

Impact of trade policy reform on Vietnam fisheries Export

Do Thi Thao* Zhang Jian Hua

School of Economics, Huazhong University of Science and Technology, Wuhan. P.R. China

Abstract

Globalization international economic integration and trade liberalization has been a prominent trend of the contemporary world economy. In compliance with this trend, since 1986, Vietnam has implemented reforms and promoting international economic integration with the slogan "Diversification, multilateral foreign relations. Vietnam is willing to be a friend of every country in international community, striving for peace, independence and development". With the policy reform since innovation, trade policy is the most important and influential to value fisheries exports in Vietnam. There are no longer centrally-planned regimes as it used to be that started by a change in policy by moving towards self-balancing and self-funded mechanisms with the aim of enhancing fisheries exports. Value of fisheries products are attracting more attention, leading to creating a policy investments sources for breeding and developing new motivation. The fisheries sector is considered one of the pioneers in the industry innovations. At this point, the government has changed policy from economic protection to market economy oriented market socialism. During the renovation process, the fisheries sector is considered a key economic sector in the country's development process. The paper focuses on the literature review related work with various different parts of the reform of important commercial activities related to Vietnam's fisheries exports in the period 1990-2015. Then, based on the literature reviews, the paper will analyze how trade policy and other reforms, the some trade policy reform impact on the volume and value of fisheries exports.

Key word: Reform, Vietnam, trade policy, impact, fisheries exports

1. Introduction

Since the 80s of last century, the world witnessed the new process taking place is changing every aspect of economic life-politics and human society. Economic globalization trend became prominent and indispensable dominated era, except not a country, any race, if you want to develop required to open the door, integrate into the global economy. Trade reform in Vietnam since 1986 have two main objectives. The first goal is to create transitions from a centrally planned to a market economy. The second goal is to promote industry's export orientation to overcome the anti-export to protection systems while protecting manufacturing industries development in the period under central planning. In the late 1980s, trade reform was slowly and hesitated, but since the 1990s real reforms have been implemented and contribute to economic development in a number of sectors such as textiles, fisheries and agriculture, trade reform focused on some key measures such as removing quantitative import restrictions, reducing tariff barriers, increase exports encourage and expand FDI, especially FDI in export oriented projects and accelerate the process of privatization in foreign trade sector.

Moreover, Vietnam will benefit greatly from the implementation of rapid trade reform and especially after Vietnam became an official the member if the WTO (World Trade Organization) in 2007 and TPP in 2015. TPP and WTO in the future will certainly be a precious medicine, an important lever to promote Vietnam's economy development and mature in the global economic playing field. In the late 1980s, trade reform were done slowly and hesitated, but since the 1990s major reforms have been implemented and contribute to economic development. During the renovation period, Vietnam is an agricultural country, so the government has to change the export structure in favor of agricultural products. Vietnam with a very good natural conditions. The fisheries sector is one of the key economic sectors of Vietnam. With the natural preference of the 3260 km long coastline and many canals, rivers, fisheries has become an industry bringing economic benefits to the country's high society. During the renovation period, Vietnam is an agricultural country, so the government has to change the export structure in favor of agricultural products.

Table 1: Fisheries development in Vietnam (2000-2015)

Year	Total yield (mil.tons)	Capture fisheries (mil.tons)	Aquaculture (mil.tons)	Exported value (Billion USD)
2000	2.00	1.28	0.72	1.48
2001	2.23	1.35	0.88	1.78
2002	2.41	1.43	0.98	2.01
2003	2.54	1.43	1.11	2.20
2004	3.07	1.92	1.15	2.40
2005	3.43	1.99	1.44	2.74
2006	3.69	2.00	1.69	3.36
2007	4.15	2.05	2.10	3.76
2008	4.58	2.13	2.45	4.51
2009	5.00	2.37	2.63	4.25
2010	5.10	2.30	2.8	5.00
2011	5.22	2.20	3.02	5.20
2012	5.80	2.60	3.20	6.20
2013	6.05	2.71	3.34	6.70
2014	6.30	2.68	3.62	7.90
2015	6.56	3.03	3.53	6.70

Source: Annual report of the Ministry of Agricultural and Rural development 2016

This paper, aims to analyze the impact of trade policy reform trends fisheries exports in this period. On the other hand, indicates the influence of positive and negative trade reform to export fisheries to provide directions for developing fisheries exports in the coming years.

2. Literature Review

2.1 Trade policy reform

The assertion of a strong influence of trade policy reform on export performance in developing countries has remained largely unresolved in the literature. The argument is based on whether trade liberalization has led to positive or negative export performance. While some studies have found a positive association between trade liberalization and export performance (Svedberg, 2000), (Santos-Paulino, 2003), (Ahmed, 2000), (Michaely et al. 1991), (Thomas et al. 1991), some other studies have also found little empirical evidence to support a link between trade liberalization and export performance (Shafaeddin, 1994); (Greenaway and Sapsford, 1994); (Agosin, 1991), (Clarke and Kirkpatrick, 1991). According to (DaniRodrik, 2000), trade policy reform mentions to the reduction of Government's interference and the substitution of quantitative restriction on price mechanisms such as tariff. He also argued that trade policy reform is the simplification of import procedures, reduction or elimination of quotas, and the rationalization of tariff structure.

But Thomas (1991) believed that trade policy reform includes measures that move the trade regime toward a more neutral incentive framework and a more liberal foreign trade regime. In the literature on trade reform, the concept of "liberalization" is described as the key factor in the reform progress. In general, trade liberalization is a distinction between inward import substitution policy and outward export promotion policy in which it has a support for the movement from trade restriction to a more liberalized trading. In last decades, there have been several theories about trade policy reform. Normally, trade policy reform refers to the reduction of Government's intervention and the replacement of quantitative restriction on price mechanisms such as tariff (Rodrik, 2000). Maurizio Bussolo and Alessandro Nicita (2005) defined that trade policy liberalization includes efforts to reduce the level of protection against foreign goods and services. Said a simpler way under this definition, trade policy can involve various complex types of actions, such as the elimination of quantitative restrictions (quotas) or the reduction of tariffs. According to a geographic dimension, there is unilateral, bilateral, regional, and multilateral liberalization.

Razeen Sally (2008) argued that another way of cutting into trade policy reform is to look at it on several tracks. Some reforms are carried out unilaterally, others reciprocally through (bilateral, regional, multilateral) trade negotiations, or in agreements with donors. The traditional literature on trade claimed that there was a high cost for the economic system under the domestic restriction policy. First of all, the cost may come from the misallocation of natural resources in production which leads to the decrease of consumer welfare caused by the misalignment in prices between domestic and international markets. Secondly, domestic protection makes the impact on economic growth rate. Many studies showed that the productivity growth is much higher in period of liberal trade policy than in the period of protection. In addition, protectionist restriction is able to divorce domestic market from international structure. In this case, country is often defeated to deal with various external shocks in economic system such as high oil price. Lastly, those countries who applied restriction policy don't have opportunities to receive new technology from overseas, thus reduce their comparative ability and limit export (Thomas et al 1991).

2.2 Trade policy instruments

2.2.1 Tariff reform

Taxation plays an extremely important role in the economic governance of the state. When the economy - growing society, deeply integrated with the world economy, the reform requires tax policy is very important and necessary. According to Greenaway et al (1993), the concepts of protection can be divided in to nominal tariff rate (percentage difference between the price of a good with and without protection) and effective tariff rate which defined as the percentage change in producers value added, as a result of taxes on trade, over the level of value-added that would have prevailed in the absence of those taxes' (Chi. 2003). A tariff reform applied for key industry is often implemented at the end of the reform program (Thomas et al. 1991).

Trade taxes have been of special significance in Vietnam, because they used to bring about one-third of total tax revenues. This share has been falling mainly due to tariff reduction following Vietnam's increased international commitments, and it decreased from about 21% in 1997 to 11.2% in 2010. With Vietnam joining the WTO, the contribution of trade taxes is likely to decline further. Tariff rates fall into the following three broad categories:

- Preferential rates applied to goods originating from countries in the most favored nation (MFN) category.
- Common tariff rates applied to goods from other countries without any trade agreements. For those countries, tariff rates in this case were 50 percent higher than for MFN countries.
- Special preferential tariff rates on goods from countries with special trade agreements with Vietnam

2.2.2 Non-tariff barriers

Besides tariff, non-tariff barrier to trade (NTB's) is also a trade barrier that restricts imports. However, NTB's is not used in the usual form of a tariff. Generally, non-tariff barriers are used to control import by large and developed countries which include quantitative and quotas restriction, import licensing, embargoes, and other restrictions. In the trade reform process, NTBs have been gradually removed, especially the removal of Quantitative Restrictions (QRs) policy. The implications of removal of QRs normally has main objective is remove corruption, remove protection of inefficient domestic industry from exploiting the local consumers in terms of both price and quality.

2.2.3 Voluntary export restraints

As an export restriction measures that a country requires importing countries to restrict the export of goods exported to their country voluntarily, if not they will apply retaliated measures resolutely. The required neutrality of incentives can be achieved by allowing export producers to purchase their inputs and sell their outputs at competitive prices; that is, by granting exporters and their main suppliers duty-free access to inputs, and granting exporters the right to retain all their export proceeds. Several mechanisms exist for granting duty-free access to exporters for imported inputs. These include duty drawback or rebate systems, and bonded manufacturing warehousing arrangements. In addition, geographically separated entities (export processing zones) may be set aside from which all import trade barriers are excluded (WB 2006).

In practice, most countries which applied export promotion policy expect that sustained export promotion will help to earn more money to make rise GDP growth to cover the cost of imports, solve balance of payments problems, reduce foreign debt, and create more employment for people.

2.2.4 Exchange rate reform

As indicated in a research of WB (2006), “Perhaps the most important single instrument in implementing outward orientation is exchange rate policy”. Generally, in the process of trade liberalization exchange rate (ER) reform always has high attention because both the supply of and demand for export volumes are influenced by the ER. In the exchange rate reform policy, real exchange rate (RER) is a closely related concept. Normally, RER is known as the nominal exchange rate adjusted to differences in inflation. According to Catão (2007), ‘RER between two currencies is the product of the nominal exchange rate (NER) and the ratio of prices between the two countries’. It is often calculated by the formula: $RER = eP^*/P$ in which e is nominal ER, P^* is the average price of a good in world market, and P is the average price of the good in domestic market. In some theories, productivity of export goods is related closely to the real supply of foreign currency, and RER plays an important role as being the principal equilibrating variable of a country’s international trade and balance of payments. An increase in the real prices of export products creates real appreciation of the currency. According to Caballero and Corbo (1989), the real exchange rate’s fluctuations bring negative effect on exports because of their considerable uncertainty. When ER is unified, a real devaluation of currency improves incentives for export industries and production of import substitutes (Thomas & Nash, 1991).

2.2.5 Policies towards trading partners

When participating nations to increase trade, improve natural conditions, apply modern techniques in the world, providing export experience in the form of protection. According to Rozelle and Swinnen (2004), the potential for expanding trade with each other’s has led many countries to form regionally integrated groups. When the trade agreements are signed, those countries are expected to increased trade, promote natural competitive advantages, expand economic scale by production for a regional market, and to provide exporting experience under protection.

2.3 Vietnam’s development through period of time from 1975 - 2015

Table 2. Vietnam’s development through period of time and its characteristics

Period	International Environment	Domestic Environment	Period’s characteristic
1975 - 1985	<ul style="list-style-type: none"> -The embargo diplomatic policy of the United States -The Cold War - Joining in the system of classical socialism affected by the Soviet Union’s economic ideology 	<ul style="list-style-type: none"> - The victory against the United States and the unity of the entire country - Tension with China burst into Border War in 1979 	Economic Recovery after war and choice of friends
1986 - 2006	<ul style="list-style-type: none"> - The collapse of Soviet Union and some Socialist countries in Eastern Europe - The end of Cold War - The Asia Financial Monetary Crisis in 1997 	<ul style="list-style-type: none"> - The sixth National Congress of the Communist Party of Vietnam - Joining in ASEAN - Normalizing the diplomatic relations between Vietnam and America - Normalizing the diplomatic relations between Vietnam and China 	- Leaving the orbit of classical socialism and integrating intensively into the global economy
2007- 2015	<ul style="list-style-type: none"> - The 2008 Financial and Economic crisis - Public debt crisis shadowed Europe and the world economy - Global Commercial decreased 	<ul style="list-style-type: none"> - Vietnam officially becomes a member of WTO - The crisis in 2010 slightly affected Vietnam financial market but strongly on its export - Role of State-Owned Enterprises (SOEs) and FDI Enterprises is challenged - Bad debt of SOEs and Real estate market put bank system in front of real challenges - Efficiency of Public Investment - New demands of people in economic life -Vietnam officially becomes a member TPP(Trans-Pacific Strategic Economic Partnership Agreement) (2015) 	<ul style="list-style-type: none"> - Becoming a member of WTO and dealing with Financial -Monetary Crisis in 2008 - Restructuring the economy facing new challenges

Source: Dao Thanh Tuong, *policy and management Studies*, VNU publisher, 2015

3. Data sources, methodology, model specification, and variables description

3.1 Data sources, methodology and model specification,

The research uses data collected from various sources. Data collection based on report from Government Agencies in Vietnam such as General Statistic Office, Ministry of Fisheries/Ministries of Agriculture and Rural Development, Ministry of Trade and Ministry of Planning and Investment, as well as World Bank and FAO. The data set used for the empirical analysis in Vietnam on period 1990 - 2015. The data contains more entities and few time periods, so there is slight variation over the time in independent variables included in the model for panel analysis. To smooth the fluctuations in the data we take log natural of all the variables in the model.

To achieve the objective of the study, the authors turn to take steps as follows:

First author used Ramsey RESET test for functional form correct conclusion and not missing variables.

Secondly, the author used verification by Breusch-Pagan-Godfrey test for the conclusion about the model does not occur variances change.

Thirdly, we used test-Godfrey Serial Correlation LM Breusch Test to conclusions about the correlation between the variables themselves

Fourthly, the author used method with a linear model to estimate the sample regression model to find the relationship of the independent variable and the dependent variable in the period. And the test will be done by the least squares method conventional (OLS) with linear model as follows:

$$\ln \text{TEF} = \alpha + \beta_1 \ln \text{TO} + \beta_2 \ln \text{EPZs} + \beta_3 \ln \text{EX} + \beta_4 \ln \text{NCTPWV} + \beta_5 \ln \text{GDPG} + \beta_6 \ln \text{WTO} + \epsilon_T \quad (1)$$

Where:

LnTEF: Natural log of turnover export fisheries

lnTO: Natural log of Trade openness

lnNPZs: Natural log of number processing export zones fisheries

ln ER: Natural log of exchange rate, value Vietnam's annual VND/USD

lnNCTPWV: Natural log of number of country trade partner with Vietnam

Ln GDPG: Natural log of annual GDP growth rate (%)

WTO: Dummy variable with two value 1 and 0

ϵ_T = Random Error

α = Constant or intercept

Finally, Author also use the method of comparing the mean values of the variables to find out the different impacts two periods 1990 – 2006 and 2007 – 2015, before and after Vietnam joined WTO accession with “independent-samples t-test” with compares the means between two unrelated groups on the same continuous, dependent variable. A t-test asks whether a difference between two group's averages is unlikely to have occurred because of random chance in sample selection.

3.2 Variables Description

Turnover export fisheries (TEF): Total export turnover is the total value of exports of all (or one) of exports of the country (or a business) within a certain period converted a uniform currency type certain. Total fisheries export value measure result of fisheries exports during 1990 - 2015

Trade Openness (TO): The Trade Openness is an economic metric calculated as the ratio of country's total trade, the sum of exports plus imports, to the country's gross domestic product^[1] = (Exports + Imports)/(Gross Domestic Product)^[2]. The interpretation of the Trade Openness is: the higher the index the larger the influence of trade on domestic activities, and the stronger that country's economy^[3]. International trade provides connection to global market through economies of scale, hence provide opportunities for the foreign investors. Trade openness has a positive influence on export-oriented FDI inflow into an economy^[4]. Generally countries with liberal trade and investment policies attract larger trade compared to countries with restrictive policies. Levels and changes in the value of exports and imports divided by aggregate GDP (the trade/GDP ratio) are

occasionally used as measures of trade “openness.” The oft-quoted work of Dollar and Kraay (2001) and the World Bank (2002) uses changes in the trade/GDP as a basis for classifying countries as “globalizers” or “non-globalizers” We argue that neither the level nor the change in a country’s trade/GDP ratio can be taken as an indication of the “openness” of a country’s trade policy.

Number Export processing zones (EPZs)

In some studies, the first advantage of EPZs is to attract FDI in export industries because of EPZs is a good environment to facilitate financial flows and goods, encouraging domestic and international cooperation, and are allocated resources efficiently. In fact, the export processing zone is the gateway to FDI abroad into the domestic market. This is also an opportunity for the domestic industry was investing in technology, engineering, resources to increase the advantages as well as increased exports turnover. Therefore, it is very necessary to create more favourable investment environment with attractive incentives. In addition, the cost to operate EPZs is much lower than other way of attracting foreign investment and “enclave nature the EPZs presents a smaller domestic political risk than opening up the entire country to foreign participation” (Ahriramadi, H. and W. Wo (1995)). And then EPZs are seen as vehicles for outward- oriented economy growth, based on the theory that active participation in international trade is an engine of growth, and “a second best type solution for a country wanting to profit from a greater and more efficient integration in to international division of number without subjecting the entire economy to trade liberalization and deregulation” (D. Spinanger, 1984)

Exchange rate (ER): The relationship between exchange rate and net export of goods exist within a country. An increasing in the exchange rate will lead to the increasing in the relative price of domestic goods. Edward, 1974 concluded the exchange rate policy played an important role in changes of trade share. Xie et al., 2007 also suggested that the export prices of Salmon are sensitive with exchange rate. The changes in the ER of VND/USD have a significant impact on the Vietnamese fisheries export, thus the testing of this relationship is necessary.

Number of trading partners with Vietnam (NCTPWV):

Vietnam’s market policy was promptly shifted to diversification and multilateral making Vietnam’s trading market was expanding and had positive changes. Before, Vietnam mainly trade with other former socialist countries (including the Soviet Union and Eastern Europe), however, after reform, Vietnam has expanded trading relations with many countries in Asia and also gradually promoted market expansion into many other regions such as Africa, America, the joining NAFTA, ASEAN, CACM causes negative influence but the joining in ASEAN (in Tu Thuy Anh (2008) and special event Vietnam joining WTO (2007) give positive impacts on export value.

Growth GDP (GDPG): When a country exports goods, it sells them to a foreign market, that is, to consumers, businesses, or governments in another country. Those exports bring money into the country, which increases the exporting nation's GDP. The relationship between exports and growth

Economists have been analyzed in numerous studies Recent empirical. However, by evidence that this relationship is quite diverse. While some research suggests the existence the causal relationship between exports and rising economic growth, a number of other studies for that does not exist proportional relationship between these two factors. In fact, no studies just the opposite relationship between exports and economic growth.

4. Results and Discussion

Table 3 show that about Statistics describe the variables. The average value, minimum value and a maximum value of variables. This shows a specific vision for the observed variables.

Table 4 shows the results of testing some basic tests with all result:

Firstly, with result Ramsy Reset test, authors wanted to check the validity of the model and the ability to miss variables, with Probability = 0.8275 > 0.05. Since then we have concluded not miss variables and validity in the model.

Secondly, with Breusch-Pagan-Godfrey test, we have result the model does not occur variance changes. The probability chi-square value of the corresponding R-square value should be greater than critical value of 5%, in this case is Prob.chi - Squared = 0.8664 > 0.05 therefore we cannot reject the null hypothesis.

Thirdly, We are also check correlation among the residuals of the model with Breusch-Godfrey Serial Correlation LM Test with result, there is no serial correlation as shown by LM test probability chi-square value 0.7575 > $\alpha = 0.05$.

Fourthly, we check the result “Chow test”, we found difference between result the two periods before 2007 and after 2007.

Table 3: Statistics describe the variables

	LnTEF	LnOT	lnNPZs	LnER	LnNCTPWV	lnGDPG
Mean	7.447267	0.030698	6.074136	9.586299	4.827373	1.927594
Median	7.670847	0.088140	6.060208	9.647791	4.908965	1.922761
Maximum	8.974618	0.526502	6.687109	10.02203	5.241747	2.255493
Minimum	5.323010	-0.655851	5.298317	8.824678	4.025352	1.562346
Std. Dev.	1.124740	0.391701	0.438805	0.277877	0.325249	0.205826
Sum	193.6290	0.798156	157.9275	249.2438	125.5117	50.11744
Sum Sq. Dev.	31.62600	3.835750	4.813747	1.930388	2.644675	1.059108
Observations	26	26	26	26	26	26

Table 4: Result of some test relation

SOME TEST RELATION			
1. Ramsey RESET Test			
	Value	Df	Probability
t-statistic	0.220590	21	0.8275
F-statistic	0.048660	(1, 21)	0.8275
Likelihood ratio	0.060176	1	0.8062
2. Heteroskedasticity Test: Breusch-Pagan-Godfrey test			
Dependent Variable: RESID^2			
F-statistic	0.310521	Prob. F(5,20)	0.9008
Obs*R-squared	1.872988	Prob. Chi-Square(5)	0.8664
Scaled explained SS	1.395628	Prob. Chi-Square(5)	0.9248
3. Breusch-Godfrey Serial Correlation LM Test			
Dependent Variable: RESID			
F-statistic	0.196448	Prob. F(2,18)	0.8234
Obs*R-squared	0.555392	Prob. Chi-Square(2)	0.7575
4. Chow Breakpoint Test: (Break point: 2007)			
F-statistic	1.280220	Prob. F(6,14)	0.3274
Log likelihood ratio	11.37224	Prob. Chi-Square(6)	0.0775
Wald Statistic	7.681319	Prob. Chi-Square(6)	0.2624
5. Histogram-Normality Test			
Jarque – Bera:	2.248305		
Probability:	0.324928		

Finally, we check the normality of the residuals Jarque Bera statistics has been applied to the data with the result on Jarque Bera test shows that probability value $0.32 > \alpha = 0.05$ therefore we cannot reject the null hypothesis and state that the residuals are normally distributed. Overall results of the residual tests shows that the model is significant and a good fit.

All test shown for regression results equation (1), we can confirm that this model suitable for the requirements basic econometrics, ensure the reliability of the estimated results OLS obtained. From the results of Table 5, with regression (1) and (2) have R-squared value = 0.952580 and R-squared value = 0.942582 which shows high significance of the model, indicating that 95.25% and 94.25% of the dependent variable was explained by model. The coefficient of perceived is positive and significant for regression (1) and regression (2), this show that all independent variables are given effect in the same direction with the dependent variable. Especially the variables (TO), EX, NCTPWN with high significant, the impact of trade policy reform to turnover fisheries exports very positive in Vietnam. Special, the impact of trade openness more deep impact on Vietnam's fisheries export turnover with coefficient ($\beta_1 = 1.216337$). With result, main reason is Vietnam's economy has a high openness trade and relatively rapid rise. This is the result of the integration path is open to the world in terms of globalization

Table 5: Result of estimation OLS test

Dependent Variable: LnTEF

Variable	Coefficient(1)	Prob.(1)	Coefficient(2)	Prob.(2)
LnTO	1.216337	0.0000	1.214350	0.0000
LnNPZs	0.581622	0.0000	0.594442	0.0045
LnER	1.119005	0.0000	1.116052	0.0001
LnNCTPWV	0.471806	0.0000	0.466811	0.0000
LnGDPG	0.283886	0.0002	0.280720	0.0470
WTO			0.507098	0.0002
C	-9.674837	0.0000	-9.691669	0.0000
R-squared	0.952580 ⁽¹⁾ [0.942582] ⁽²⁾		Mean dependent var	7.447267 ⁽¹⁾ [7.447267] ⁽²⁾
Adjusted R-squared	0.920726 ⁽¹⁾ [0.940239] ⁽²⁾		S.D. dependent var	1.124740 ⁽¹⁾ [1.124740] ⁽²⁾
Prob(F-statistic)	0.000000 ⁽¹⁾		[0.000000] ⁽²⁾	

Openness trade above shows Vietnam not only exploited the strength of the domestic economy, but also enlisted the world market. Deeper integration into the world economy as well as a growing number of large open world economy, so Vietnam has given certain benefits have been proven by the development of increasingly upward Vietnam's economy in recent years. By the way the more we see the important role of the process of commercialization, international exchange activities in Vietnam fisheries exports.

Simultaneously, the EX with coefficient ($\beta_3 = 1.119005$), was very influential to the turnover fisheries export in Vietnam, this is accordance with economic theory. EX become effective tool for calculating and comparing the value in local currency with foreign currency values, domestic commodity prices to international prices and labor productivity in the country with international labor productivity. On that basis, the efficiency of foreign trade calculations, the efficiency of joint ventures with foreign countries, foreign loans, and the effectiveness of the external economic policy of the country. Also the factor of the number of EPSs, the number of countries trading partners with Vietnam also greatly affect the total export turnover, this shows the correlation of trade policy transformation significant impact on the situation of the Vietnamese fisheries export and impact GDP growth rate negligible impact fisheries exports. We are estimated Sample regression function:

$$\text{LnTEF} = 1.21633713057 * \text{LnOT} + 0.581621851888 * \text{LnNPZs} + 1.11900452814 * \text{LnER} + 0.471806136074 * \text{LnNCTPWV} + 0.283886397977 * \text{LnGDPG} - 9.6748365226 \text{ (regression 1)}$$

Vietnam become office member of WTO in 2007. The accession to WTO has been initiated to secure Vietnam's access to the leading markets and to anchor the domestic reforms on strong external commitments. The result "Chow test" on table 4 found difference between result the two periods before 2007 and after 2007. The WTO

accession has also promoted and expanded the exporting of Vietnamese fisheries products into the worldwide market. Fisheries has been one of the most important industries in Vietnam. With $\beta_6 = 0.0507098$, Prop. = 0.0002, we have the coefficient of perceived is positive and significant with impact WTO on turnover export fisheries. We are result estimated Sample regression (2) (with dummy variable WTO) function:

$$\text{LNTEF} = 1.21434967317 * \text{LnTO} + 0.594441500747 * \text{LnNPZs} + 1.11605240804 * \text{LnER} + 0.466810796829 * \text{LnNCTWV} + 0.280719888793 * \text{LnGDPG} + 0.50709823894581 * \text{WTO} - 9.69166870869 \text{ (regression 2)}$$

Vietnam has a long tradition in the fishing activities and aquaculture. Nowadays, the fishery industry in Vietnam grows incessantly both quality and quantity. Besides that, Vietnam also gains an amount of money thanks to seafood exports. After WTO accession, Vietnam also has been gaining advantageous conditions to develop export fisheries as well as some challenges for expansion.

Table 6: Group Statistics

Variable	2007 (Vietnam joined WTO)	Mean	Std. Deviation	Std. Error Mean
LnTEF	Before	6.828407	.8773804	.2127960
	After	8.616226	.2500681	.0833560
lnTO	Before	-.180941	.3168063	.0768368
	After	.430462	.0613771	.0204590
lnNPZs	Before	5.805064	.2661183	.0645432
	After	6.582384	.1250043	.0416681
lnER	Before	9.443297	.2237403	.0542650
	After	9.856413	.1250679	.0416893
lnNCTPWV	Before	4.694196	.3216622	.0780145
	After	5.078930	.1215369	.0405123
lnGDPG	Before	1.989579	.2053026	.0497932
	After	1.810512	.1565371	.0521790

With this difference, maybe the change a series of trade policy since 2007 is a major turning point affecting fisheries export turnover in Vietnam. The result on table 6, with mean values of the independent variables and the dependent before and after WTO accession significantly different. Specifically the value mean, LnTEF = 6.828407 (before 2007) and LnTEF = 8.616226 (after 2007). When joining the WTO, according to the MFN principle, WTO principle Vietnam will have access to free merchandise levels without negotiating bilateral trade agreements with individual countries. So that there are greater opportunities and greater equality in entering and expanding international markets. That helped Vietnam have a new breakthrough in the trade. The difference mean between variables. Especially openness trade trade with ln TO = -0.18 (before 2007) and lnTO = 0.43 (after 2007), and lnNCTWV=4.69 (before 2007), lnNCTWV = 5.07(after 2007).

After Vietnam joined the WTO, international trade become an important part has decisive role in the development of the country. In particular the fisheries sector still plays an important role in the economic structure of Vietnam. The fisheries sector has seen great development, brought to the country a value source of foreign currency for re-investment in service, the implementation of industrialization - modernization of the

country. Through checklist of the difference mean value we see this clearly in table 7 with Levene's Test for Equality of Variances and t-test for Equality of Means (mean Difference)

Table 7: Independent Sample Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
lnTEF	Equal variances assumed	11.54	0	5.935	0	-1.787819	0.3012512	-2.409571	-1.166067
	Equal variances not assumed			7.823	0	-1.787819	0.2285396	-2.26405	-1.311589
lnTO	Equal variances assumed	13.87	0	5.681	0	-0.611404	0.1076283	-0.833538	-0.38927
	Equal variances not assumed			7.689	0.001	-0.611404	0.0795139	-0.778346	-0.444461
lnNPZs	Equal variances assumed	1.79	0	8.236	0	-0.77732	0.0943833	-0.972117	-0.582522
	Equal variances not assumed			10.12	0	-0.77732	0.0768248	-0.935936	-0.618703
ln EX	Equal variances assumed	2.476	0	5.102	0.002	-0.413116	0.0809771	-0.580245	-0.245987
	Equal variances not assumed			6.037	0	-0.413116	0.0684302	-0.554397	-0.271835
ln NCTPWV	Equal variances assumed	8.74	0	3.433	0.004	-0.384733	0.1120643	-0.616023	-0.153444
	Equal variances not assumed			4.377	0	-0.384733	0.0879063	-0.566797	-0.20267
ln GDPG	Equal variances assumed	1.206	0	2.281	0.032	0.1790672	0.0785053	0.0170402	0.3410943
	Equal variances not assumed			2.483	0.022	0.1790672	0.072125	0.0289177	0.3292168

5. Conclusion and policy implications

In particular fisheries exports which accounted for 6.7 USD billion in 2015. Some trade policy has a major impact on fisheries export growth especial export fisheries. One of the important policies affecting greatest export is trade openness including Vietnam's entry into the international trade organizations such as ASEAN, APEC, ASEM, ... bilateral agreements and multilateral the United States, Japan, China Especially after Vietnam joined the WTO (2007), TPP (2015) with the exemption policy about finance (EX), as well as increased cooperation relations with many countries around the world. Products exporting fisheries from Vietnam is increasingly more diverse, more abundant. Simultaneously with the development of EPZs, Vietnam fisheries exports is increasing and advanced further into international market. This study has some policy implications for Vietnam export fisheries

1. For the domestic market, the tax system should be adjusted to suit the current integration process. The first, input support to export activities should tax exemption for this type of product. Simultaneously gradually eliminate of tariff barriers with the aim of promoting trade activities in Vietnam and the countries of the world become more active.

2. The ER is one of the macroeconomic policies of each country is important. Evolution of the exchange rate between the Euro dollar, between USD/JPY as well as exchange rate fluctuations between the USD/VND in recent years shows that the exchange rate is always topical issue, very sensitive. In Vietnam, the exchange rate not only affects the import, export, trade balance and national debt, attract direct investment, indirect, but significant impacts to trust of the people. Therefore, the government should take measures to adjust the exchange rate in accordance with the time, the economic situation and more flexible. Because the value of the Vietnam dong is too low compared with other countries, and the rate of depreciation of the real low thus reducing competitiveness for exporters Vietnam. Therefore, in order to enhance competitiveness and need a long-term policy for the exchange rate. Avoid fluctuations greatly affect the overall export and fisheries exports in particular.

3. Expanding relations, trade cooperation with other countries as competitors in exporting seafood such as Thailand, Malaysia, Philippines, China.... Instead of competing, these countries should be linked to the development. The association, cooperation may be involved in a bidding package to limit the power of the largest seafood importer. At the same time it is also favorable conditions for the country to exchange experiences, enhance the standard and scientific and technical progress. This cooperation can also bring the power and standing of the country in the international arena.

4. When the expansion of international trade relations, wanted of fishery products have high competitive ability, the fisheries sector needs to build its own brand. Especially for key export products such as shrimp, catfish ... need to build brand from Vietnam. This, as well as confirming the quality of the products Vietnam fishery exports on the world market. Also if Vietnam fishery products brand will create a sustainable market to avoid trade conflicts

5. Need to expand the trade promotion agencies abroad, can help Vietnam a better grasp of customer needs, and increase the channel information, promote products on mass media, and open the exhibition to introduce Vietnam fishery products with your friends around the world. In recent years Vietnam has many support policies, trade promotion, however, was small and not really promoting clarity about the quality of fishery products for export

6. Within marketing system that, marketing systems between wholesale and retailers for of fishery products should be improved and expanded to make sure product distribution from farmers for processing and export effectively. It is essential to establish a development strategy domestic fish market by improving raw materials for production, transportation, store ...

7. The Government need to develop and further expand the EPZs to increase the output and quality of fishery products in Vietnam, also increasing investment to advance scientific techniques in processing. There are tax incentives, technical assistance ... in to increase the export processing zones to attract foreign investment and increase the quality of fisheries in accordance with the hard requirements from import country

8. Appreciate improve quality, lower costs, diversification of products, maintaining the traditional markets and expand new markets, noting the Chinese market is huge and near market should be able to export many aquatic products with large numbers

9. In addition to enhancing learning about the law, purchasing practices, culture ... market penetration, businesses need to work together in a spirit of community to create self-protection power and increased edge

competition; respected reputation, to preserve the reputation to carry out long-term development strategy. Because last time, but no less dishonest entrepreneurs in business, lack of a sense of solidarity with the struggle in such as pumping impurities in raw fishery...

10. Vietnam should enhance the work the management, creating a tightly linked between the production of raw materials with export processing to stabilize and improve the efficiency of production and business; reduced spontaneous elements in the production, exports and domestic consumption, investment increased processing capacity Ahmed (2000) goods with high value, to meet quality requirements and food safety, doing well the export promotion, research and learn experience in international trade.

References

- AHMED, N. U. (2000), "Export Responses to Trade Liberalization in Bangladesh: A Cointegration Analysis, Applied Economics", 32, 1077-1084.
- AHRIRAMADI, H. AND W. WO (1995), "Export Processing Zones in Asia", *Asian Survey* 35(9), 828-849.
- ALAM, M. S. (1987), "Trade orientation and macroeconomic performance in LDCs: An empirical study Economic Development and Cultural Change", 39, 839-848.
- ALESINA, A., AND A. DRAZEN (1991), "Why are stabilizations delayed?" *Economic Review*, 81.
- AMSDEN, A. (1989), "Asia's next giant: South Korea and late industrialization", *New York and Oxford: Oxford University Press*.
- AGOSIN, (1991), "Regional Integration and Trade in Africa", *Journal of African Economic Review*, 69(1), 135
- ATIIYAS, I., M. DUTZ, AND C. FRISOHFAK.(1992), "Fundamental issues and policy approaches in industrial restructuring", *Industry and Energy Department Working Paper*, World Bank, April.
- ANDERS, S.M AND CASWELL, J.A. (2008), "Standards as Barriers versus Standards as Catalyst: Assessing the Impact of HACCP Implementation on U.S. Seafood Import", *American Journal of Agricultural Economics*, 1-12.
- ANH, N.T.V. (2009), "Effects of food safety regulatory standards on seafood exports to US, EU and Japan", *Master Thesis submitted to the Graduate Faculty of Auburn University*.
- ALAN V. DEARDORFF AND ROBERT M. STERN. (1985), "Measurement of non-tariff barriers. Economics department", *Working papers No. 179 OCDE/GD (97)129 Beaulieu, C, 2005*.
- AITKEN AND A. HARRISON. (1992). "Does proximity to foreign firms induce technology spillovers?" 34-45
- BUCKLEY, P. J., WANG, C. & CLEGG. (2007), "The impact of foreign ownership, local ownership and industry characteristics on spillover benefits from foreign direct investment in China", *International business review*, 16, 142-158
- CATÃO, L.A.V. (2007), "Why Real Exchange Rates?", 44.
- CALVO, G. A., LEIDERMAN, L. & REINHART, C. M. (1996), "Inflows of Capital to Developing Countries in the 1990s", *The Journal of Economic Perspectives*, 123-139
- CHI, H.P. (2003), "The Impacts of Trade Policy on Manufactured Exports in Vietnam in the period 1986-2002", *MA thesis, Institute of Social Studies*.
- CHAKRABARTI, A. (2001), "The determinants of foreign direct investments: Sensitivity analyses of cross - country regressions", 54, 89-114.
- CLARKE, R. AND C. KIRKPATRICK. (1991), "Trade Policy reform and Economic Performance in Developing Countries: Assessing the empirical evidence in Asian country", 32-34.
- C. KIRKPATRICK, R. ADHIKRI AND J. WEISS (EDS), "Industry, Trade and Policy Reforms in Developing Countries", 56-73.
- DANI RODRIK. (1992), "The limits of Trade Policy Reform in Developing Countries", *The Journal of Economic Perspectives*, 87-105.
- D. SPINANGER. (1984), "Objectives and Impact of Economic Activity Zones: Some Evidence from Asia", 65-87
- DOLLAR D AND KRAAY A. (2001), Trade, Growth, and Poverty, World Bank, Washington, DC. Available on-line at <http://www.worldbank.org/research/growth/pdf/Trade5.pdf>
- EDWARD, S.G. (1974), "The Exchange Rate and U. S. Agriculture", *American Journal of Agricultural Economics*, 56(1), 1-13
- EDWARD, D.M AND MARC, L.B. (1995), "The political economy of nontariff barriers: a crossnational analysis", *International Organization*, Autumn 1995, 723-749
- GREENAWAY, D. AND C. MILNER. (1993), "Trade and Industrial Policy in Developing Countries: A Manual of Policy Analysis", 212-217
- GREENAWAY & DAVID SAPSFORD. (1994), "What does liberalisation do for exports and growth?" 12-14

- RICHARDS, DG. (2001), "Exports as a Determinant of Long-run Growth in Paraguay", *The Journal of Development Studies*, 38 [1], 1966-1996
- RODRIG, D. (2000), "Trade Policy Reform as Institution Reform", Harvard University
- RAZEEN SALLY. (2008), "The political economy of trade policy reform: Lessons from developing countries", *The Journal of International Trade and Diplomacy*, 55-96.
- ROZELLE, S. AND J.F.M. SWINNEN. (2004), "Success and Failure of Reform: Insights from the Transition of Agriculture", *Journal of Economic Literature XLII*, 404- 456.
- NGUYEN THI THANH HUYEN. (2006), "Trade Policy Reform and Its Impact on Export: The case of fisheries sector in Vietnam during period 1986 – 2006", *Institute of Social Studies*, 2000.
- NGUYEN TIEN TRUNG. (2002), "Vietnam's international trade regime and comparative advantage", *CAS Discussion paper No 37*, January 2002.
- NASH. 1992, MICHAELY, AND ET AL. (1991), "Liberalising Foreign Trade: Lessons of Experience in the Developing World", *Oxford: Basil Blackwell*.
- MICHAELY, M. (1977), "Export and Growth: An Empirical Investigation" *Journal of Development Economics*, 6(1).
- MAURIZIO BUSSOLO AND ALESSANDRO NICITA. (2005). "Trade policy reforms", 321-356
- PHILLIP ABBOTT, JEANET BENTZEN AND FINN TARP. (2009), "Trade and Development: Lessons from Vietnam's Past Trade Agreements, *World Development*", 37[2], 341–353.
- TON THAT THIEN. (1984), "Vietnam's New Economic Policy: Notes and Comments, *Pacific Affairs*, 56[4], 691-712.
- NGOC Q. PHAM, BUI TRINH, THANH DUC NGUYEN .(2007), "Economic performance of Vietnam, 1976-2000" *New evidence from input-output model, DEPOCEN Working Paper No.13*.
- PHILIPPE AUFFRET (2003). "Trade reform in Vietnam: Opportunities with emerging challenges", *Policy research working paper 3076, June 2003*.
- THOMAS, V., J. NASH AND ASSOCIATES.(1991), "Best Practices in Trade Policy Reform", *Oxford: Oxford University Press*
- S.M. SHAFAEEDDIN. (2005), "Trade Liberalization and economic reform in developing countries: structural change or de-industrialization?"
- SHAFAEEDDIN, S.M. (1994), "The impact of trade Liberalization export and GDP in Least Developed Countries", *UNCTAD Discussion Papers No.85, UNCTAD, Geneva*.
- SVEDBERG, P. (2000), "Trade and Development in Sub-Saharan African".
- SANTOS-PAULINO. (1993). "The Impact of Trade Liberalisation on Exports, Imports and the Balance of Payments of Developing Countries", *Economic Journal, Vol. 114*, 50-72.
- VINOD THOMAS, JOHN NASH (2003), "Reform of trade policy, recent Evidence from Theory and practice", 219 – 241.
- MORISSET, J. (2000), "Foreign direct investment in Africa: policies also matter", *World Bank Publications*
- NAIM, MOISES. (1999), "Fads and Fashion in Economic Reforms: Washington Consensus or Washington Confusion?" *Working Draft of a Paper Prepared for the IMF Conference on Second Generation Reforms, Washington, DC. (October 26)*.
- Online at <http://www.imf.org/external/pubs/ft/seminar/1999/reforms/Naim.HTM>
- THOMAS, V. AND J.NASH. (1991), "Best Practices in Trade Policy Reform", *Oxford: Oxford University Press*.
- XIE, J ET AL. (2007), "The Effects of Exchange Rates on Export Prices of Farmed Salmon", *Marine Resource Economics, Volume 23*, 439– 457.
- WORLD BANK. (2002), "Globalization, Growth, and Poverty: Building an inclusive world economy", *Oxford University Press: Washington, DC*.
- WB. (2006), "Chapter 2: Lessons from the literature review" [electronic version], *Assessing World Bank Support for trade, 1987–2004*
- WEIGUO LU (1995), "Reform of China's foreign trade policy", *Parliamentary Research service, research paper No 19*.