

Wright State University

CORE Scholar

Economics Student Publications

Economics

2008

Has Vietnam Dumped its Shrimp in the United States?

Huyen Khanh Nguyen

Wright State University - Main Campus

Follow this and additional works at: https://corescholar.libraries.wright.edu/econ_student



Part of the [Business Commons](#), and the [Economics Commons](#)

Repository Citation

Nguyen, H. K. (2008). Has Vietnam Dumped its Shrimp in the United States?. .
https://corescholar.libraries.wright.edu/econ_student/35

This Master's Culminating Experience is brought to you for free and open access by the Economics at CORE Scholar. It has been accepted for inclusion in Economics Student Publications by an authorized administrator of CORE Scholar. For more information, please contact library-corescholar@wright.edu.

**HAS VIETNAM DUMPED ITS SHRIMP
IN THE UNITED STATES?**

A capstone project submitted in partial fulfillment
of the requirements for the degree of
Master of Science

By

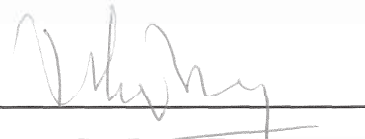
HUYEN KHANH NGUYEN
B.A., National Economics University, 2005

2008
Wright State University

WRIGHT STATE UNIVERSITY
SCHOOL OF GRADUATE STUDIES

December 22, 2008

I HEREBY RECOMMEND THAT THE CAPSTONE PROJECT PREPARED UNDER MY SUPERVISION BY Huyen Khanh Nguyen ENTITLED Has Vietnam Dumped Its Shrimp in the United States? BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF Master of Science.



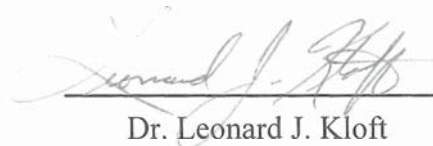
Dr. Dung Tran

Thesis Director



Dr. Paulette Olson

Faculty Reader



Dr. Leonard J. Kloft

Director, Social and Applied

Economics Program

ABSTRACT

Nguyen, Huyen Khanh. M.S., Master of Social and Applied Economics program,
Economics Department, Wright State University, 2008.
Has Vietnam Dumped Its Shrimp in the United States?

This paper examines the shrimp anti-dumping case between the United States and six target countries in 2004. It focuses on the final announcement by the U.S. Department of Commerce that Vietnam, one of the six targets, dumped shrimp in the U.S. and suffered anti-dumping tariffs. The paper provides specific evidence about the shrimp market in the U.S. and Vietnam as well as broad analysis about the methods applied in the U.S. anti-dumping investigation. The final conclusion is that irrationalities still exist in the treatment by the U.S. with its different trade partners, without which Vietnam should not have been blamed for dumping shrimp in the U.S.

TABLE OF CONTENTS

1. INTRODUCTION	1
2. WORLD SHRIMP MARKET	4
2.1. <i>World shrimp supply</i>	4
2.2. <i>World shrimp demand</i>	7
3. THE U.S. SHRIMP MARKET	11
3.1. <i>The U.S. shrimp supply</i>	11
3.2. <i>The U.S. shrimp demand</i>	14
4. VIETNAM SHRIMP INDUSTRY	16
4.1. <i>Shrimp farming in Vietnam</i>	16
4.2. <i>Shrimp export in Vietnam's growth strategy</i>	17
5. ANTIDUMPING THEORY AND PRACTICE	21
5.1. <i>Definition of dumping</i>	21
5.2. <i>Antidumping law in international trade relations</i>	23
5.3. <i>Anti-dumping activities in international trade</i>	28
5.4. <i>Differential treatment under antidumping law (market and non-market economy)</i>	30
5.5. <i>Penalties in antidumping cases</i>	32
5.6. <i>Zeroing – a practice in defining the dumping margin</i>	33
6. THE ANTIDUMPING CASE INVOLVING THE U.S AND VIETNAM	36
6.1. <i>Summary of the case</i>	36
6.2. <i>Analysis of the case</i>	37
6.3. <i>The effects and implications for the U.S. and Vietnam</i>	45
7. CONCLUSION	51

LIST OF FIGURES

Figure 1: World shrimp catch and aquaculture, 1979-2006	6
Figure 2: Annual consumption of shrimp across three major world markets.....	8
Figure 3: Yearly shrimp exports by major exporting countries, 1979-2001.....	9
Figure 4: U.S. imports by country, 1998-2005	19
Figure 5: Number of antidumping investigations initiated.....	29

LIST OF TABLES

Table 1: World shrimp production statistics, 1979-2006.....	5
Table 2: Annual consumption of shrimp	7
Table 3: Domestic and import market shares of the U.S. shrimp market.....	11
Table 4: World shrimp imports by country in 2003	12
Table 5: U.S shrimp imports by countries, 1998-2005 (1,000 metric tons)	13
Table 6: Annual per capita U.S. consumption of shrimp, 1980, 1990, and 2000-2004.....	14
Table 7: Vietnam's major merchandise exports, 1997 and 2002.....	17
Table 8: World shrimp exports by country in 2003	18

1. INTRODUCTION

The term “globalization” refers to the process of economic globalization as an integration of national economies through trade liberalization, free flow of capital, migration and diffusion of technology.¹ It often appears to be ideal for the overall growth of global economy. Developing countries enjoy this process the most by absorbing foreign investment, new innovation in technology, and especially accessing large markets in developed countries. Given the liberalization of international trade, poor countries can seek large markets to push their exports of goods in which they have a comparative advantage. These new markets generate foreign exchange for the poor countries’ economic growth and development.

Nevertheless, that ideal is just theoretical. Despite strong trade liberalization, trade barriers have not disappeared. Duties and quotas are now replaced by antidumping actions which prevent exporting countries from selling their products in other markets at prices lower than these products’ normal value or domestic prices. The number of anti-dumping cases, together with trade disputes, increased over recent years. The U.S. is known as a trade leader but it currently uses anti-dumping actions the most of any country. These antidumping activities weaken its moral authority and unintentionally encourage other trading partners to participate in the trade war. (O' Grady, 2005, p. 50)

The shrimp anti-dumping case is worth considering due to its complicated features and disputes. This case started in mid-June 2003 when several shrimping

¹ See Wikipedia, the free encyclopedia with the key word “globalization”.

companies in the southern U.S. filed a petition against shrimp exporters of six countries: Brazil, China, Ecuador, India, Thailand and Vietnam. The petitioner argued that these countries had dumped shrimp in the U.S. and that the U.S. economy was harmed by the flood of shrimp imported from these countries. Profitability and potential tariff revenue led to this law-suit. First, the dominance and the low price of the imported shrimp from these six target countries had negative effects on the sales and profits of domestic shrimpers. Second, the domestic shrimp firms would benefit from the anti-dumping tax revenue that they would receive under the Byrd Amendment. This rule allows shrimpers who won the law suit to receive the antidumping tax revenue. These reasons have partly shown the irrationalities in the U.S.'s anti-dumping law and its unfair treatment in trading with other partners. Moreover, the methods used to determine dumping margins also have caused disputes. One of these methods is zeroing which sets the negative net between the price of product in importing countries and that price in exporting countries to zero. This is considered illegal because it can overestimate the dumping margin. For non-market economies, the Department of Commerce (DoC) must choose a substitute country to verify production cost, which is not a good measure and easily distorts or overestimates the dumping margin. Although the final announcement by the U.S. DoC determines that these six target countries dumped shrimp in the US and that their exporting shrimp must suffer anti-dumping tariffs, some issues for further discussion remain.

This paper analyzes whether Vietnam, one of the six target countries in this case, in fact dumped shrimp in the U.S. Vietnam and the U.S. are important trade partners in many industries besides the shrimp trade. This case has great impacts on both Vietnamese shrimp producers and the Vietnamese economy as a whole since the shrimp industry is a

key sector for Vietnam's economic growth strategy and its goals of hunger elimination and poverty reduction. Moreover, the claim that Vietnam dumped shrimp in the U.S. raises two questions. Favorable natural conditions help some countries such as Vietnam gain comparative advantage in shrimp farming to produce excess of shrimp at low price; however, these advantages may raise suspicions about dumping among importing countries and accordingly the imposition of high anti-dumping penalties. Hence, one question is whether Vietnam can avoid such anti-dumping cases while it still maximizes its economic growth. Another question is whether the large revenue from anti-dumping tariffs could benefit the U.S. economy as a whole rather than just the domestic shrimper. We can have a clear view about these questions from this paper.

The paper is divided into five parts: 1) the world shrimp market; 2) the U.S. shrimp importer; 3) the Vietnam shrimp exporter; 4) the antidumping theory and 5) the analysis of the shrimp case. Data are included to provide a clear outlook about the feature of the shrimp market, its development trend, and the trade relation between the U.S. and other target countries, especially Vietnam.

2. WORLD SHRIMP MARKET

Shrimp is a food with low fat and high nutritional content. It has become increasingly familiar to people in everyday meals and on restaurants' menus. In many parts of the world, shrimp ranks as the most preferred and consumed seafood, especially in the world's three largest markets, the U. S, Japan, and the European Union. (Lem, 2006, p. 3) Shrimp also is considered the most economically important seafood given its large share of the international fish trade market. (Lem, 2006, p. 3) Statistics in 2003 show that the export value of shrimp as well as other shrimp products exceeds more than \$10 billion and accounts for approximately 20% of the world's total fish exports. The trend of shrimp trade depicts a strong increase in consumption.

2.1. World shrimp supply

First, let's examine world shrimp production during the past decades. The shrimp supply comes from two sources: fishing and farming. Until the 1980s, wild fisheries were almost the only source of shrimp production. Although, the world catch does increase through newly discovered fishing areas, it is hard to determine if the shrimp population will continue to increase (Johnston et al., 2000, p. 3). In fact, the level of the shrimp catch even has slightly decreased in the recent past.

Shrimp farming, which is also called aquaculture, is a key source to replace fishing. It was first practiced in Asia centuries ago with simple techniques and low outputs. With innovations in farming technology, aquaculture increased yields, raised quality standards, and expanded to increasingly large production scales. Aquaculture has

demonstrated many of its advantages in comparison to shrimp catching. As wild, tropical shrimp resources are nearly fully-utilized, technological improvement has transformed shrimp farming into a highly productive industry while reducing both the risk of crop

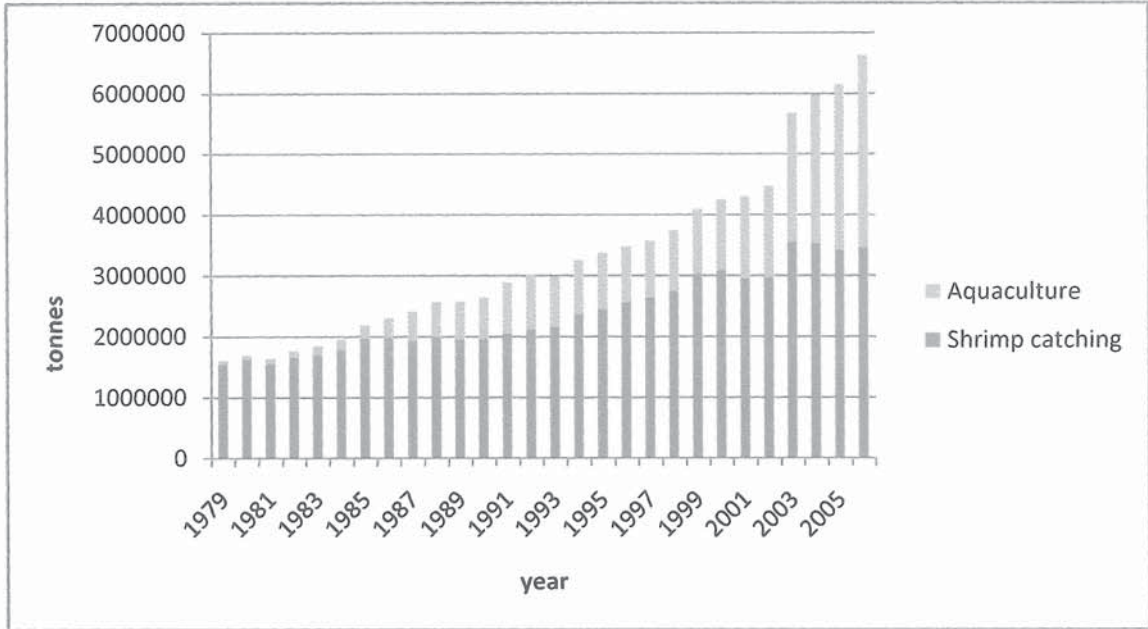
Table 1: World shrimp production statistics, 1979-2006²

Year	Catch (tons)	% Catch	Aquaculture (tons)	% Aquaculture	Production (tons)
1979	1,547,248	96%	63,398	4%	1,610,646
1980	1,625,878	96%	71,897	4%	1,697,775
1981	1,554,207	95%	88,599	5%	1,642,806
1982	1,655,041	94%	112,007	6%	1,767,048
1983	1,703,633	92%	142,177	8%	1,845,810
1984	1,783,961	91%	172,175	9%	1,956,136
1985	1,974,083	90%	213,635	10%	2,187,718
1986	1,981,946	86%	319,667	14%	2,301,613
1987	1,920,052	80%	494,120	20%	2,414,172
1988	1,988,328	78%	576,901	22%	2,565,229
1989	1,952,540	76%	621,219	24%	2,573,759
1990	1,956,730	74%	679,976	26%	2,636,706
1991	2,046,465	71%	838,229	29%	2,884,694
1992	2,115,113	70%	897,042	30%	3,012,155
1993	2,152,994	72%	835,207	28%	2,988,201
1994	2,369,106	73%	881,965	27%	3,251,071
1995	2,443,969	72%	928,238	28%	3,372,207
1996	2,558,153	74%	917,315	26%	3,475,468
1997	2,632,748	74%	932,832	26%	3,565,580
1998	2,737,929	73%	999,370	27%	3,737,299
1999	3,022,161	74%	1,068,299	26%	4,090,460
2000	3,086,893	73%	1,161,796	27%	4,248,689
2001	2,954,780	69%	1,346,702	31%	4,301,482
2002	2,966,019	66%	1,496,204	34%	4,462,223
2003	3,543,050	62%	2,129,026	38%	5,672,076
2004	3,527,095	59%	2,446,192	41%	5,973,287
2005	3,420,307	56%	2,716,101	44%	6,136,408
2006	3,460,003	52%	3,164,384	48%	6,624,387

² Data is collected from the software Fishstat Plus by FAO Fisheries Department, Fishery Information, Data and Statistics Unit.

failure and production cost. (Haby, 2003) Additionally, under policies that promote free trade, aquaculture is more utilized.

Figure 1: World shrimp catch and aquaculture, 1979-2006



From both Table 1 and Figure 1, world shrimp production increased exponentially from 1.5 million metric tons in 1979 to 6.5 million metric tons in 2006. The growth rate is moderate, except for 2003, when total production rapidly increased by nearly 1.5 million metric tons. From 2003 to 2005, the shrimp catch seemed to decrease while shrimp aquaculture production climbed rapidly. As mentioned above, aquaculture developed widely since the 1980s and has made an increasingly significant contribution to the world shrimp output. Aquaculture only accounted for 5% of world production 1979 until 1982, but after 20 years, it accounts for almost half of the production.

In addition to the innovations in shrimp farming techniques, the significant increase in consumer demand has led to the strong development of aquaculture. Although shrimp is considered a luxury food, shrimp is indispensable in menus. Its appeal in

restaurants has maintained consumer demand for shrimp products in many countries. Moreover, excess shrimp production and the accompanying price decrease further stimulate consumer demand.

Examination of time series data of shrimp consumption in the world's three largest markets: the United States, European Union and Japan reveal general trends in the world shrimp's consumption. The consumption data³ is available from 1988 to 1999⁴ and has been converted to the consumption of shell-on, headless shrimp (See Table 2 and Figure 2).

2.2. *World shrimp demand*

Table 2: Annual consumption of shrimp among major markets, 1988-1999 (tons)⁵

Year	U.S.	EU	Japan	Total
1988	357,659	233,126	280,610	871,395
1989	335,133	251,524	304,002	890,659
1990	326,327	277,625	310,085	914,036
1991	352,974	300,568	312,526	966,067
1992	386,097	325,314	310,968	1,022,379
1993	370,709	315,101	323,907	1,009,717
1994	394,849	330,307	329,290	1,054,446
1995	384,140	315,361	315,630	1,015,131
1996	392,227	337,170	312,888	1,042,285
1997	422,251	327,587	290,852	1,040,691
1998	454,080	384,912	259,226	1,098,218
1999	500,021	370,370	270,538	1,140,929

³ Consumption = (Domestic production + Imports + Net storage between the previous year and this year) – Exports.

⁴ No data after 1999 is reachable.

⁵ Data is from Table 6, Haby et al. 2002, p. 13 of 26. Data is converted from pound to ton for the consistency of unit.

Figure 2: Annual consumption of shrimp across three major world markets

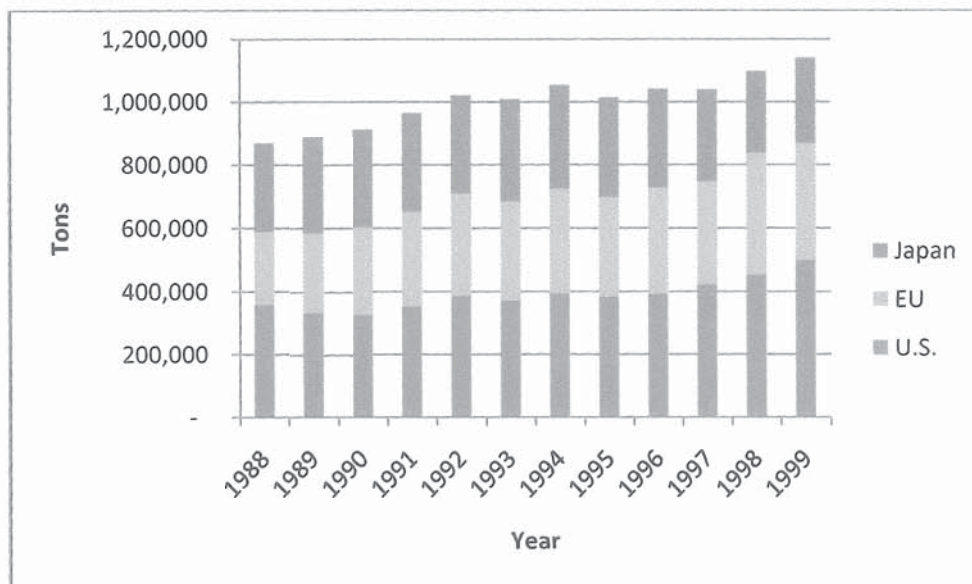


Table 2 and Figure 2 show that during the period 1988 to 1999, even with slight fluctuations of shrimp consumption in each individual market, the total consumption in these three markets still increased. As compared with the large increase in world production, it can be concluded that the consumption in the rest of the world's shrimp market also is increasing.⁶ This increase in shrimp consumption outside the key markets is a good sign for the shrimp industry's future growth. (Haby et al., 2002, p. 13)

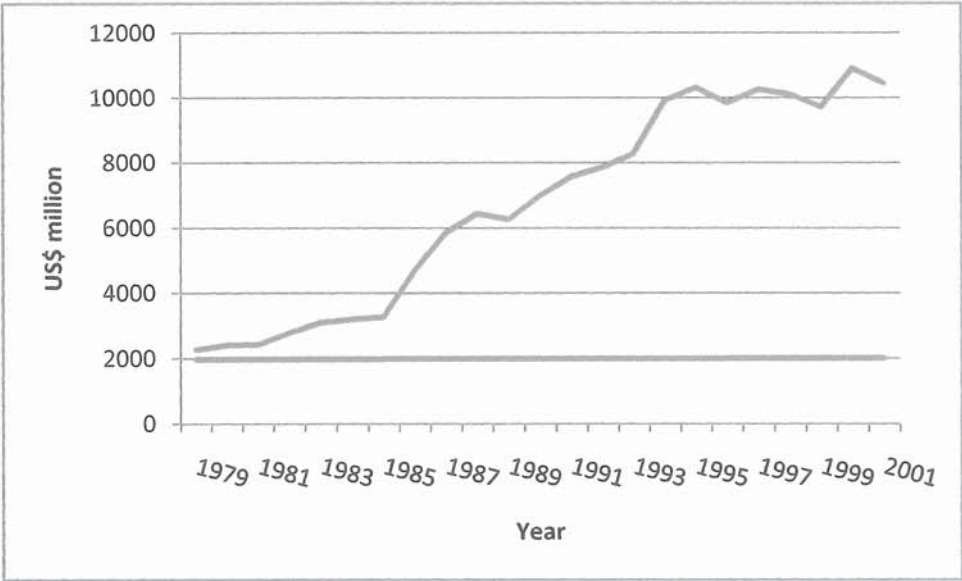
The shrimp industry has two main characteristics. First, shrimp fishing is more costly than shrimp farming. It is true, that in this instance 'it is easier to grow food than to hunt it'. Second, shrimp consumption and shrimp production differs between developed and developing countries. Developing countries, with excess shrimp output, have a very small shrimp demand market; whereas shrimp demand in developed countries is very large compared to its production capacity. As an example, the demand of the large U.S. market cannot be met by the domestic shrimping but must be supplemented by foreign

⁶ See the world production data in Table 1 and make comparison.

supplies. These large shortfalls in local production leads to increased shrimp trade across the world.

Next, we can look at the world market of shrimp trade which partly shows the nature of world shrimp demand.⁷ Figure 3 depicts shrimp export values, in US\$ million, by major exporting countries from 1979 to 2001. As can be seen, world demand for shrimp is quite high and increased very quickly over the past 20 years.

Figure 3: Yearly shrimp exports by major exporting countries, 1979-2001



Additionally, the major sources of shrimp supply are from Asian and Latin American exporters. The five largest exporters at the end of 2001 were Thailand, Indonesia, India, Vietnam and Mexico. These developing countries used their favorable conditions to develop their shrimp farming industry; therefore most of the world shrimp exports are sourced from aquaculture. Aquaculture is a positive factor for the expansion of the shrimp trade.

⁷ Trade exists because of consumers' demand.

In conclusion, it can be said shrimp production, consumption, and also trade experienced continuous growth. It is the development of shrimp farming in developing countries, especially in Asia and Latin America, which reinforce this growth. Also, the increasing gap between the shrimp consumption demand and production capacity in rich countries is another reason for the growth. In the next part, we discuss the shrimp trade relationship between the U.S., importer, and Vietnam, exporter.

3. THE U.S. SHRIMP MARKET

3.1. *The U.S. shrimp supply*

The shrimp supply for the U.S market comes from two main sources: domestic shrimp fishing and frozen shrimp imports. The domestic shrimp fishing in the U.S. has not shown strong growth but merely has remained the same (Haby et al., 2002). As the shrimp consumption market grows, shrimp imports fill the gap left by inadequate domestic supplies. In Table 5, during the early 1980s, domestic shrimp fishing equaled imports; however, since 1997, imports captured more than 80% of the U.S. market. According to the 2001 data in Table 3, domestic supply met only 15% of the total U.S. demand. Therefore, if shrimp fishing does not increase, then the U.S. shrimp market must depend increasingly on shrimp imports.

Table 3: Domestic and import market shares of the U.S. shrimp market⁸

Year	Thousands of pounds			Market share	
	Landings	Imports	Total	Domestic	Imports
1979	205,587	267,119	472,706	43%	57%
1980	207,869	255,957	463,826	45%	55%
1981	218,900	256,920	475,820	46%	54%
1982	175,613	319,596	495,209	35%	65%
1983	155,591	421,179	576,770	27%	73%
1984	188,132	422,340	610,472	31%	69%
1985	207,239	452,232	659,471	31%	69%
1986	244,409	492,005	736,414	33%	67%
1987	223,514	583,030	806,544	28%	72%
1988	203,350	598,210	801,560	25%	75%
1989	215,825	563,523	779,348	28%	72%
1990	213,899	579,427	793,326	27%	73%

⁸ Data is from Table 8, Haby et al. 2002, p. 15 of 26.

Year	Thousands of pounds			Market share	
	Landings	Imports	Total	Domestic	Imports
1991	198,115	632,775	830,890	24%	76%
1992	207,086	694,252	901,338	23%	77%
1993	180,687	708,683	889,370	20%	80%
1994	174,969	749,993	924,962	19%	81%
1995	190,208	719,463	909,671	21%	79%
1996	195,902	720,852	916,754	21%	79%
1997	179,084	810,696	989,780	18%	82%
1998	173,304	893,578	1,066,882	16%	84%
1999	189,112	959,915	1,149,027	16%	84%
2000	218,542	1,024,476	1,243,018	18%	82%
2001	201,428	1,178,232	1,379,660	15%	85%

The shortage of domestic shrimp supply made the U.S the world's largest shrimp importer, which historically was Japan. The economic stagnation in Japan during the late 1990s caused shrimp, as well as other product imports, to decrease. (Lem, 2006, p. 8)

Table 4: World shrimp imports by country in 2003⁹

Importers	Thousands of metric tons	Value (millions dollars)	% Quantity	% Value
United States	505	3,896	27	34
Japan	229	1,947	12	17
Spain	141	959	7	8
France	92	601	5	5
United Kingdom	91	576	5	5
Italy	56	433	3	4
Belgium	50	368	3	3
Denmark	114	352	6	3
Canada	38	279	2	2
Netherlands	61	258	3	2
Thailand	33	155	2	1
Hong Kong, P.R. China	29	125	2	1
Malaysia	33	75	2	1
Iceland	43	55	2	1
Others	370	1,545	2	13
Total	1885	11,624	100	100

⁹ Data is from Table 1.5, Chapter 1, Lem 2006, p. 8.

In 2003, shrimp imports to the U.S. accounted for 27% and 34% of the world's total imports by quantity and by value, respectively. Following the U.S., the next largest markets are Japan and the EU. Obviously, these largest markets represent more than 80% of the total world shrimp imports by value. Hence, any change in these large markets greatly impacts the world market. If one of the large markets restricts shrimp imports, then shrimp prices will rise in the domestic market but fall in the remaining markets.

Table 5: U.S shrimp imports by countries, 1998-2005 (1,000 metric tons)¹⁰

	1998	1999	2000	2001	2002	2003	2004	2005
Thailand	92	115	126	136	115	133	132	161
China	7	9	18	28	50	81	66	45
Vietnam	5	8	16	33	45	57	37	42
India	20	22	28	33	44	45	41	35
Ecuador	65	50	19	27	30	34	38	49
Mexico	35	35	29	30	24	26	29	28
Brazil	1	2	6	10	18	22	9	3
Indonesia	15	16	17	16	17	22	47	52
Guyana	6	6	9	12	10	11	8	8
Others	69	70	77	76	77	73	111	103
Total	315	332	345	400	429	505	518	529

In recent years, U.S. shrimp imports increased steadily. The volume of shrimp imports first exceeded 500,000 metric tons in 2003. This volume grew to 518,000 metric tons in 2004 and 529,000 metric tons in 2005. Most likely, U.S. shrimp imports will continue to rise.

From table 5, Thailand is the biggest shrimp exporter to the U.S. Shrimp imported from Thailand to the U.S market consistently accounted for approximately 30% of the total imports by quantity. The amount of shrimp exported from countries such as Thailand, China and Vietnam, etc. increased gradually from 1998 to 2005, except in

¹⁰ Data is from Table 1.6, Lem 2006, p. 9.

2004. The slight decline of shrimp exports in 2004 was due to the shrimp antidumping case by the U.S. shrimpers.

3.2. *The U.S. shrimp demand*

Both the food industry and the cosmetic industry spurred U.S. shrimp demand. According to Citac (2004), shrimp became more popular to household consumers thanks to the supply from imports as well as strong distributors such as Costco Wholesale and Wal-Mart. Increased imports helped these retailers meet the growing shrimp demand of American families at all levels of income. Shrimp plays an important role in the cosmetic industry because the sub-products of shrimp are production factors for this industry.

Table 6: Annual per capita U.S. consumption of shrimp, 1980, 1990, and 2000-2004¹¹

(Edible weight of shrimp in pounds per person)

1980	1.4
1990	2.2
2000	3.2
2001	3.4
2002	3.7
2003	2.0
2004	4.2

According to the National Oceanic and Atmospheric Administration statistics, U.S. shrimp consumption per capita increased steadily during the last two decades. It was 1.4 pound per capita in 1980, but doubled two decades later. In 2004, the annual per capita shrimp consumption set a record 4.2 pounds per capita. Reports by the Bureau of Labor Statistics (BLS) confirmed that American households spent more money on shrimp over time and that the sales of shrimp in grocery stores and food outlets rose rapidly. Although the 2004 antidumping case restricted shrimp imports, shrimp demand still increased.

¹¹ Data is collected from the report by National Marine Fisheries Service 2007, p. 75.

The U.S. shrimp market is a highly appealing potential market for any exporters due to its large scale, its large growing demand, and limited domestic supply. Since shrimp is no longer a luxury food, purchased only by high income consumers, shrimp consumption continued to rise. Given the limited domestic source of fishing, the U.S. market must depend more on shrimp imports. Yet, the flood of shrimp imports into the market decreased shrimp prices and reduced or eliminated profit for domestic shrimpers, which are the primary reasons for conflicts on the shrimp market share and profit between U.S. shrimpers and foreign shrimp exporters.

4. VIETNAM'S SHRIMP INDUSTRY

Vietnam, a densely populated country of more than 84 million people, is a developing country in Asia. In the late 1980s, the process of economic renovation, *Doi Moi*, began in Vietnam and its goals were to reach a high economic growth rate, to eliminate hunger and to reduce poverty. Vietnam has integrated into the world trade arena by removing many restrictions on exports and trade barriers. These economic reforms in the past 30 years led to high levels of progress in the Vietnam economy, which helped Vietnam record some of the highest economic growth rates in the region and be considered a newly-emergent economy. According to data from the World Bank, Vietnam's Gross Domestic Product (GDP) increased from \$31.2 billion in 2000 to \$61.0 billion in 2006 and the economic growth rate ranges 7% to 8% per year. Due to its economic growth and development policies, Vietnam is the most successful country in the region to reduce poverty. Therefore, Vietnam now is a very attractive place for foreign investment and also economics research. The shrimp case is one typical example of the research.

4.1. *Shrimp farming in Vietnam*

In past decades, Vietnam enjoyed the success in the aquaculture industry due to the country's favorable environment conditions. Vietnam's natural inland water surface, long coastal line, and low labor costs are extremely important in aquaculture's strategic development planning. The coastline is 3,260 km long, while the inland area and territorial water is 226,000 km² and that of the exclusive economic zone is about 1

million km². These environment factors create advantages for Vietnam to develop its inshore and offshore catch fisheries and also aquaculture. In addition, with a large population in rural areas, the development of the seafood industry can take advantage of the inexpensive, abundant rural labor, and at the same time these rural people find jobs and earn income.

Shrimp farming started in Vietnam about 100 years ago, but its considerable growth was in the 1990s. The government's development policies and the applications of new technologies in shrimp farming pushed the growth in the Vietnamese shrimp industry. As farmers reaped profits from their investment in aquaculture, shrimp pond construction expanded rapidly across the country.

4.2. Shrimp export in Vietnam's growth strategy

Vietnam's high economic growth rate was linked to the export-driven growth strategy, in which seafood export is a priority. Additionally, this industry plays an important role in providing a source of protein, which helps Vietnam eliminate hunger,

Table 7: Vietnam's major merchandise exports, 1997 and 2002¹²

	1997		2002	
	US\$ million	Percentages	US\$ million	Percentages
Petroleum	1,413	15.5	3,270	19.6
Textiles and garments	1,349	14.8	2,752	16.5
Marine products	781	8.5	2,023	12.1
Footwear	965	10.6	1,867	11.2
Rice	870	9.5	726	4.3
Coffee	491	5.4	322	1.9
Rubber	191	2.1	268	1.6
Total exports	9,145	100	16,706	100

¹² Data is from Table 2, Thoburn 2004, p. 12 of 19.

especially in rural areas. The government seems to have made the right decision in its promotion of the seafood industry in general, as well as aquaculture in particular.

According to the statistics reported in Table 7, seafood ranked third among the country's leading staples for export, after crude oil and garments-textiles. Surprisingly, seafood exceeds even footwear and rice, which are considered key export commodities. The export industry created 3.4 million jobs for local people and brought 2.3 billion USD to the domestic economy. Of all seafood, shrimp has a decisive role in Vietnam's export strategy. Shrimp production increased widely and rapidly during the last two decades. In 2003, 500,000 metric tons of seafood products were exported, totaling 2.3 billion USD. Half of this value came from shrimp exports.

Table 8: World shrimp exports by country in 2003¹³

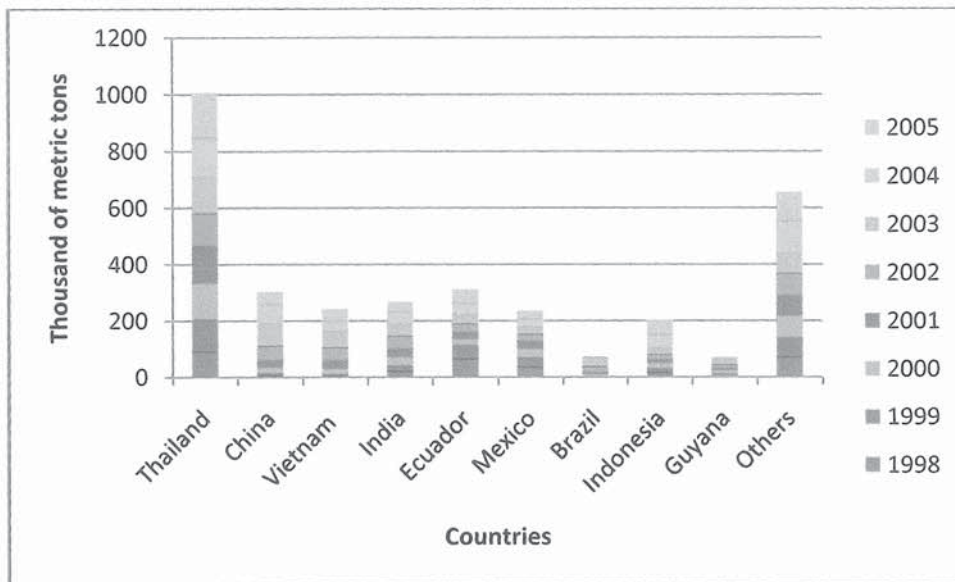
Exporters	Thousand of metric tons	Value (million dollars)	% Quantity	%Value
Thailand	234	1,732	13	16
Vietnam	125	1,058	7	10
India	175	897	10	8
China	189	882	10	8
Indonesia	123	789	7	7
Denmark	109	432	6	4
Argentina	47	383	3	3
Canada	78	345	4	3
Netherlands	39	341	2	3
Ecuador	53	276	3	3
Greenland	98	229	5	2
Malaysia	29	123	2	1
Others	543	3,462	29	32
Total	1,842	10,949	100	100

From Table 8, Vietnam is the world's second largest shrimp exporter with a 7% share of the total quantity and 10% share of the total value. In fact, Vietnam is not superior in shrimp supply or shrimp farming when compared to other countries like

¹³ Data is from Table 1.4, Lem 2006, p. 6.

China, India and Indonesia; however, as mentioned in Globefish (2004), Vietnam's success in shrimp export arises from its focus on major markets and its high processing grade. Shrimp products from Vietnam satisfy strict standards and high quality requirements, which helps Vietnamese shrimp access about 75 different markets, of which Japan and the U.S. are the most important ones.

Figure 4: U.S. shrimp imports by country, 1998-2005¹⁴



The growth of Vietnam's shrimp exports to the U.S. are seen clearly in Table 5 and Figure 4. In 1998, Vietnam started to have considerable access to the U.S. market with a total export quantity of 7 thousand metric tons and is ranked as the seventh largest exporter. Nevertheless, Vietnam penetrated the U.S. most rapidly and successfully. Four years after first accessing the U.S., Vietnam's shrimp exports ranked third in this market, and remained at this level until 2005, despite a slight export decrease in 2004.

The successful strategy of shrimp-based exports has many effects not only on Vietnam's economy but also on the world shrimp market. The rapid growth of shrimp

¹⁴ Figure is created from Table 5, p. 13.

production makes a great contribution to national economic development and helps improve local shrimpers' livelihoods. It also creates a significant source of shrimp to meet the world's increasing demand; however, the increasing export of shrimp products from Vietnam and other shrimp exporters causes an increase in shrimp supply, which decreases the price. This price decrease benefits consumers at any level of income in the world to access surplus shrimp products at a reasonable price. Nevertheless, domestic shrimpers in developed countries such as the U.S. suffer a loss due to low prices and static domestic supply so the U.S. shrimp market relies increasingly on imports.

5. ANTIDUMPING THEORY AND PRACTICE

5.1. *Definition of dumping*

Dumping is an economic term defined as selling a product in an export market at a price which is lower than its normal value. (Lindsey & Ikenson, 2003, p. 1) Given definitions of normal value, dumping can be understood in different ways. While normal value is identified as the price of the same or a similar product in the producer's market, dumping is international price discrimination. While normal value is characterized by the production cost, dumping can be referred as the sales of a product below the cost to produce it. Subtracting the export price from the normal value and dividing this positive difference (being assumed) by the export price, we have the extent of dumping, known as the "dumping margin".¹⁵ The concept of dumping appears simple, but calculations to determine dumping margin are complicated. Each term in the definition about dumping such as export price and normal value involves complicated determination and calculation. (Jackson, 1989, p. 2)

In a normal sense, it can be expected that dumping would cause a loss to the exporter and a benefit to the importer. With dumping, buyers in the export market may suffer from higher prices compared to prices in the import market and sellers in the export market may experience a loss as a result of the inability of the price to cover the production cost. On the contrary, consumers in import markets enjoy the benefit from other countries' dumping because they can buy products at relatively cheap prices. This

¹⁵ Dumping margin = (Normal value – Export price)/Export price.

actually is not relevant to the basic economic principle of profit maximizing in business activities. Therefore, it is essential to determine the source of dumping and its effects on both domestic and foreign markets.

According to Marceau (1994), dumping is caused by various reasons. An enterprise might want to keep different prices in different markets during a certain time period. When entering a new and competitive market, the producer makes their products more attractive by offering low-prices. Products often are sold at low prices in secondary markets if their prices are controlled in the first market. This is helpful if the producer wants to expand his markets to achieve large scales of economies or to be aware of the market's reaction about new products and if his business is depressed or overproduced.

Another source of dumping occurs when the producer uses his profit in a high-price market to subsidize a low-price market in eliminate other competitors and obtain monopoly power. In the process of being tested and promoted, a new product might be sold below average cost and even below marginal cost. Some enterprises want to maximize their sales instead of profits, especially when the products are overproduced and they have to reduce large inventory level. This may depress prices and lead to the possibility of predation and monopolization. In short, the reasons why producers use price discrimination or sell below production cost seem to be rational. Marceau concluded that from an economic perspective, dumping would benefit the general welfare of the importing country, but this opinion is opposed from the viewpoint of the supporter of antidumping laws.

Dumping can be classified into three categories: sporadic dumping, predatory dumping and persistent dumping. Sporadic dumping occurs when a foreign producer with

an excess of products decides to sell the surplus at whatever price he can obtain. This kind of dumping disrupts import-competing industries and may cause economic damage to the importing country. Predatory dumping occurs when the foreign firm offers the product at a very low price with the purpose of driving its competitors from the market. This is the most harmful dumping to importing countries. In contrast to these apparent harmful forms of dumping, persistent dumping may benefit importing countries. In this type of dumping, giants use their monopolistic power to charge higher prices in their home market. This price discrimination helps these giants maximize profit. Foreign consumers benefit by paying systematically lower price for imported products, while domestic producers are driven from the market.

5.2. Antidumping law in international trade relations

Since the market is full of lower-priced import goods, domestic firms lose their market share and complain loudly about the unfairness. It is obvious that consumers enjoy the benefit of low import prices. The problem is whether the importing countries should welcome the low-priced products and the improved terms of trade. The importing countries should encourage the imports until the loss of the domestic import-competing producers is greater than the consumers' benefit. The importing country is likely to suffer from big losses if the two other kinds of dumping dominate and foreign exporters derive monopoly power in importing market. As a result, the importing country must have clear policies to handle the issue of dumping.

There have been many debates about the treatment of dumping. From an economic perspective, a policy is analyzed and judged on the criteria of improving people's welfare. (Lindsey & Ikenson, 2003, p. x) Since dumping is associated with sales

of low-priced products, consumer welfare is served the most. There is little harm from low prices unless they lead to higher prices in the long run. Therefore, economists tend to have suspicions but not evaluations of the antidumping law. In their opinions, antidumping actions unnecessarily damage the social welfare. (Marceau, 1994, p. 44)

Those economists' arguments are all but inappropriate for a debate about antidumping law. (Lindsey & Ikenson, 2003, p. xi) Supporters of antidumping laws acknowledge unhesitatingly that these laws are not for improving consumer welfare but for creating trade fairness. Their grounds to defend antidumping laws are not from the viewpoint of efficiency, but from that of fairness. Antidumping remedies are expected to reestablish a level playing field for every firm. They argue that the benefit from the increase in consumer welfare is just short term and that domestic imports-competing industries do not have to suffer unfair trade conditions. Experts in international relations argue that antidumping actions are applied just for the exclusive interests of some protected political groups. The examination by Michael Moore of decisions made by the International Trade Center (ITC) from 1980 to 1986 determined that the success of each group in foreign competition depends on its elected representatives. (Marceau, 1994, p. 44) A recent report issued by the World Bank conducted an economic analysis of the effect of applying antidumping laws and concluded that imposing antidumping tariff effectively insulates import-competing industries from competition. There is a significant and important quotation by Marceau that *"The aim of antidumping duty is to transfer income from the rest of the community to domestic producers of the dumped goods...Since consumption must exceed output for an imported good, consumers must lose more than producers gain."* (Marceau, 1994, pp. 44-45) Hence, debates regarding

the existence and the application of antidumping law have not been resolved. Yet, hardly anyone can favor dumped imports which are seen as illegal and unfair or oppose creating a level playing field. “*If it sounds good, it must be good*” (Lindsey & Ikenson, 2003, p. ix) was a short description about antidumping laws and thus they are now legal institutions recognized by the World Trade Organization (WTO).

Antidumping laws allow importing countries to retaliate against dumping if dumping exists and hurts domestic firms. Retaliation may include bans, duties, or tariffs levied on imported products. These protection methods are called Anti-Dumping measures (ADMs). Peacock (2004) said that this issue is both technical and theoretical and therefore should be based on economic principles and legal arguments; however, what happens in reality is politics-intensive and more seriously is abused when one industry fails to compete with other export producers.

The dumping regulations of the WTO or in the bilateral agreements between countries play an important role on how countries handle dumping. A specific section of the 1947 General Agreement on Tariffs and Trade (GATT) called *Article VI – Antidumping and Countervailing Duties* (formally *Antidumping Agreement*) deals with this issue. According to this article, the importing country can levy a countervailing duty on the imported products to offset the export subsidy. Yet, this procedure must satisfy two requirements: first evidence of antidumping exists and second this dumping hurts the importing country’s industry. This procedure’s requirements should be considered as a rule to settle a dumping dispute but not a judgment about the justice or the rationality of antidumping. More importantly, as time passed and antidumping laws were applied widely, GATT countries have experienced higher trade barriers which restrict and distort

international trade flows. (Jackson, 1989, p. 7) As a result, dumping regulations may not benefit international trade.

Lindsey and Ikenson (2003) discussed the big gap between theory and practice. What happens in practice is contrary to the international trade fairness arguments made by supporters of antidumping laws. In fact, antidumping laws do not create a more level playing field as expected, but rather penalize export producers. Even though these foreign exporters take part in legal commercial activities, their products face a high level of antidumping tariffs. Antidumping laws discriminate against foreign firms and create an unlevel playing field for imports, which creates a new form of protectionism.

The application of antidumping laws appears clear and straightforward, but in fact can be quite varied given that dumping has various different definitions, reasons, and forms of expressions. (Peacock, 2004) As mentioned earlier, persistent dumping can be seen as not harmful to the importing country. Therefore, antidumping measures should be imposed when dumping exists as sporadic dumping or predatory dumping. Additionally, dumping can be attributed to each individual firm's business strategies, or government subsidy policies, and even effects of exchange rate regimes. It is the complexity of dumping that causes many of the debates.

Starting from the two definitions of dumping, the difficulty is how to define normal value and production cost. The law of one price says that one product traded easily and freely should have the same price in any market. This is true in theory only and based on the assumption of a common exchange rate regime for countries. Currently, countries use four kinds of exchange rate regimes: floating exchange rate, manageable floating exchange rate, adjustable fixed exchange rate and fixed exchange rate. As the

exchange rate in one country is not flexible, the currency's appreciation or depreciation does not have great impact on product prices in its market. Other factors, such as international transport costs or national trade barriers, can't be ignored. Some economists believe that the theory of purchasing power parity (PPP) can offset the difference in price over the long run. Yet, the problem is how long it takes for adjustment. No importing country wants to wait for this offset to evaluate the case of dumping and to establish the antidumping measures. Therefore, it is difficult to define whether an import product is sold at a lower price than in its home country. The only way for an exporting country not to dump products in foreign markets is to sell its products at the price (subtracted from cost for exporting) exactly the same or higher than the price at home as the price is calculated equivalent in exchange rates.

Another challenge in defining dumping is to demonstrate that the price of an imported product is below its production cost. If the low price of an imported product originated in a country with high competitive advantage, then the low price is understandable and reasonable. The Heckscher-Ohlin theory implies that a country should specialize and export products that use factors relatively abundant in this country. (Pugel, 2007, pp. 60-61) Also, the abundance of any production factor creates favorable conditions or comparative advantage for a country to expand an industry using that factor. This industry enjoys low production costs and competitive prices. This fact is not accepted by countries without competitive capacity; thus they always regard sales of low-priced products as dumping. Second, to determine the exact production cost is complicated because we must rely on a series of assumptions, conventions and value

judgments. (Peacock, 2004) Moreover, it becomes extremely hard to discover the true production cost in exporting countries with non-market economies.

5.3. Anti-dumping activities in international trade

Tariff and other trade barriers were once the main tools to protect domestic industries from exporters' competition. Since trade liberalization dominates globalization; many kinds of tariffs were eliminated. Anti-dumping has merged as another means for importing countries to prevent the flood of imported goods. It is considered a trade barrier as it is misused and widely-applied during these recent decades. This also implies the possibility of anti-dumping activities, which prevent consumers from enjoying low-priced products.

Since the WTO was established in 1995, the number of anti-dumping cases has increased steadily. Of the estimated 358 cases submitted to the WTO by 25th February 2007, 69 of the cases were related to anti-dumping issues. One fifth of all trade investigations involved antidumping. (Chaisse et al., 2007) China is the most frequent object of petitions against their exports. During 1995-2006, 536 anti-dumping investigations targeted China. The U.S. and Canada are the two largest users of antidumping laws, especially in agriculture. Noticeably, for decades, antidumping laws were considered to be exclusive to industrialized countries; however, more less-developed nations have followed the U.S. example to apply antidumping laws which leads to a dramatic rise in antidumping action around the world. (Lindsey & Ikenson, 2003, p. viii) Exports from more developed countries such as the U.S. also face similar blockages that have long been imposed on imports into the U.S. Figure 5 shows a significant fluctuation in the number of anti-dumping cases across countries in the world.

The increase in antidumping investigations might raise the possibility of misusing trade barriers.

**Figure 5: Number of antidumping investigations initiated
from 1980 to 2006 over the world¹⁶**

Anti-dumping is also defined specifically in the U.S. by various laws and procedures. Antidumping, countervailing duties, and safeguard actions are trade remedies for the U.S. (Jabara & Payne, 2005, p. 3) Antidumping actions are applied when the U.S DoC issues clear judgments that imported goods are sold in domestic market at lower prices than their normal values and the International Trade Commission determines that the domestic industry suffers from the imported product. Dumping occurs as foreign producers sell products at prices lower than the normal value, but it is not necessarily dumping if products are sold at lower prices than those of the equivalent American products. (Jabara & Payne, 2005, p. 4)

¹⁶Data is from Table 2, Chaisse et al. 2007, p. 38.