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European Union – Vietnam Free Trade Agreement and Vietnam's Footwear

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ABSTRACT

This study investigates the ex-ante impact of the proposed European Union – Vietnam Free Trade Agreement on Vietnam's footwear industry using the partial equilibrium model called Software for Market Analysis and Restrictions on Trade. From the 2015 trade and tariff database between EU and Vietnam accessed through the World Integrated Trade Solutions, the authors construct different possible scenarios under three key policies of tariff elimination, rule of origin and trade defense. The results show that the EU's tariff removal for the Vietnam's footwear exports would increase Vietnam's product export value, even under the anti-dumping policy. However, the EU's trade defense still has a negative impact on Vietnam's most important export footwear group HS Code 6403. The simulation results also indicate that there would be a remarkable shift in the export structure of the groups of products which would enjoy high tariff preference.

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1. Introduction

Footwear industry, for years, has always been one of the major trading sectors of Vietnam. Vietnam is at the top of four largest footwear producers in the world (after China, India and Brazil), and is the third largest exporter in the world in terms of value (after China and Italy). Vietnam's footwear products have been exported to more than 50 countries and territories. According to preliminary statistics of General Department of Customs, Vietnam's footwear export turnover reached US$12.01 billion in 2015, 16.15% higher in comparison with the figure of the same period in 2014. Exports to the EU reached about US$3.98 billion, accounting for more than 30% of total exports, ranking second only after the United States. Japanese market ranks the third with US$597.58 million (4.98%), and China follows with US$754.19 million (6.28%).

The EU – Vietnam Free Trade Agreement (EVFTA) is a new-generation FTA between Vietnam and the EU–27. The negotiations for the Agreement officially finished in December 2015, and the documents of the agreement were announced in December 2016. EVFTA is expected to come into effect in 2018 and would be one of the largest and most committed FTAs in Vietnam. With the market openness commitments, when the Agreement comes into effect, the EU is committed to eliminate most of the tariffs on Vietnamese products. This has important implications for goods trading in general and footwear industry in particular. For footwear, EVFTA will reduce the average tariffs from 12.4% to 0% on a 7–year roadmap.

To maximize EVFTA's potential benefits from tariff elimination, Vietnam's footwear exporters must satisfy the rule of origin, in particularly, the requirement to use input either from EVFTA's members or from partners that EU has FTA with, such as Korea. According to the Vietnam Leather and Footwear Association (LEFASO), the price of raw materials for the footwear industry accounts for more than 50% of the total cost, while the input localization rate of high-grade leather and footwear, one of the main export products to the EU, only account for 25%–30%.

Furthermore, in support of domestic enterprises against the competition of foreign footwear products, the EU may increase applying trade defense policies. One of the measures has been imposed on Vietnam and many other developing countries is anti-dumping. On another aspect, as the US tends to broaden their protectionism policy in trade, together with that the UK left the EU, this Union seems to have the orientation of further development its integration with other developing countries in Asia and America, such as ASEAN, China, India, and Brazil. These events would also have remarkable impact on Vietnam's footwear industry.

Overall, if the EVFTA enters into force, the tariff elimination may create more opportunities for market access and export promotion of Vietnam's footwear product; yet, the origin regulation would be a tough restriction for Vietnam's benefit optimization from the tariff reduction. In other words, the anti-dumping policy and newly settled FTAs of the EU may also affect Vietnam's footwear export to EU.

In the trade literature, there are only some studies on the influence of EVFTA on Vietnam's economy such as Philip et al. (2011), Baker et al. (2014), Nguyen (2014), and Vu (2016). However, on the relationship of EU and Vietnam in footwear industry, most studies focus on the aspect of anti-dumping policy that EU imposed on Vietnam's footwear products sine 2005 (Cuyvers & Dumont, 2005; Dirk & Eckhardt, 2011; Nguyen et al., 2014), or on the determinants of Vietnam's footwear export to EU (Vu & Doan, 2016). There is no previous literature quantifying the impact of EVFTA on Vietnam's footwear industry, except for some studies mentioning the overall opportunity and challenges but without empirical evidence. Therefore, the analysis of an *ex-ante* partial equilibrium models to predict the impact of the EVFTA on Vietnam's footwear industry is necessary and contributable to the economic development strategy and general policy of Vietnam under integration conditions.

To fill the gap, this study aims to investigate the extension that the proposed EVFTA may affect Vietnam's footwear industry. The following questions will be investigated to clarify the research objective:

(i) What is the impact of the EVFTA on the export value and trade welfare of Vietnam's footwear export products?

(ii) What is the impact of the EVFTA on the export value and trade welfare of Vietnam's footwear export products under the EU's anti-dumping policy?

Hence, this study not only simulates the impact of the EVFTA's full implementation but also considers the crucial barrier for Vietnam's footwear export - the anti-dumping policy. In addition, using Software for Market Analysis and Restrictions on Trade (SMART) model, the study can evaluate at disaggregated level the EVFTA's effect on Vietnam's footwear with updated data. As the tariff elimination schedule and anti-dumping duty are different among products, the disaggregated analysis assists in estimating which group of products may benefit or suffer the most from the agreement's impact.

Following the introduction mentioned above, this study will present five sections: Section 2 presents a review of theoretical and empirical studies; section 3 gives the overview the EVFTA and the Vietnam's footwear industry; section 4 develops the methodology and data collection for the research; section 5 simulates the model, analyses, and discusses the simulation results; and section 6 suggests some policy implications.

2. Literature Review

2.1. Theoretical review

Theoretical analysis of the free trade agreement's impact

An FTA like EVFTA is a form of trade liberalization, in which trade barriers are first reduced and then eliminated among nation members (Snorrason, 2012). It would be too ambitious for the discussion of the FTA's impact in general as the EVFTA is a not-yet-in-

force agreement, and we only aim to analyze the impact on Vietnam's footwear in terms of sub-sectors. Hence, the theoretical review will focus mostly on *ex-ante* and disaggregated analysis.

Ex-ante analysis is an appropriate approach when we challenge a new or proposed free trade agreement with the unavailability of database. The overall process to implement this analysis is doing the simulation over a range of different scenarios with alternative input values so as to evaluate the sensitivity of the outcomes. General equilibrium and partial equilibrium are the two famous demand-supply equilibrium models that are frequently applied for this kind of ex-ante analysis (Snorrason, 2012; Bacchetta et al., 2012; Francois & Reinert, 1997).

Disaggregated analysis is used to analyze the effects of an FTA at disaggregate level, such as sub-sectors of agriculture or manufacturing. The most well-known approach to implement this *ex-ante* disaggregated analysis for trade agreements is partial equilibrium. Partial equilibrium is a part of the general equilibrium, where the market clearance is considered only in some specific sectors or industries. This model mainly focuses on the policies' impact in directly affected market, particularly when the sectors or groups of products play important role in the trade balance, remarkably contributing to the GDP's growth, or creating many jobs for unskilled workers. Also, the policy makers may want to understand the impact of a trade agreement on these industries for the change in trade flows, tariff revenue, consumer and producer surplus (Cheong, 2010; Bacchetta et al., 2012).

Partial equilibrium and the impact of free trade agreement

Marshall (1890) is of the pioneers studying partial equilibrium, aiming to achieve the equilibrium price under a key assumption of other things remaining unchanged (ceteris paribus). Other researchers who have contributed to the development of this equilibrium theory include Viner (1950), Francois and Reinert (1997), Francois and Hall (2002), Cheong (2010), Bacchetta et al. (2012), … By introducing the theory of trade creation and trade diversion impact of an agreement, Viner (1950) has used the partial equilibrium analysis to prove that FTAs do not always create advantages for the members as shown by most of previous studies. In particular, trade creation is found to bring the positive effects on welfare while trade diversion causes the negative ones, and the relative strength of these two effects will determine the change in welfare of a trade agreement. Francois and Reinert (1997), Cheong (2010) and Bacchetta et al., (2012) focused on analyzing the FTA's impact on changes in trade values, consumer and producer surpluses, and tariff revenue.

The key advantage of the partial equilibrium is disaggregated level analysis which can focus on a very specific group of products. Further, a rather limited database is in need, mainly including trade flows and trade interventions, together with several specific parameters. However, the main limitation of this approach is the lack of mutual interaction with other markets as can be achieved by general equilibrium. As the main focus of the study is about tariff elimination's impact on trade value and welfare within a single sector (in this case: the footwear industry) and under the constraint of data collection, the suitable

approach is partial equilibrium model. The World Integrated Trade Solutions (WITS) has provided four available models for analysis of this partial equilibrium, including SMART, Global Simulation Analysis of Industry-Level Trade Policy (GSIM), Tariff Reform Impact Simulation Tool (TRIST), and Agricultural Trade Policy Simulation Model (ATPSM). Among four models, SMART is chosen as the model for the analysis. Further detail about this model will be presented in Section 4.

Rule of origin's impact on footwear industry

Rule of origin is a frequently mentioned provision in the content of any FTA, especially when discussing about the footwear industry. A number of theoretical studies indicate that the application of the rule of origin may divert intermediate trading activities from low-cost but non-member countries toward the FTA members (Ju & Krishna, 2000; Panagariya & Duttagupta, 2001). This is the result of the trade barrier elimination taken place when the FTA comes into force. Viner's trade diversion (1950), can also be used to explain for this situation. A country seems to confront a trade-off when exporting products to other FTA members. On the one hand, if the exporters keep using a high proportion of components from non-FTA members, who are supposed to supply with the most competitive price, they would not be able to fully receive the tariff elimination. On the other hand, if the country turns into the intra partners for the input supply, despite a higher cost of intermediate than before, it might have more opportunity to access other partners' markets.

However, rules of origin can also bring positive effects to welfare through attracting investments in intermediate production (Estevadeordal & Souminen, 2005). The input originated from foreign direct manufacturers, as an example, would legitimize the provisions regarding the origin of the export products

2.2. Empirical review

Studies on EVFTA so far have largely addressed the impact of the agreement on macro factors of both the EU and Vietnam through general equilibrium models and economic indicators, such as the studies of Phillip et al. (2011), Baker et al. (2014), Nguyen (2016). The report of Phillip et al. (2011) analyzed the impact of the agreement on the EU and Vietnam through both computable general equilibrium (CGE) model and qualitative approach. The quantitative CGE analysis was conducted by considering different scenarios of the tax elimination roadmap based on the sensitivity level of each product. The results reveal that the agreement would have a positive impact on Vietnam's GDP growth, from 2.7% to 3.7% due to the tax reduction and exemption. An increase is also recorded in the private and government consumption as well as in investment attraction. Vietnam's exports would also increase by an average of 4% per annum. In some sectors, the increase was over 6%, a high rate despite the fact that Vietnam is now facing high tariffs when exporting to the EU market. Baker et al. (2014) also provided a detailed 245-page analysis of the change in economic factors through a variety of models and methods. In particular, the CGE model was also used to analyze macro-factors and sectors in interaction with other sectors. The partial equilibrium analysis for specific sectors was also implemented, but most of them were only

at 2–digit HS level for identifying the opportunities and challenges of tariff reductions for the sector. In another study, Nguyen (2016), by using the gravity model on a panel data from 1997 to 2013, also predicted a positive impact of the FTA on bilateral trade between Vietnam and the EU under the enforcement of the agreement's tariff elimination.

There have been several in-depth studies on the impact of the agreement at industries level, but most of them focused on two main groups of products that Vietnam imports from the EU: automobiles and pharmaceuticals. Specifically, Vu (2016) applied the Software for Market Analysis and Restrictions (SMART) model to examine the impact of the EVFTA on the pharmaceutical imports by Vietnam from the EU based on two scenarios. The simulation results indicate that although the elimination would not lead to a remarkable increase of Vietnam's pharmaceutical imports from the EU, this region is still the most important suppliers of medicine for Vietnam in the upcoming years. In another research on the impact of the FTA on EU's automobile exports to Vietnam, The SMART model's results show that EVFTA would significantly increase the volume of Vietnam's automobile imports from the EU, and in both scenarios, trade creation is more effective than trade diversion which means an improvement in the welfare of Vietnam from the FTA.

Regarded as one of the key export products of Vietnam to the EU, but the footwear industry has not received sufficient attention from researchers. There have been numerous studies about the relationship of the EU and Vietnam on the sector; however, most of them focused on the aspect of anti-dumping policy that the EU imposed on Vietnam's footwear products since 2005 (Cuyvers & Dumont, 2005; Dirk & Eckhardt, 2011; Nguyen et al., 2014). These researches confirmed the negative impact of the anti-dumping on the export trade volume and value of Vietnam's footwear to the EU, for which, many enterprises had to divert their export target to other markets like the U.S. (Nguyen et al., 2014). Another topic relating to the EU and Vietnam's footwear is investigating the determinants of Vietnam's footwear export to the EU (Vu and Doan, 2016). For the impact of the EVFTA, in most previous studies, the footwear industry is only mentioned together with the change of the entire economy and trade between the two parties (Phillip et al., 2011; Baker et al., 2014).

3. EVFTA And Vietnam's Foowear Industry

3.1. Vietnam's footwear industry

Footwear is one of the major export sectors of Vietnam, with the total export value increasing by years. In 2012, the figure was US$7.52 billion; then continuously increased in the four following years; and reached the amount of US$13.72 billion in 2016, a rise of about 10.32% compared to 2015 (Figure 1).

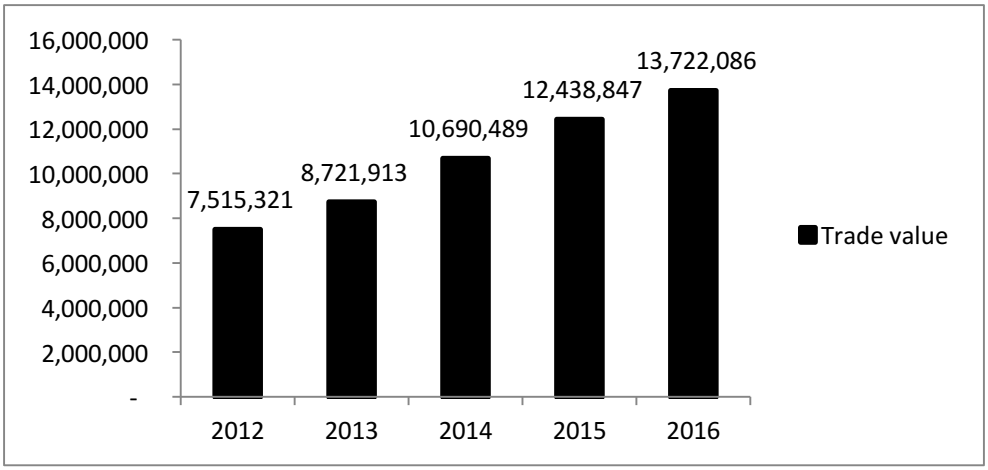

Figure 1. Exports of Vietnam's footwear in period of 2012-2016

Source: Compiled from WITS (2016)

In Figure 2, the United States is the leading importer of Vietnamese footwear with 34% of total footwear exports. European market is the second largest consumer with the proportion of approximately 29%, followed by Japan with the figure of 6.5%. With the EVFTA scheduled to come into effect in 2018, together with the US's withdrawal from the Trans-Pacific Partnership Agreement in early 2017, a remarkable shift is expected in the value of its exports to these markets, particularly to the US and the EU.

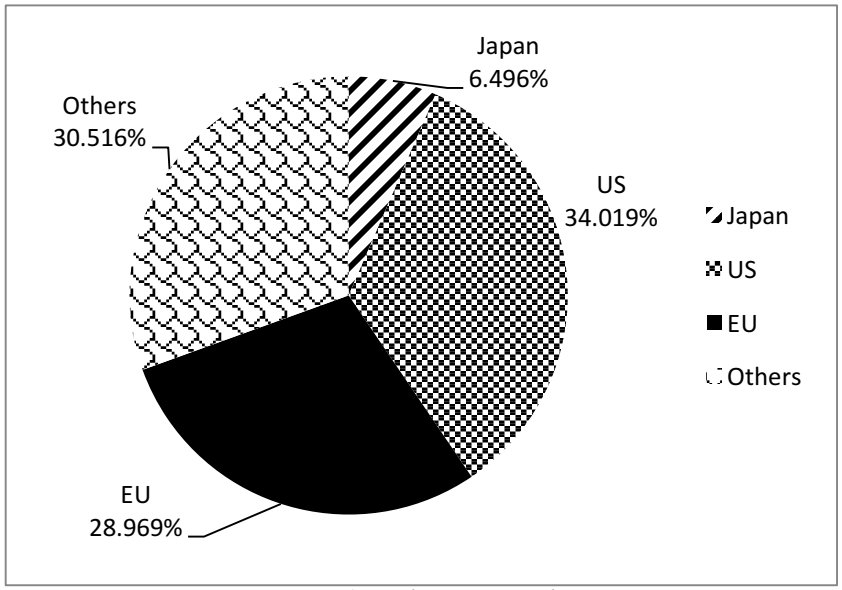

Figure 2. Export market of Vietnam's footwear in 2016

Source: Compiled from WITS (2016)

The EU is an attractive market not only for Vietnamese footwear industry but also for many other developing countries, such as China, Indonesia, India, and Cambodia. Those four countries together with Vietnam account for 81% of the total supply of footwear products to the EU. Among them, China maintains its leading position with a market share of over 46%. Vietnam has also been focusing on this market for the past few years and has risen to the second place with a market share of about 18%, nearly equal to the market share of all three following suppliers of India, Indonesia, and Cambodia.

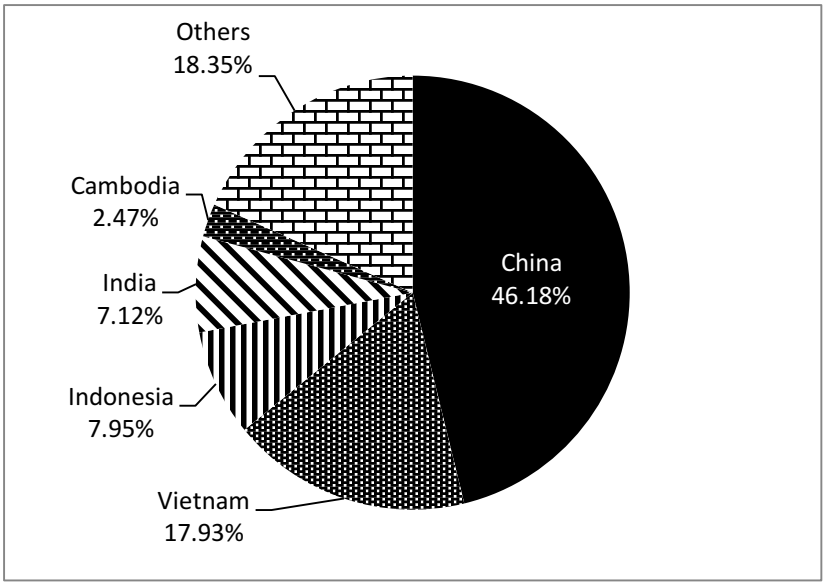

Figure 3. Main suppliers of footwear products to the EU in 2016

Source: Compiled from WITS (2016)

3.2. EVFTA and the rule of origin

In the period of international economic integration, Vietnam has signed bilateral trade agreements with various countries. The EVFTA is a new free trade agreement between Vietnam and 27 EU member states with wide scope and commitments. This will accelerate the process of economic restructuring and transform Vietnam's positive growth model. Specifically, on December 1, 2015, the EVFTA officially concluded negotiations, and on February 1, 2016 the text of the agreement was announced. It is expected that the agreement will come into effect since 2018.

With the scope of commitments, the EVFTA is considered a comprehensive agreement, with high quality and a balance of benefits for both Vietnam and the EU, which also takes into account the development gap. The effectiveness of the EVFTA would be the opening of a large free trade market of more than 500 million people, accounting for 22% of the nominal GDP (US$16.2 trillion in 2015) and around 17% (US$19.2 trillion) of the world's purchasing power parity. Vietnam would have easier access to the EU market because the FTA will

allow the elimination of more than 90 types of tariffs, which may help Vietnamese goods exported to the EU increase from 30%–40% compared to the absence of the Agreement. Especially, the footwear industry is expected to benefit most from this FTA, along with other sectors such as textiles and food processing.

While benefiting from the size of the market as well as from the value that EVTFA provides, Vietnamese enterprises in general, and enterprises in the footwear industry in particular, also face strict regulations of origin, technical barriers, and localization ratio.

Each free trade agreement has its own rules of origin. To enjoy the preferential tariff rate of the Agreement, export goods need to meet these requirements, specifically, the rules of origin in the EVFTA Agreement as follows.

Goods shall be deemed to have origin in either Party (Vietnam or the EU) if one of the following conditions is met:

(i) Wholly-obtained or produced in the territory of the exporting party

(ii) It is not wholly obtained or produced in the territory of the exporting party but meets the following requirements:

The value of the domestic value shall not be less than 40% or the change of commodity code shall be at the 4–digit level;

The products are considered to be fully manufactured or processed if they meet the Specification for Origin criteria in Annex II. Note: Article 6, Chapter 4 provides a list of "processing and processing" related to the goods that will not be recognized as originating goods, without considering the requirements of Article 5 whether or not committed (Ministry of Industry and Trade, 2016).

For the footwear industry, rules of origin consider goods having a proper origin if the final products are wholly obtained or wholly produced in the territory of the exporting party; or the value of the domestic value shall not be less than 40% or the change of commodity code shall be at the 4–digit level. At present, the high dependence of Vietnam's footwear export on imported raw materials do not allow all these criteria to be met. In particular, the localization rate is only 40%–45% (mainly shoe soles and sewing threads) while the most important raw materials are leather and artificial leather.

Regarding the anti-dumping policy, since 2005, the European Commission (EC) has announced anti-dumping investigations on leather footwear imported from Vietnam and China. A year later, the EC issued a decision to impose anti-dumping duties at 10% for Vietnam and 16.5% for China. The product subjected to investigation and imposition of anti-dumping duty is mainly leather footwear or leather composition, designed for sports activities with 4–digit HS code 6403. In 2011, this anti-dumping measure was terminated for Vietnam and some Chinese companies. However, since September 2016, the EC has announced the reintroduction of a 10% duty on leather footwear products. If the duty remains in effect when the FTA comes into force, it will be a major barrier for Vietnamese enterprises to promote the leather footwear export to the European market.

4. Methodology, Scenarios and Data

4.1. Methodology

As mentioned in section 2, the suitable methodology used in this study is partial equilibrium. Provided we take notice of the limitation of the method, useful understandings and policies can be gained from the simulation results. So as to study the mutual FTA's effect on Vietnam's footwear industry, Software for Market Analysis and Restrictions on Trade (SMART) is considered one of the most popular and suitable simulation models. The results of the SMART allow the assessment of trading effects concerning trade creation, trade diversion and trade welfare.

The next paragraphs mention the model's mathematical construction. Following the formulation in the works of Jammes and Olarreaga (2005) and Khorana et al. (2009), the built-up of the SMART can be summarized as follows.

The main assumptions of the SMART model are:

(i) Export supply elasticities are assumed as infinite because Vietnam and other export countries are regarded as small countries, and given its burgeoning trade deficit with the EU, the Armington's assumption on substitutability between suppliers is applied.

(ii) The import demand elasticities are taken (at HS 6–digit level) from the World Bank survey conducted by Jammes and Olarreaga (2005). The rationale for updating import demand elasticities to simulate tariff reductions in SMART model is that original elasticities based on the calculations by Stern (1976) no longer reflects the present economic and trade conditions.

(iii) The import substitution elasticity is assumed at 1.5 which implies that similar products from different countries are imperfect substitutes.

The model measures trade creation effect as follows:

$$TC_{ijk} = M^1_{ijk} * \eta * \Delta t_{ijk} / [\left(1 + t_{ijk}\right) * (1 - \left(\frac{\eta}{\beta}\right)] \quad (1)$$

where:

TC_{ijk}: Trade creation on commodity i imported from country k into country j;

M_{ijk}: Imports of commodity i to country j from exporting country k;

η: Import elasticity of demand in the importing country;

t_{ijk}: Tariff of commodity i to country j from exporting country k;

β: Export supply elasticity.

Equation (2) presents the trade diversion effect. This is the change in duty paid prices relative to other prices from the rest of the world sources after the implementation of FTA. The extent of trade diversion depends on the elasticity of substitution and is estimated using the formula:

$$TD_{ijk} = \frac{M_{ke}^{1} * M_{row}^{1}\left(\left(\frac{(1+t_1)}{(1+t_0)}\right)-1\right)*\lambda}{M_{ke}^{1}+M_{row}^{1}+M_{row}^{1}\left(\left(\frac{(1+t_1)}{(1+t_0)}\right)-1\right)*\lambda} \quad (2)$$

where:

TD_{ijk}: Trade diversion on commodity i imported from country k into country j

M_{ke}: Imports from l;

M_{row}: Imports from the rest of the world

t_{ijk}: Tariff (t_1 and t_0 refer to post and pre-integration tariffs)

λ: Substitution elasticity

The net trade effect (TE) is a summation of total trade creation and trade diversion, which is represented as:

TE = TC+ TD (3)

The welfare effect, which is a summation of consumers and producers' surplus (equation 4), presents the net welfare effect under the FTA.

$$W_{ijk} = 0.5(\Delta t_{ijk} * \Delta M_{ijk}) \quad (4)$$

4.2. Scenarios

Based on the literature review and the background on the EVFTA and Vietnam's footwear industry, two scenarios are set as follow:

Scenario 1. Enforcement of EVFTA with tariff elimination and 'rule of origin' satisfaction (tariff is reduced to 0%)

Scenario 2. Enforcement of EVFTA with tariff elimination and 'rule of origin' satisfaction (tariff is reduced to 0%), but anti-dumping policy is still applied (with anti-dumping duty is set at the level of 10% as been applied in 2005-2011 and re-applied since 2016).

4.3. Data

Research partners and products

The research uses the 2015 trade and tariff database between the EU and Vietnam. The data is accessed through the World Integrated Trade Solutions (WITS). Appendix 1 illustrates the change in the EU's tariffs applied on Vietnam's footwear product in the base year and under two scenarios. Except for the five tariff lines that are subject to the 0% rate from the beginning, and the HS6403 product group receiving a tax rate from 4.17% to 4.50%, most of the remaining footwear products are subject to a tax rate of approximately 12%. Under the first scenario, all the tariff will be reduced to 0%.

For a disaggregated analysis of Vietnam export footwear (HS64), the paper studies main exporting footwear products of Vietnam in the HS 4–digit code including five groups: 6401, 6402, 6403, 6404, 6405, 6406 (see Appendix 2)

Elasticities

Elasticities are a fundamental assumption of this simulation methodology.

Substitution elasticity is based on assumption of Armington (1969) of imperfect substitutions of import goods from different sources, and developed by Jammes and Olarreaga (2005) whose study gives recommendation of taking the default value of 1.5 in the simulation model for industrial products.

Export supply elasticity is infinite by default with the value of 99 in SMART model. The reason for the infinite value is that the supply of only one country such as Vietnam is too small in comparison to the whole world to affect the change of the product price.

Import demand elasticity proportionally affects import change. Its value has been empirically estimated for each country and every HS 6–digit product in SMART model (Kee et al., 2008).

5. Simulation Results and Discussion

It can be seen from Table 1 that export values of Vietnam's footwear to the EU market increase in both scenarios. The results reinforce evidence for the positive impact of tariff elimination under the enforcement of the EVFTA. With the full reduction of EU's import tariff to 0%, the export value of Vietnam's footwear products increases by 4.96% from approximately US$3.98 billion to US$4.17 billion. Conversely, due to the anti-dumping duty policy, this rise seems to be lower in the second scenario with the amount of US$166.11 million (equivalent to a proportion of 4.18%).

Table 1

Change in export values of Vietnam's footwear

Scenario	Baseline	New value	Δ in value	%Δ in value
Scenario 1	3,975,135.11	4,172,431.53	197,296.48	4.96%
Scenario 2	3,975,135.11	4,141,249.76	166,114.65	4.18%

Paying more attention to the Vietnam's footwear at disaggregated level, we compare the export value of the six groups of footwear products under two scenarios. As can be seen from Table 2, group of footwear in HS code 6403 (footwear with outer soles of rubber, plastics, leather or composition leather and uppers of leather) is the main export products of Vietnam, with the original value reaching US$1.54 billion. However, since the current tariff imposed on this product (not subject to anti-dumping duties) is relatively low (from 4.17% to 4.50%, Appendix 1), the potential for export promotion of this group after EVFTA will not be as strong as that of other groups, with a growth of just 3.98%. Especially, this group of products has been subject to the imposition of anti-dumping duties for a long period of 2005-2011, and continue to be applied since September of 2016, thus, under the

second scenario, the export value of this product group is reduced dramatically, resulting in a quite slight growth rate of just 0.79%.

The second major export group of Vietnam's footwear in EU market belongs to HS code 6404, which is footwear with outer soles of rubber, plastics, leather or composition leather and uppers of textile materials. This group has the highest export value among all Vietnam's footwear exports to the EU, with the amount of up to US$ 69.88 million and US$78.55 million in the first and second scenario respectively. These figures are reasonable as this group would receive a remarkable tariff reduction from 11.9% to 0% under the EVFTA and not being subject to anti-dumping duty like HS code 6403 as well (Table 2).

Two product groups with the largest potential of exporting to the EU market are those of HS code 6402 and 6401. In particular, when the HS Code 6403 group is disadvantaged by antidumping duties, exporters seem to shift more drastically to these two categories, with growth rate in turn reaching 10.11% and 9.53%. It is also worth noting that for those groups that have already benefited from the zero tariff, typically the HS Code 6405 and 6406, we may only witness a very low or even slightly negative growth rates. (Table 2).

Table 2

Change in export values of Vietnam's footwear in detailed groups

		Scenario 1		Scenario 2	
HS code	Baseline	Δ in value	%Δ in value	Δ in value	%Δ in value
6401	1,642.13	114.00	7.00%	156.42	9.53%
6402	748,808.72	66,586.43	8.89%	75,701.37	10.11%
6403	1,542,495.90	61,347.87	3.98%	12,176.72	0.79%
6404	1,510,781.83	69,883.06	4.63%	78,553.80	5.20%
6405	45,392.75	3.73	0.01%	24.87	0.05%
6406	126,013.78	-639.6	-0.51%	-498.53	-0.40%
All	3,975,135.11	197,296.48	4.96%	166,114.65	4.18%

Regarding the trade effect of the EU's tariff elimination, this indicator is cumulated from two components: A and B. A occurs when domestic EU production or imported products from other suppliers are replaced by higher-quality imported products from Vietnam. This, in terms of social efficiency, will benefit both the EU and Vietnam. However, the import will cause higher competition for the EU producers. On the other hand, if the EVFTA comes into effect and leads to the EU moving from effective non-EVFTA importers to Vietnam, assuming not a productive supplier, this will create trade diversion.

The results from Table 3 show that under the EVFTA's tariff elimination, the trade creation effects are higher than the trade diversion effects in both scenarios. Especially, in the first scenario, it is likely that there will be a quite positive effect on trade welfare of the

two partners, reaching US$ 197.26 million. In the second scenario, there is a fall in the total trade effect due to the imposition of anti-dumping duty to one of the main export groups of Vietnam's footwear to EU market.

Table 3

Trade effect of the EU's tariff elimination

Scenario	Trade creation effect	Trade creation effect	Trade total effect
Scenario 1	240,526.38	-43,262.76	197,263.62
Scenario 2	138,868.87	-60,656.31	78,212.56

6. Policy Implication

The government should have strategies for the development of supply for input materials, orienting enterprise engaging in enhancing the design research, product quality testing and confronting technical barriers imposed by the EU and other importing countries.

Also, Vietnam should actively diversify the consumption markets. On the one hand, continuing to export to the traditional markets such as the EU as well as other main consumers the US and Japan, as well as accessing the new target markets such as Asian, Africa region, the Central and South America,… On the other hand, footwear manufacturers should concentrate more on exploiting and expanding the domestic market as this is a more familiar market and easier to access with less barriers relating to trade such as anti-dumping duty or rules of origin.

Finally, the government should actively promote the participation into trade agreements, the integration with countries having advantages in raw materials supply or with countries that are major import partners. This not only can help Vietnam footwear product to satisfy the rules of origin but also enhance export ability■

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Appendix 1.

The EU's tariffs applied on Vietnam's footwear products in 2015

Scenario	Baseline	Scenario 1	Scenario 2
640110	11.90	0	0
640192	11.90	0	0
640199	11.90	0	0
640212	11.90	0	0
640219	11.90	0	0
640220	11.90	0	0
640291	11.90	0	0
640299	11.90	0	0
640312	4.50	0	10
640319	4.50	0	10
640320	4.50	0	10
640340	4.50	0	10
640351	4.50	0	10
640359	4.20	0	10
640391	4.20	0	10
640399	4.17	0	10
640411	11.90	0	0
640419	11.90	0	0
640420	11.90	0	0
640510	0	0	0
640520	0	0	0
640590	5.95	0	0
640610	0	0	0
640620	0	0	0
640690	0	0	0

Source: Compiled from WITS (2016)

Appendix 2

Detail of footwear products

Hs code	Product details
6401	Waterproof footwear with outer soles and uppers of rubber or of plastics, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes
6402	Other footwear with outer soles and uppers of rubber or plastics
6403	Footwear with outer soles of rubber, plastics, leather or composition leather and uppers of leather
6404	Footwear with outer soles of rubber, plastics, leather or composition leather and uppers of textile materials
6405	Other footwear
6406	Parts of footwear (including uppers whether or not attached to soles other than outer soles); removable insoles, heel cushions and similar articles; gaiters, leggings and similar articles, and parts thereof

Source: World Custom Organization (2017)[2]

[2] World Custom Organization (https://www.wcoomd.org)