failure to make continued and determined efforts, along with the comprehensive implementation of measures and solutions from central to local levels, from state agencies to businesses and fishermen in the near future, could result in further disadvantages for Vietnam's seafood exports to this potential market, undermining the advantages gained from the EVFTA.

Stringent labor and environmental standards in the EVFTA have posed challenges for seafood exports. Non-tariff barriers related to Sanitary and Phytosanitary Measures (SPS) and Technical Barriers to Trade (TBT) are being used more frequently as tariff reductions take effect in the EVFTA.

2.2.4. Wood and Wood Products

a) Opportunities

Vietnam currently exports about 700-800 million USD worth of wood and wood products to the EU each year. In 2019, Vietnam's wood and wood product exports to the EU reached 847 million USD, marking an 8.7% increase compared to 2018.

The EU's annual wood consumption amounts to approximately 85 billion USD, so Vietnam's market share is currently only around 1%, leaving significant room for growth.

Despite the current low import tariffs for wood products in the range of 0-6%, the removal of tariffs immediately upon the EVFTA's entry into force will further facilitate Vietnamese exports to the EU market.

The origin criteria are not overly restrictive. For wood raw materials in general and wooden furniture products, the origin criteria involve converting the 4-digit code or the value of non-originating materials used in production, which should not exceed 70%. However, certain wood products, such as veneer sheets for overlaying or inlaying, plywood with at least one outer ply of tropical wood, boxes, crates, and cases shaped like bananas, have specific criteria for processing.

b) Challenges

EU consumers have strict requirements for wood origin to ensure environmental compliance. All wood exported to the EU must be legally sourced. Whether using domestic or imported wood, companies must provide complete documentation and proof of the legality of the wood. This requires companies to undertake several steps to ensure clear traceability of the wood's origin, leading to increased costs. This is an immediate challenge for many Vietnamese wood companies, as they must strictly adhere to the VPA/FLEGT agreement.

The EU is particularly stringent about verifying the legality of wood imports, and any failure to meet these standards can lead to severe consequences for exporters. Therefore, Vietnamese wood companies must be diligent in complying with VPA/FLEGT requirements to access the EU market without complications.

2.2.5. Fruits and Vegetables

a) Opportunities

Vietnam's fruit and vegetable exports to the EU reached 148 million USD in 2019, marking a 28.5% increase compared to 2018. However, as the EU is the world's leading market for fruit and vegetable imports, Vietnamese exports account for only a very small share, approximately 0.08% of the EU's total imports. This means there is significant room for growth in exports.

The EU has committed to a strong market opening for Vietnamese fruits and vegetables in the EVFTA. Specifically, the EU will eliminate 94% of the total 547 tariff lines for fruits, vegetables, and processed products (including many products that are strengths of Vietnam, such as lychee, longan, rambutan, dragon fruit, pineapple, melon, and more). Most of the tariff lines that the EU has committed to eliminating currently have an average MFN (Most Favored Nation) tariff rate of over 10%, with some fruit and vegetable products subject to tariffs exceeding 20%. Therefore, the EU's commitment is expected to provide a significant price advantage for Vietnamese fruits and vegetables (especially in competition with countries that do not have an FTA with the EU, such as Thailand and China).

b) Challenges

Post-harvest preservation technology for fresh vegetables is still limited, which hinders the transportation of vegetables over long distances and for export.

Decentralized production, high levels of waste, and high production costs are challenges. The production technology, harvesting, processing, and preservation of vegetables are limited, resulting in inconsistent quality and difficulties in control and traceability, which can lead to warnings or rejections by importers and EU authorities.

2.3. Leveraging the EVFTA for Export Promotion

2.3.1. Measures by State Management Agencies

a) Organizing the Immediate Implementation of EVFTA Provisions

In its role as the leading agency responsible for implementing the EVFTA in Vietnam, the Ministry of Industry and Trade has actively implemented various synchronized measures to prepare both before and after the EVFTA comes into effect.

The Ministry of Industry and Trade has developed and submitted to the government a draft Action Plan to prepare for the implementation of the EVFTA. This action plan clearly defines objectives, key tasks, and the relevant ministries and sectors involved, along with specific timelines.

The Ministry of Industry and Trade has issued Decision No. 932/QĐ-BCT to implement certain activities related to EVFTA preparation and enforcement, covering the period from now until the EVFTA takes effect.

Various units within the Ministry of Industry and Trade have carried out numerous activities to fulfill these tasks. Among these, the Import and Export Department has issued a plan for implementing the EVFTA, outlining 25 core tasks divided into 5 focus groups.

b) Developing a Strong Supporting Industry

The government needs to develop a robust supporting industry that can meet the demand for raw materials, thereby increasing domestic content in exported goods and ensuring compliance with rules of origin to enjoy tariff preferences. In the short term, there is a need to attract and grant licenses for textile and dyeing projects, especially those with advanced technology equipment and environmentally-friendly wastewater treatment processes.

To develop the supporting industry, it is not only the responsibility of the Ministry of Industry and Trade but also requires cooperation from other ministries, sectors, and especially localities to develop each industry and product within the supporting industry, thus enhancing the value-added in export products.

c) Restructuring the Agriculture Sector

The restructuring of the agriculture sector towards enhancing the quality of export products to meet food safety standards, as mentioned by the government, is crucial. However, for the EU market with numerous standards and criteria related to food safety, production processes, and organizational activities, special attention is required.

Post-harvest preservation technology for fresh fruits and vegetables is also an issue that needs research and application.

d) Attracting Investment for Production and Export to the EU Market

Localities should study the advantages gained from the EVFTA and, based on natural conditions, labor, and production advantages, formulate plans to develop production and exports by attracting investments in sectors and industries in which they have advantages.

e) Promoting Trade and Market Information

Revamping trade promotion activities by focusing on building brands, which is the most critical factor for appealing to the preferences of EU consumers, and utilizing online trade promotion methods, which are the latest approaches.

In the context of COVID-19, the Ministry is directing the development of streamlined trade promotion schemes, feasible plans, specific implementation strategies, and preparation in advance to conduct trade promotion activities and participate in trade events as soon as the disease situation is successfully controlled in various countries.

The Ministry will instruct Vietnam Trade Offices abroad to strengthen and enhance information dissemination activities, providing businesses with market analysis, forecasts, as well as information on laws, policies, and specific trade practices of each regional **market**.

2.3.2. Measures for Enterprises, Especially SMEs

Some exporting enterprises in sectors such as textiles, footwear, furniture, and seafood have substantial operations in the EU market. However, many exporting enterprises to the EU are small and medium-sized enterprises (SMEs) with limited resources. Their production processes do not yet meet EU standards, they lack significant investment in research and development (R&D), and they have not effectively leveraged their intellectual property assets and brand value. These SMEs often lack personnel with language skills and professional negotiation skills required for conducting export activities in the EU market.

In the near future, one of the critical steps for Vietnamese enterprises is to invest in enhancing the value and quality of their products to strengthen their competitiveness in the EU market. These enterprises need to focus on food safety, compliance with EU-mandated standards and management procedures, social responsibility, and transparency in labor and production environment information. It is particularly important to ensure compliance with rules of origin when exporting to the EU.

To effectively utilize the advantages offered by the EVFTA, enterprises need to proactively understand the contents of the agreement, especially commitments related to tariffs and rules of origin. They should adjust their production processes and sourcing of raw materials to meet the origin requirements of the agreement. Shifting imports towards domestic sources or from other EVFTA member countries is advisable.

For SMEs, it is essential to view the EVFTA as the beginning of a new phase in business within a new competitive context. This should serve as a motivation for innovation and development. SMEs should also actively seek opportunities for cooperation with partner markets under the agreement to attract strong direct investments into Vietnam, effectively harnessing capital and technology transfer from large corporations. This is an excellent opportunity for Vietnamese SMEs to deepen their involvement in regional and global supply chains.

3. OVERVIEW OF RESEARCH

3.1. Theories Related to the Impact Assessment of FTAs

a) Partial Equilibrium Theory

Marshall (1890) proposed that equilibrium prices are determined by the intersection of supply and demand curves, assuming that other factors remain constant (*ceteris paribus*). Shifts in the supply or demand curves would change the equilibrium price in the market. Later, Viner (1950), Francois (1997), Cheong (2010), Bacchetta and colleagues (2010), among others, expanded this theory by integrating other related theories such as trade creation, trade diversion, government revenue, and social welfare.

b) Trade Creation and Trade Diversion Theory

Viner (1950) argued that in customs unions, based on tariff preferences given by members to each other, trade shifts occur due to two effects: trade creation and trade diversion. Trade creation is the effect that promotes exports (for the exporting country) as goods from that

country become more competitive in the importing market compared to domestic goods. Trade diversion occurs as exports increase (for the exporting country) and imports decrease from other countries that also export similar goods to a particular country. Trade diversion increases exports based on the advantage of preferential tariffs.

c) Neoclassical Economic Theory of Tariff Impact

In Neoclassical Economics, particularly in the theories of Adam Smith and David Ricardo, tariffs play a vital role in restricting imports and protecting domestic production. Reducing tariffs stimulates international trade, giving rise to the concept of trade liberalization. Marshall later developed theories related to the effects of tariffs, such as producer surplus, consumer surplus, government tax revenue, and overall social loss.

d) Gravity Model of Trade

The Gravity Model posits that bilateral trade depends on the size of economies and the distance between them. The model was proposed by Jan Tinbergen in 1962. The Gravity Model often considers various variables such as per capita GDP, price indices, tariffs, exchange rates, and other factors like membership in FTAs or language. This model is commonly used to assess the impact of agreements on trade flows, explaining the import demand of the parties. A drawback of this model is its reliance on accurate data for precise estimates. Comprehensive data is required, which is characteristic of ex-post real impact assessments.

e) General Equilibrium Theory of Walras

General Equilibrium Theory seeks to explain the balance of supply, demand, and prices across the entire economy with interactions across many markets and goods. It asserts that market prices for goods exist, and when the market prices for all goods reach equilibrium, the overall economy reaches general equilibrium, according to Leontief Walras (1870). The theory is used to analyze prices and trade between two international markets within a framework of multiple market interactions. The model provides a practical basis for assessing the effects of trade policies (such as FTAs). However, it does not account for the impact of non-tariff barriers (e.g., SPS, TBT), customs issues, technical standards, among others.

f) Theory of Elasticity

Marshall (1890) introduced the concept of price elasticity of demand, which reflects changes in the quantity demanded of goods when prices change, assuming other factors remain constant (*ceteris paribus*). Price elasticity of demand measures the percentage change in quantity demanded relative to the percentage change in price. Subsequently, Armington expanded on Marshall's research, developing elasticity coefficients for import and export substitution.

g) SMART Model Theory

Based on economic theories, the SMART (Spatial Multi-product Accounting for Resource Trade) model was developed by the World Bank's Data and Software Division of the Trade Unit (WITS). SMART is built upon foundational economic theories, including partial equilibrium, trade creation, trade diversion, government revenue and social welfare, import and

export demand-supply theories, and elasticity concepts. SMART employs various databases related to tariffs, trade, and simulates the impact of tariff reduction on exports and imports in specific sectors. The results from SMART provide quantitative insight into the impact of an FTA or tariff changes on a specific group or sector (disaggregated analysis). However, this model also independently analyzes subjects without considering relationships with related sectors or the broader economic context.

3.2. Empirical Studies on FTA Impact Assessment

Various empirical studies have been conducted to assess the impact of Free Trade Agreements (FTAs) using different economic theories and models. Here are some key studies and their findings:

Viner (1950), Cline (1978), Krueger (1995): These studies extended the concepts of trade creation and trade diversion, which were initially developed for customs unions, to evaluate the impact of FTAs.

Wylie (1995), Bachetta et al. (2012), Francois and Hall (1997): These studies applied the partial equilibrium theory, emphasizing that the partial equilibrium model is suitable for assessing the potential impact of FTAs.

Katsoloudes and Hadjidakis (2007), Negasi (2009), Plummer et al. (2010), Cheong et al. (2005), Negasi (2009): These studies used the theories of trade creation and trade diversion to show that increased exports resulting from FTAs are driven by the correlation between domestic prices in the importing country and those from the exporting country or other exporting countries.

Frankel and Wei (1993), Deardoff (1998), Kalirajan (2000), Urata and Okabe (2007), Moinuddin (2013), Dũng (2011), Drong (2016): These studies applied gravity models of trade and introduced new independent variables such as language, shared borders, and more to assess the impact of FTAs on trade. They evaluated the effects after FTAs had been in effect for some time to determine if they met the expectations.

Thắng (2018): This study used the WITS-SMART model to analyze the impact of the EVFTA on Vietnam's footwear exports. The study projected that under certain assumptions, Vietnam's footwear exports would increase by approximately 4.96%.

Bảo (2016): This study used the WITS-SMART model to analyze the opportunities and challenges of the EVFTA for Vietnam's wood processing industry. The results showed that when tariffs on certain HS codes are reduced to 0%, the trade value for those categories would increase by approximately \$307,371.

Othieno and Shinyekwa (2011), Karingi et al. (2005): These studies applied the SMART-WITS model to analyze the impact of trade tariffs within customs unions on Uganda and various African countries, respectively. They found that the trade diversion effect dominated, hindering economic integration.

Huong and Tuyết (2017): This study used the SMART model to analyze the impact of the EVFTA on Vietnam's car imports from the EU. It concluded that the EVFTA would increase car imports from the EU due to the trade creation effect outweighing the trade diversion effect.

Anh and Ngọc (2015): This study used the SMART-WITS model to analyze the impact of RCEP on several sectors of Vietnam's economy. However, it mainly assessed changes in trade volume and did not delve into trade creation, trade diversion, government revenue, or social welfare.

These studies demonstrate the diverse methods and models used to evaluate the effects of FTAs on trade and other economic factors. Researchers often combine various economic theories and utilize empirical data to provide insights into the potential impacts of FTAs on specific industries or economies.

4. RESEARCH METHODOLOGY

There are several models used to analyze the impact of Free Trade Agreements (FTAs) on the growth of exports and imports for an entire economy or specific industry groups. Commonly used models include the gravity model, general equilibrium model, and partial equilibrium model.

For the gravity model, the analysis of the impact of FTA participation typically stops at showing how FTAs affect trade flows and explaining import demand. The gravity model does not explain specific effects on individual sectors or product groups through changes in applied tariffs.

The general equilibrium model is designed to analyze price and trade balance equilibrium between two economies across various product categories. However, for research analyzing the impact of the EVFTA on Vietnam's exports to the EU, the study focuses on single industries. Therefore, the general equilibrium model is not suitable for this analysis.

According to Bachetta (2010), the Structural Analysis and Review (SMART) model is the most suitable for assessing the effects of FTAs on the exports of specific groups or industries (disaggregated analysis). Built on economic theories such as local equilibrium theory, trade diversion, tariff revenue, and social welfare, as well as import and export supply and demand theories and elasticity parameters, the SMART model is constructed to assess the impact of FTA participation on the growth of exports.

SMART offers several advantages when applied to partial equilibrium analysis. Firstly, as noted by Vergano (2009), SMART requires simple input data and can analyze the effects of tax policies on trade creation, trade diversion, tariff revenue, and social welfare. Secondly, the SMART model can analyze the impact of FTAs on a detailed level by cutting import tariffs down to six digits in the Harmonized System (HS) classification. This enables policymakers to see the specific impacts of FTAs on individual products, providing a basis for developing strategies and policies to boost exports of specific products for maximum economic benefit. Consequently, this study employs the SMART model to quantitatively analyze the effects of

the EVFTA on Vietnam's exports to the EU.

To run simulations with the SMART model, the authors utilize data related to the value of Vietnam's exports to the EU, collected from UN's COMTRADE and Trade Map, and Most Favored Nation (MFN) tariffs applied by the EU, collected from UNCTAD's TRAINS and WTO's IDB. SMART supports automated extraction or manual collection of the mentioned data. Additionally, qualitative data related to import and export are collected from reports and websites of Vietnamese government agencies. The data used for analysis is collected between early 2022 and the end of 2022, with the analyzed value being the year-end 2022 total value, extracted from the mentioned databases.

This quantitative research, utilizing the SMART model, aims to evaluate the effects of the EVFTA on Vietnam's exports to the EU by analyzing the impact of trade creation and trade diversion resulting from tariff reductions. The tariff scenario assumes that the EU will reduce import tariffs to 0% for all products exported from Vietnam to the EU, with exceptions for some products subject to tariff-rate quotas.

Additionally, the research conducts interviews with experts to propose implications for enhancing export activities to the EU market.

5. RESEARCH RESULTS

The SMART model was employed to assess the impact of tariff reductions in the new-generation EVFTA on the scale and growth rate of trade between Vietnam and the chosen EVFTA partner countries.

To make projections, four new-generation FTAs were selected for research and assessment, focusing on tariff reductions and their effects on export markets.

Impact of New-Generation EVFTAs on Vietnam's Export Volume to EVFTA Partner Countries

When partner countries eliminate tariffs for Vietnam in the researched EVFTA agreements, Vietnam's exports to these partner countries during the period from 2019 to 2029 are estimated to increase by 6.33%, equivalent to over 5.3 billion USD. This increase can be attributed to two main factors:

First, Vietnamese exported goods become cheaper compared to before the tariff elimination on the markets of EVFTA partner countries.

Second, Vietnamese exports become relatively cheaper compared to goods from other countries that do not enjoy preferential treatment under these EVFTAs.

Table 01. Changes in Exports between Vietnam and EVFTA Partner Countries

Indicator	Period		
	2019-2026	2027-2029	Total
Value (1.000 USD)	2.042.804	175.057	2.217.861
Growth Rate (%)	6.01	0.31	6.32
Trade Creation Effect (1.000 USD)	1.719.526	46.547	1.766.073
Trade Diversion Effect (1.000 USD)	1.323.278	28.510	1.351.788

Source: Calculations based on SMART model simulations.

Vietnam's exports to partner countries will increase primarily during the 2019-2026 period when partner countries simultaneously reduce tariffs for Vietnam. During this period, Vietnam's exports will increase by over 2 billion USD. In the subsequent period, from 2027 to 2029, only the CPTPP countries will continue to reduce tariffs for Vietnam, while EU partners will have completed their tariff reductions for Vietnam as per the agreed schedule. Therefore, Vietnam's exports will increase insignificantly, adding only more than 275 million USD from CPTPP countries. Thus, Vietnam needs to quickly leverage the tariff advantages from now until 2026 to boost exports to partner markets.

Within the total export increase of 2.3 billion USD from Vietnam to FTA partner countries, the trade creation effect accounts for 2.87 billion USD, while the trade diversion effect amounts to 1.45 billion USD. The trade creation effect constitutes 53.90%, indicating that the increase in Vietnam's exports to EVFTA partner countries is primarily due to Vietnamese goods becoming more price-competitive compared to before the EVFTA implementation. The trade diversion effect makes up 46.10% of the total effect, which is smaller than the trade creation effect.

Table 02: Countries with the Most Significant Increase in Vietnam's Exports to EVFTA Partner Countries

No.	Countries with the Most Export Reduction	Decrease in Export Value (1,000 USD)
1	China	484,580
2	Indonesia	67,234
3	Bangladesh	66,904
4	India	53,356
5	Turkey	53,230
6	Cambodia	37,602
7	Morocco	29,635
8	Tunisia	23,865
9	Thailand	22,667
10	Pakistan	19,762

Source: Calculations based on SMART simulation results

When Vietnam implements the EVFTA with its partner countries, the countries that will lose market share to Vietnam the most are identified in Table 02.

China is the country that must cede the most market share to Vietnam in the EU market. Meanwhile, the United States must yield the most market share to Vietnam in the CPTPP market, with China following closely in second place. This partly explains why China is

currently strategizing to potentially join CPTPP in the future. In ASEAN, Indonesia and Thailand, due to their lack of participation in EVFTA and CPTPP, also lose some market advantage to Vietnam in these markets and have to cede a portion of the market to Vietnam. Vietnam also gains market share from some European countries such as Germany, Italy, and Spain in the CPTPP, EAEU, and South Korea markets. Therefore, signing and implementing EVFTA provides certain price-related competitive advantages for Vietnam compared to other countries.

However, it is also worth noting that these price-related competitive advantages under EVFTA may not be long-term and depend significantly on the integration process of other countries in the world. Currently, in the face of the failure of multilateral negotiations and the decline of the WTO, countries and regions around the world are increasingly pushing for bilateral negotiations. Japan and the EU have already signed an FTA on July 17, 2018. In the near future, when Indonesia, Thailand, India reach EVFTA agreements and the agreement with Ecuador comes into effect, Vietnam's price-related competitive advantage compared to these countries will decrease, and therefore, Vietnam's exports to the EU market will be reduced.

Impact on Vietnam's exports to EVFTA partner countries by market

Vietnam's exports to South Korea have increased significantly, followed by exports to the EU and CPTPP. The increase in Vietnam's exports to EAEU countries is the lowest and much lower than the increase in exports to other countries and regions. Vietnam's exports to the EU have increased by more than \$1.6 billion in both stages, equivalent to a growth rate of 4.95%. The trade establishment rate of the EU market is 45.24%. Therefore, for the EU market, Vietnam's export growth is primarily due to the EU shifting its imports from other partner countries to Vietnam due to the relatively lower prices of Vietnamese goods compared to those of other partner countries in the EU market, thanks to reduced tariffs.

Table 03: Increase in Vietnam's Exports under EVFTA

Value Added (1,000 USD)	Share (%)	Growth Rate (%)	Establishment Impact		Distortion Impact (1,000 USD)
			1,000 USD	%	
2,640.803	132,54	14,95	942.242	48,24	898.561

Source: Calculated from SMART simulation results

Impact on Vietnam's Exports to EVFTA Partner Countries by Commodity Group

Eight research commodity groups will be the key groups for Vietnam's increased exports to the EVFTA partner countries. The export increase in these 08 commodity groups amounts to over 4.3 billion USD, accounting for 81.94% of Vietnam's total additional exports. The export growth rate of these 08 research commodity groups is also higher than the overall export growth rate from Vietnam to partner countries (6.63% compared to 6.33%).

Table 04: Increase in Vietnam's Exports to EVFTA Partner Countries by Commodity Group

Commodity Group Seafood	Share (%)	Growth Rate (%)	Establishment Impact		Distortion Impact (1,000 USD)
			1,000 USD	%	
Agricultural Products	15,85	23,06	206.651	66,43	104.421
Textiles and Garments	17,71	12,66	325.418	79,39	84.504
Phones and Electronic Components	47,23	26,76	1.061.004	53,60	918.607
Footwear	16,66	11,19	170.500	48,11	183.881
Machinery and Equipment	20,41	25,64	444.868	40,99	640.372
Vehicles and Transport Equipment	11,23	10,77	31.303	48,03	33.870
Wood and Wood Products	11,36	17,25	47.943	66,25	24.423
Commodity Group	11,49	15,82	49.128	61,82	30.339

Source: Calculated from SMART simulation results

However, there is a significant disparity in the increase in Vietnam's exports to EVFTA partner countries by commodity group. Among the 08 commodity groups, three of them have a higher trade diversion impact than establishment impact. These are phones and electronic components, footwear, and machinery and equipment, with respective trade diversion impact shares of 48%, 41%, and 48%. This implies that when Vietnam implements the EVFTA, the increase in Vietnam's exports to EVFTA partner countries is mainly due to these partner countries redirecting their imports from other countries to Vietnam because Vietnamese goods become cheaper compared to competing rivals due to tariff advantages. For the remaining 05 commodity groups, the establishment impact is higher than the trade diversion impact.

5. CONCLUSION AND IMPLICATIONS

Table 05: Total Impact from EVFTA

Impact Type	Value (1,000 USD)	Percentage
Establishment Impact	11,190,387.03	64.40%
Trade Diversion Impact	6,184,099.53	35.60%

Source: Compiled by the author from research results

It can be seen that the establishment impact dominates the trade diversion impact, accounting for approximately 64.4% of the total impact. This indicates that when EVFTA comes into effect after internal approval between parties and when export taxes are reduced to 0%, the majority of Vietnam's export growth to the EU comes from the competitiveness of Vietnamese goods compared to those from within the EU.

Furthermore, the trade diversion impact represents about 35.6% of the total impact, indicating that under the influence of EVFTA, Vietnam also becomes more competitive than goods from other competing rivals exporting similar products to the EU market. However, this advantage should be carefully considered, as these competitors are actively negotiating to sign FTAs to reduce tariff pressure on their exports to the EU.

The managerial implications for export-oriented businesses are as follows:

The research results indicate that businesses need to invest in and upgrade processing plants to maximize production capacity and implement automation to reduce labor costs in the manufacturing process. This will enhance the competitive advantage of products based on price advantages.

Additionally, companies should diversify their processed products and target consumer markets that align with the tastes and cultural preferences of various European countries. This diversification should leverage Vietnam's comparative advantages. Furthermore, strict adherence to the European food safety regulations and standards is crucial.

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