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國際學碩士學位論文

**Analysis of the Trade Effects from
Anti-dumping Disputes in
Japanese Electronics Industry**

반덤핑 관세부여에 따른 일본 전자산업의 무역 영향력 분석

2013 年 8 月

서울대학교 國際大學院

國際學科 國際通商專攻

張 榮 眞

**Analysis of the Trade Effects from
Anti-dumping Disputes in
Japanese Electronics Industry**

A thesis presented

by

Youngjin Chang

A dissertation submitted in partial fulfillment
of the requirements for the degree of Master
of International Studies in the subject
of International Commerce

**Graduate School of International Studies
Seoul National University
Seoul, Korea
August 2013**

반덤핑 관세부여에 따른 일본 전자산업의 무역 영향력 분석

지도교수 안 덕 근

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Analysis of the Trade Effects from Anti-dumping Disputes in Japanese Electronics Industry

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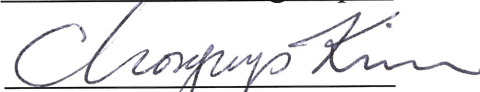
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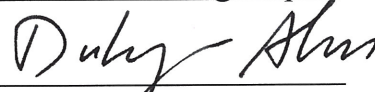
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ABSTRACT

Analysis of the Trade Effects from Anti-dumping Disputes in Japanese Electronics Industry

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Japanese electronics companies have been key figures in world electronics markets. Their innovations and high technological development brought market dominations in commercial applications for the transistor in the 1950s and generations of semiconductor devices of the 1970s and home appliances in 1980s. Until late 20th century, their major export partners were the United States and the European Union accounting close to 50% of total electronics exports. However, from 2000 Japanese companies diversified their trading partners lowering their dependence on the US and the EU. Japanese companies have quickly adapted to the new demand from growing economies in Asia and Middle East.

In an attempt to explain such diversification, this paper empirically investigates whether large importing country's use of anti-dumping generates systematic and sizable changes in both trade patterns and the terms of trade in the market of a third, non-targeted country. It first looks for an impact on Japanese export reduction in Japanese export growth to the imposing country, which is called trade

depression. Having observed Japan's trade depression, possibility of substantial trade being deflected to third country markets is expected after the imposition of anti-dumping duty. Furthermore, a US or EU anti-dumping duty only on Japan not on third-country exporters would be expected to lead to trade diversion. An increase in exports from third-country to the imposing country market as their product becomes more competitive and has a price comparative advantage.

This paper can also provide insightful inputs in understanding the trend of trade remedy on electronics industry as its use rises and anti-dumping laws proliferate worldwide. By studying and analyzing the changing paradigm of trade disputes, countries can better prepare themselves from the dynamics of trade movement.

Keywords: Trade depression, Trade deflection, Trade diversion, Anti-dumping, Japanese electronics

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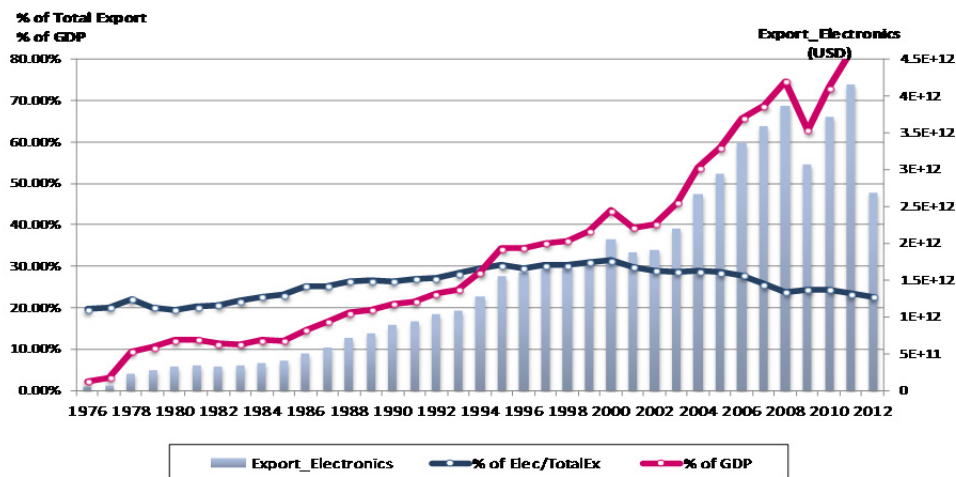
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CHAPTER I. INTRODUCTION: Overview of the Japanese Electronics Industry

Japanese electronics industry has played a significant fuel for the economic growth in the 20th century. Major Japanese electronics companies are namely, Canon, Casio, Fujitsu, Hitachi, JVC Kenwood, Mitsubishi Electric, NEC, Nikon, Nintendo, Olympus, Panasonic, Pioneer, Ricoh, Seiko Group, Sharp, Sony, TDK and Toshiba. These major leading companies have been the world leaders in the production of compact disc players, video cameras, laptop computers, fax machines, photocopiers, cell phones and various key computer components with a reputation for high quality products.

With the strong demand for consumer electronics products, Japanese electronics business rapidly developed and by the 1980s, the industry dominated Japan's international trade and investment transaction.

[Graph 1] Dependency Degree¹ of Japanese Electronics Exports Out of Total Exports and GDP (1976-2012)



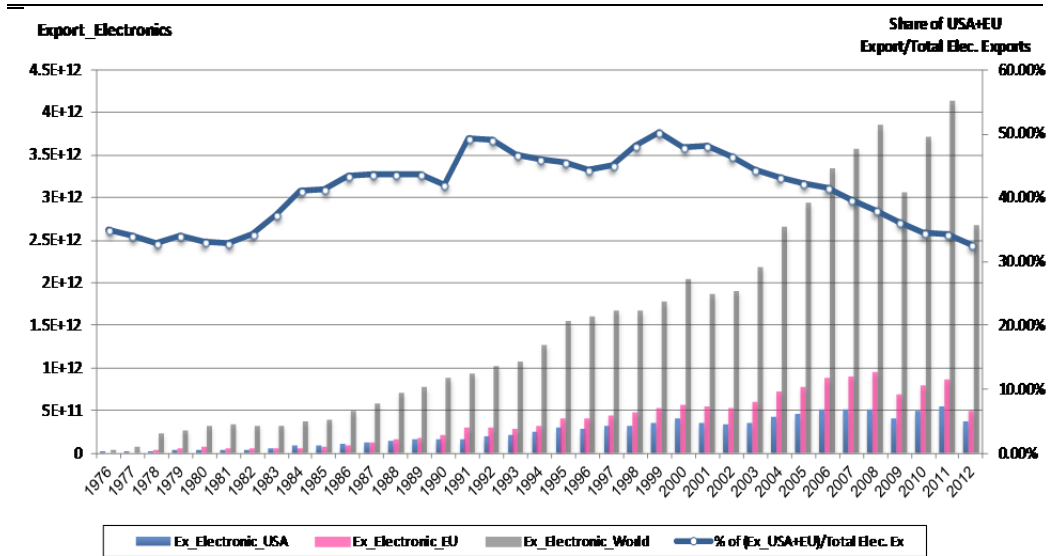
Source: Author's own calculation based on the data from Comtrade and IMF

¹ Dependence degree is calculated as [Export of Electronics Products/Total Exports of Japan]

What made Japanese electronics companies to be successful in the early days and still competitive in the international market were innovations and technological development. Japanese companies have been responsible for a number of important innovations, including having pioneered the transistor radio and the Walkman (Sony), the first mass-produced laptops (Toshiba), the VHS recorder (JVC), and solar cells and LCD screens (Sharp). Such innovations brought market domination in commercial applications for the transistor in the 1950s and generations of semiconductor devices of the 1970s and 1980s.

Until 2000s, Japan's major trading partners were United States and European Union countries accounting close to 50% of total electronics exports. Japan heavily relied on these two major markets for exports of electronic goods backed by their strong purchasing power. However, from 2000, coupled with the shifting paradigm of electronics market and growing global economy, Japanese companies diversified their trading partners lowering their dependence on US and EU. Japanese companies have quickly adapted to the new demand from growing economies in Asia and Middle East for products like personal computer, digital cameras, cell phones, car navigation systems, DVD machines and flat-panel liquid crystal and plasma television.

[Graph 2] Trend of Dependence on Japanese Electronics Exports to US and EU (1976-2012)



Source: Author's own calculation based on the data from Comtrade and IMF

Another reason behind the decrease in the dependence of Japanese electronics exports to US and EU is perceived to be an increase in the use of trade restriction limits (i.e., anti-dumping, countervailing duties) by importing countries.

The aim of this paper is therefore to take a first step and empirically invest whether one country's use of anti-dumping action generates systematic and sizable changes in trade pattern. It is noteworthy to look at the trade epidemic of trade restriction measures on the industry, in this case, Japanese electronics industry. The rest of the paper proceeds as follows. First part of the paper describes the conceptual framework behind trade protectionism and its potential effects to imposed country. Then the second part summarizes the historical cases of major trade restriction measures imposed on Japanese electronic products by the US and the EU. Last part of the paper presents and analyzes the empirically tested potential trade responses from anti-dumping actions by the US and the EU.

CHAPTER II. LITERATURE REVIEWS ON TRADE RESTRICTIONS

1. Proliferation of Trade Protectionism

One of notable phenomena in the area of international trade is a proliferation of countries adopting anti-dumping (AD) policies. Many economists including Prusa (2001) has highlighted the increasing numbers of AD cases mainly used by Australia, Canada, the European Community, and the United States. Particularly, there has been a dramatic increase in the total number of AD investigations filed worldwide over the last two decades as described on [Table 1].

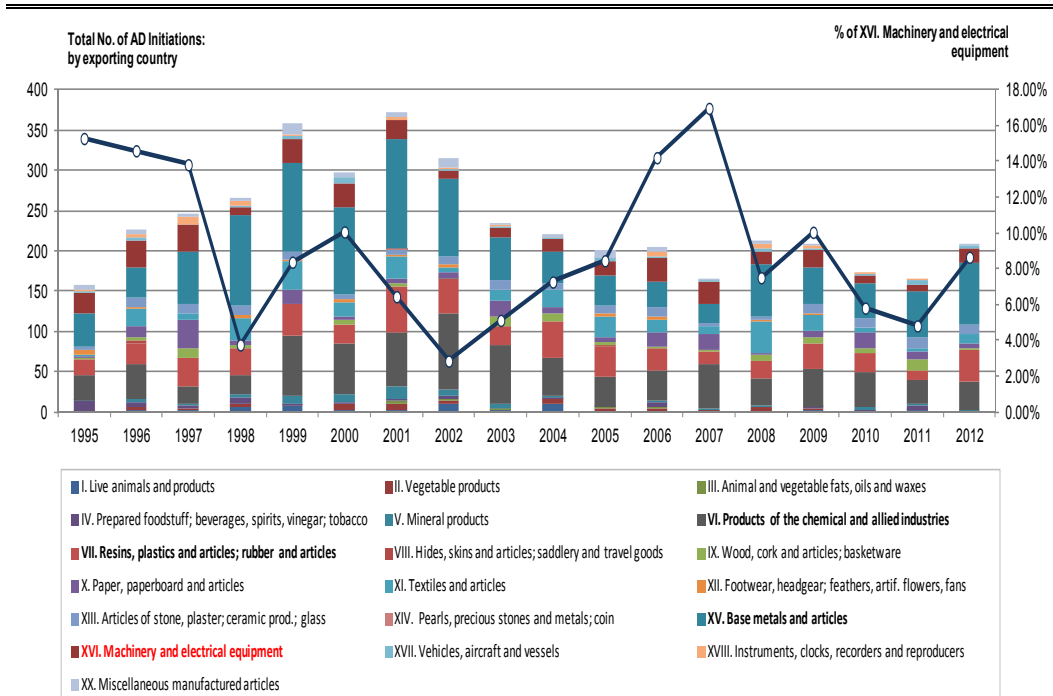
The below table portrays the top six economies that were most affected by AD investigations in a time-series since 1980. We can see that the United States was the top target economy during the early 1980s, which was then replaced by Japan who remained the most targeted economy during the rest of 1980s. It is also interesting to note that out of top six countries, four countries are major electronics exporters in Asia (China, Japan, Korea, and Taiwan). Some economists like Prusa and Skeath (2002) and Fu (1997) argue that a proliferation of AD use is likely that firms believe AD can be used strategically to block foreign competition.

[Table 1] Proliferation of AD: Top Five Anti-dumping Targets by Reporting Country, 1980-2012

Affected Country	China (PRC)	USA	South Korea	Japan	Chinese Taipei	TOTAL AD	% of Top 5
1980	1	20		5		69	37.68%
1981	1	11	5	9	4	93	32.26%
1982	8	20	17	19	5	217	31.80%
1983	8	16	12	21	10	173	38.73%
1984	6	13	9	19	7	151	35.76%
1985	8	14	12	20	12	202	32.67%
1986	6	14	11	18	11	160	37.50%
1987	1	18	8	19	6	119	43.70%
1988	5	10	12	18	8	122	43.44%
1989	4	8	6	10	6	96	35.42%
1990	12	18	11	13	11	165	39.39%
1991	16	16	12	18	10	228	31.58%
1992	31	26	25	14	15	320	34.69%
1993	45	31	17	11	11	297	38.72%
1994	44	14	8	7	5	234	33.33%
1995	20	12	14	5	4	157	35.03%
1996	43	21	11	6	9	226	39.82%
1997	33	15	15	14	16	246	37.80%
1998	28	16	27	14	11	266	36.09%
1999	42	14	35	22	22	358	37.71%
2000	44	13	23	12	15	298	35.91%
2001	55	15	23	14	19	372	33.87%
2002	51	12	23	13	16	315	36.51%
2003	53	21	17	16	13	234	51.28%
2004	49	14	24	9	21	220	53.18%
2005	56	12	12	7	13	201	49.75%
2006	72	11	11	11	12	204	57.35%
2007	62	7	13	4	6	165	55.76%
2008	76	8	9	3	10	213	49.77%
2009	77	14	7	5	11	209	54.55%
2010	44	19	9	5	5	172	47.67%
2011	51	11	11	5	9	166	52.41%
2012	60	9	22	6	22	208	57.21%
TOTAL	1,112	493	471	392	355	6,876	41.06%

Source: 1980-1994 data from Chu, T., Prusa, T. (2004) and 1995-2012 data source from WTO Statistics

[Graph 3] Anti-dumping Sectoral Distribution and % of Machinery and Electrical Equipment by exporting country, 1995-2012



Source: Data source from WTO Statistics and author's own calculation

When looking at the WTO data of antidumping sectoral distribution of all countries from 1995-2012, XVI. Machinery and electrical equipment forms about 10% of all AD initiations by exporting country. The most initiated AD cases are from XV. Base metals and articles followed by VI. Products of the chemical and allied industries to VII. Resins, plastics and articles; rubber and articles. Looking at Japan alone, as [Table 2] presents XVI. Machinery and mechanical appliances; electrical equipment; parts thereof makes up 13% of total AD initiations in Japan during 1995-2012. As the data proves, electronics industry is a big part of AD conflicts and that the number of initiations is quite significant.

*[Table 2] Japan, Korea and China: Anti-dumping Sectoral Distribution of Initiations:
By Exporting Country, 1995 -2012*

	–	=	≡	≥	>	≥	≥	≥	≥	×	×	×	×	×	×	×	×	×	×	×	Total
Japan					4	51	23			15	1		1		50	22	2	2			171
Korea				2	2	52	68			18	37				83	38	2	3		1	306
China	2	11		4	14	179	66	5	18	24	78	19	61		232	114	23	17		49	916

Source: Data source from WTO Statistics and author's own calculation

Apart from the fact that the traditional view of using AD is a response to protect domestic industry from unfair trade, J.H. Jackson (1997) in his book “World Trading System”, suggested that different perspective of AD use needs to be considered. According to him, the AD complaint is not a response to unfairness, but rather a disguised form of a protective instrument to cause trade restriction. This competing explanation for the use of AD and other safeguard measurements proposed the possibility that countries might use AD strategically.

Prusa (2001) supported this view arguing that not only does AD allow politicians to offer politically preferred industries protection without blatantly violating GATT/WTO principles, but it can also broaden the scope and availability of AD protection. For example, the United States has amended its AD rules at least a half dozen times over the last 25 years as a way to serve political instrument. Even when the foreign firms charge higher prices to export markets than the home market, these imports can still be deemed unfair trade because foreign firm is making good profits on each and every export sales.

It reaffirms the argument that upsurge in AD filings do not necessarily indicate that there is an upsurge in unfair trading practices, but there might be other incentives that drive each nation's decision to file, or begin to file, AD complaints.

Other scholars like J. H. Jackson et al (2005) also explained a reason for an increase in AD use. According to J.H. Jackson, countries found difficult to manage trade environment and fierce competition from imports as the trade system is more and more liberalized after the WTO establishment. Therefore, a country has few choices but to resort to trade remedies to safeguard their industries. However, a major reason for a country has a preference for using AD compared to countervailing duties or safeguard measure is that it is an easier tool for domestic protection.

2. Potential Effects of an AD Action

Other literature discusses three potential effects of an AD action on trade patterns: trade depression, trade diversion, and trade deflection. The definition of trade depression can be explained as the direct impact of raising the tariff on imports into the subject country. The underlying notion is that the level of antidumping margin increases the price of product thus the trade flow should decrease as a result. Economists like Staiger and Wolak (1994) and Prusa (1997, 2001) however, argue that trade depression is not the only way AD affects the market, AD protection can lead to substantial trade diversion as the side-effects. Due to AD effect, export from third country will be increased to an importing country as compared to the AD exporter. Non-subject countries will partially fill the void in the importing country market when AD imposed country export sales to importing country fall. According to the study done by Prusa (2001) using sample of the US anti-dumping actions from 1980 to 1994, he found that an AD duty lowers subject trade by about 50% whereas import from non-subject suppliers to increase by 40-60%.

The last epidemic of AD impact is trade deflection as discussed by Bown and Crowley (2003). Trade deflection is the shift of exports by AD subject country to other markets to make up for the lost market in the original importing country. So exporting countries will seek new alternative markets if their existing markets are deterred. Bown and Crowley (2003) stated that the imposition of the US AD duty on Japan resulted in Japanese exporters to increase their shipment to non-US market by 11-22%. They also argued that trade deflection can explain why a simple trade dispute may turn into a worldwide trade event.

Although it is difficult to find concrete evidence of these effects as there are other factors may affect the trade flows, it would help researchers to better understand the dynamics of trade movement. In this paper, these three potential effects of AD actions are tested on exports of Japanese electronics products to observe the electronics industry and quantify the impact.

3. Data and Country Groups

Bilateral imports and exports and total imports and exports were downloaded from UN Commodity trade database (COMTRADE) using the Standard International Trade Classification (SITC) Revision 3. The countries used in the dataset are selected based on the amount of electronics exports from Japan and is listed on [Table 3]. List of products are composed of SITC Revision 3 from 71-77 excluding transport equipments.

7. Machinery and transport equipment

- 71- Power-generating machinery and equipment
- 72- Machinery specialized for particular industries
- 73- Metalworking machinery

- 74- General industrial machinery and equipment, n.e.s., and machine parts, n.e.s.
- 75- Office machines and automatic data-processing machines
- 76- Telecommunications and sound-recording and reproducing apparatus and equipment
- 77- Electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof (including non-electrical counterparts, n.e.s., of electrical household-type equipment)

Source: UN Comtrade

[Table 3] Countries Included in the Data Set

Asia (13)	Middle East (5)	Europe (16)		Americas (8)
China	Bahamas	Austria	Netherlands	Brazil
Hong Kong	Egypt	Belgium	Norway	Chile
India	Iran	Denmark	Portugal	Colombia
Indonesia	Saudi Arabia	France	Spain	Mexico
Korea	United Arab	Finland	Sweden	Panama
Malaysia	Emirates (UAE)	Germany	Turkey	Venezuela
Pakistan		Greece	United	
Philippines		Ireland Italy	Kingdom	
Singapore				Canada
Thailand				United States
Vietnam				
Australia				
New Zealand				

Chapter III. TRADE RESTRICTION CASES OF JAPANESE ELECTRONICS INDUSTRY

In an effort to present the historical cases of major trade restriction measures imposed on Japanese electronic products, [Table 5] and [Table 7] list all the cases from 1970 to present by EU and United States. Unlike under WTO regime set up in 1995, where all the cases are filed on system, there was no systematic account of worldwide trade restriction activity. More importantly, the United States is the only country for which comprehensive activity data are available prior to 1980. However, since 1980 the GATT/WTO has required member nations to make semi-annual reports of their trade restriction activity, better data are available henceforth.

Still, there are shortcomings with the data collection. Firstly, the reports contain only basic information on dispute outcomes and only a broad description of the product involved (Prusa, 2005). Secondly, at times the official submission to GATT/WTO conflict with internal country records. Lastly, in case of European Union, for example AD cases are filed on behalf of all EU members not by an individual country. As such AD duties are imposed on the subject product regardless of what port it enters the EU. In contrast, AD cases can be filed against the entire EU or against one individual nation (Prusa, 2005).

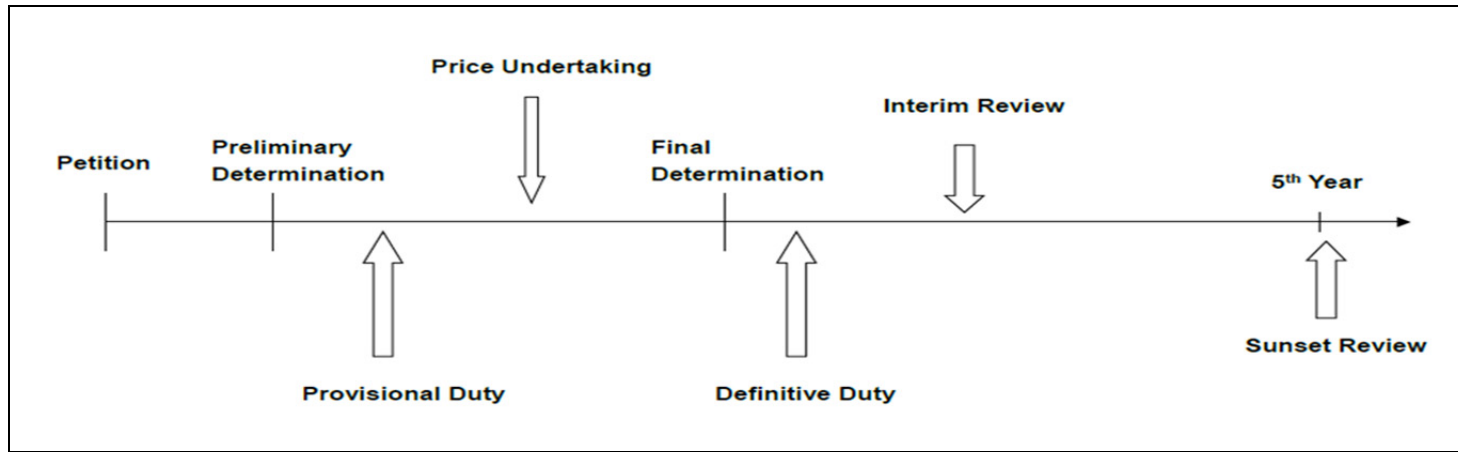
In spite of a few restrictions, a comprehensive summary of cases are presented for EU and the United States against Japanese electronic products.

1. Summary of European Union Cases

In the EU, antidumping system duties are levied on a prospective basis (Vermulst 1990). If the Commission finds dumping and injury in its investigation, duties are set which apply to all future exports until the antidumping order expires.

Although in theory exporters can apply for a review and claim refunds if they can show they are not dumping, in practice both the refund and review systems have not functioned effectively. Hence, the EU system is best characterized as a duty payment system: antidumping duties punish exporters for past dumping and are in effect very similar to customs tariffs (Bellis 1990: 61). The prospective character of the duties implies much weaker incentives to raise prices in response: given that duties are set as a percentage of price, raising the export price automatically increases duty payments (Van Bael 1990)

[Table 4] EU Antidumping - Prospective system



Source: Dukgeun Ahn, Anti-dumping mechanism-(mimeo)

Since 1984, the EU applies a "sunset" provision to its antidumping measures. The duties determined apply throughout a period of five years. After the five-year period, antidumping measures expire unless the EU industry petitions for a "sunset review" in which dumping and injury are again established (Belderbos 1997).

[Table 5] List of cases filed by European Union against Japanese electronic products

Type	Product	Company	Rate(%)	In force date	Validity date
Anti-dumping (3643/84)	Electronic Typewriter	-Brother Industries -Canon -Nakajima All Co. -Sharp -Silver Seiko -TEC Tokyo Electric -Tokyo Juki Industrial -Towa Sankiden Corp	43.7 33.3 0 21.1 26.6 6.9 34.2 20.2	1984/12/23	1985/06/23
Anti-dumping (1698/35)	Electronic Typewriter	-Brother Industries -Canon -Sharp -Silver Seiko -TEC Tokyo Electric -Tokyo Juki Industrial -Towa Sankiden Corp	21 35 32 21 21 17 20	1985/06/23	1993/04/20
Anti-dumping (1022/88)	Electronic Typewriter	-Canon Bretagne (FR) -Kyushu Matsushita(UK) -Sharp(UK) -Silver Reed(UK)	44 40.94 21.82 56.14	1988/04/20	1993/04/20
Anti-dumping (2640/86)	Plain paper Photocopier	- Canon - Copyer - Fuji Xerox - Konishiroku - Kyocera - Matsushita	15.8 Except Copyer(7.2) Mita(13.7) Toshiba(15.3)	1986/08/27	1987/02/27

		<ul style="list-style-type: none"> - Minolta - Mita - Ricoh - Sanyo - Sharp - Toshiba 			
Anti-dumping (535/87)	Plain paper Photocopier	<ul style="list-style-type: none"> - Canon - Copyer - Fuji Xerox - Konishiroku - Kyocera - Matsushita - Minolta - Mita - Ricoh - Sanyo - Sharp - Toshiba 	20 Except Copyer(7.2) Mita(12.6) Toshiba(10)	1987/02/25	1995/10/12
Anti-dumping (501/89)	Video Cassette Recorders(VCRs)	<ul style="list-style-type: none"> - Funai - Orion 	11.5 13	1989/03/01	1994/03/01
Anti-dumping (112/90)	CD Player	<ul style="list-style-type: none"> - Nippon Columbia Co. Ltd (Denon)(17%) - Funai Electric Trading Co. Ltd(8.9%) - Kenwood Corp.(23.3%) - Matsushita Electric(Panasonic)(26.3%) - Onkyo Corp.(8.3%) - Pioneer Electronic Corp. (26.3%) - Sanyo Electric Co. (26.5%) - Sony Corporation (10,1%) 	32	1990/01/17	1993/08/26

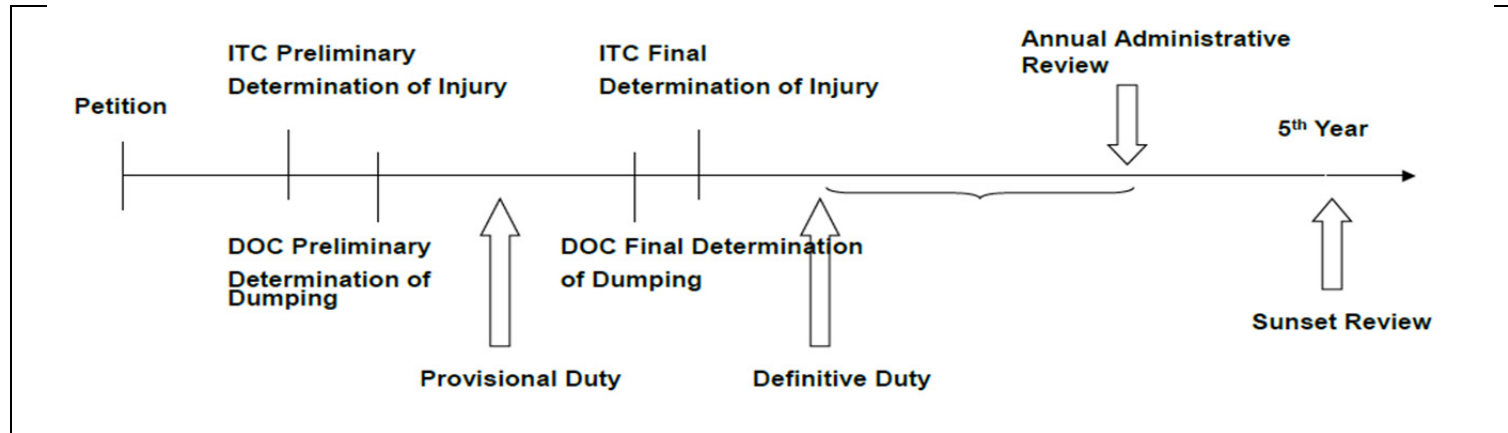
		<ul style="list-style-type: none"> - Teac Corp.(12.7%) - Victor Company of Japan (JVC)(17.9%) - Nippon Gakki Corp. (Yamaha)(27.5%) - Sharp Corp(32%) - Toshiba Corp(31%) - Chou-Denki Co.(17.8%) - Lux Corporation 			
Anti-dumping (165/90)	Dynamic Random Access Memory Components (DRAMs)	<ul style="list-style-type: none"> - Fujitsu Limited, - Hitachi Ltd, - Matsushita Electronics Corporation, - Mitsubishi Electric Corporation, - NEC Corporation, - NMB Semiconductor Co. Ltd, - Oki Electric Industry Co. Ltd, - Sanyo Electric Co. Ltd, - Sharp Corporation, - Texas Instruments (Japan) Ltd, and - Toshiba Corporation 	60	1990/01/26	1995/01/26
Anti-dumping (1015/94)	Television camera	<ul style="list-style-type: none"> - Ikegami Tsushinki Co., Ltd - Sony Corporation: - Hitachi 	82.9 62.6 52.7	1994/05/01	2005/09/30

Source: Case sourced from Westlaw (www.westlaw.com)

2. Summary of the United States Cases

In the US antidumping system, duties are levied retrospectively. After the DOC finds dumping and the ITC finds injury, no duties as such are levied but exporters are required to make cash deposits. These deposits are an estimate of the duties the exporters would have to pay, based on the calculated dumping margin and past export volume. Actual payable duties, however, are only calculated in a review one year later, based on actual shipping volume in that year and a calculation of the actual dumping margin for such shipments. If no dumping is found in the review, the exporter will get a full refund of the cash deposit, including interest. Hence, the US operates a duty avoidance antidumping system, which gives exporters an incentive to raise prices and avoid paying duties (Belderbos 1997).

[Table 6] Retrospective System



Source: Dukgeun Ahn, Anti-dumping mechanism-(mimeo)

[Table 7] List of cases filed by the Unites States against Japanese electronic products

Type	Product	Company	Rate(%)	In force date
Anti-Dumping (36 Fed. Reg. 11308)	Large power transformers	- Fuji Electric Co. - Hitachi Ltd. - Tokyo Shibaura Electric(Toshiba)	0 13.3 15,3	1970/06/16
Anti-Dumping (36 FR 4597-01)	Television Receivers, Monochrome and Color	- Matsushita	-	1971/12/05
Anti-Dumping (45 FR 30618-01)	Electric Typewriter	- Nakajima All. - Silver Seiko	4.36 36.53	1980/05/09

		- Brother Ind.	48.70 37.12(All others)	
Anti-Dumping (48 FR 14719-04)	Electric motors	- Toshiba - Yaskawa - Hitachi	6.30 0.17 6.70	1983/04/05
Anti-Dumping (50 FR 24554-01)	Cellular Mobile Telephones and Subassemblies(CMTs)	- Oki - Hitachi - Toshiba - MELCO - NEC - Matsushita	18.51 20.90 4.77 21.94 95.57 106.60 32.77(All others)	1985/06/11
Anti-Dumping (50 FR 50649-01)	Dynamic Random Access Memory Components (DRAMs)	- NEC - Hitachi Ltd. - Oki Electric - Mitsubishi	8.93 18.49 12.52 94.0 38.83(All others)	1985/12/11
Anti-Dumping (52 FR 24320-01)	Color Picture Tubes (CPTs)	- Mitsubishi - Hitachi - Matsushita - Toshiba	1.69 13.14 27.02 33.22 27.24(All others)	1987/06/30
Anti-Dumping (54 FR 31978-01)	Certain Small Business Telephone Systems and Subassemblies	- Toshiba - Matsushita	136.77 178.93 157.85(All others)	1989/08/02
Anti-Dumping (58 FR 30144-03)	Professional Electric Cutting Tools and Professional Electric Sanding/Grinding Tools	- Makita	46.75 46.75(All others)	1993/05/26

Anti-Dumping (62 FR 55392-02)	Vector Supercomputer	- Fujitsu Ltd. - NEC Corp.	173.08 454.00 313.54(All others)	1997/10/24
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Source: Case sourced from Westlaw (www.westlaw.com)

3. The United States Anti-Dumping Dispute Process

Until the case of “United States - Anti-Dumping Duties on Imports of Colour Television Receivers from Korea”, under US antidumping law, there was no sunset clause and antidumping actions can last almost indefinitely. A antidumping measures for Japanese colour televisions (CTVs) had been in force for more than 25 years while the scope of the antidumping order had over the years been extended to cover projection televisions and liquid crystal display (LCD) televisions (Belderbos 1997). [Table 8] shows the full list of antidumping duties on Television Receivers, Monochrome and Colour on Japanese companies since 1971. In 1984, the US also imposed antidumping duty on Korean electronics companies for the first time on television. Duties, however, have varied considerably over the years under the retrospective duty system with annual reviews.

[Table 8] Case history of AD duty on Television Receivers, Monochrome and Color

Type	Product	Company	Rate(%)	In force date
Anti-Dumping (36 FR 4597-01)	Television Receivers, Monochrome and Color	Matsushita	-	1971/12/05
46 FR 12220-02		Fujitsu General Corp Hitachi Corp Mitsubishi Matsushita Otake Trading Co. Sharp Corp	7.92 0.05 0.40 0 6.05 0.41	1981/02/13
48 FR 37506-01		Denki Onkyo Fujitsu General Corp Gulraj Hitachi Corp Kaga Denshi Kogen MELCO NEC Nissei Sangyo Original Otake Sankei Sharp Corp VCJ	0.53 0 0.53 0.16 0.53 0.53 0.53 0.42 0.16 0.53 0.03 0.53 0 0.17	1983/08/18
49 FR 18336-02	Color Television Receivers	Samsung Gold Star Taihan Electric Wire All others(except	14.77 15.95 16.57 13.90	1984/04/30

		Anam&KEC)		
50 FR 24278-01		Denki Onkyo Gulraj Hitachi Corp Kaga Denshi Kogen Mitsubishi NEC Nissei Sangyo Original Sankei Victor	0.86 0.86 0.16 0.86 0.86 0.54 0.86 0.16 0.86 0.86 0.28	1985/06/10
52 FR 27234-02		Fujitsu General Mitsubishi Sanyo Hitachi NEC	6.05 7.87 2.86 0.16 13.67	1987/07/20
53 FR 4050-05		Fujitsu General Mitsubishi Sanyo Hitachi NEC	4.06 1.35 2.86 0.16 16.32	1988/02/11
54 FR 13917-01		Funai Electric Mitsubishi NEC Victor	21.93 26.94 16.32 19.24	1989/04/06
55 FR 42616-01		Fujitsu General Funai Electric Hitachi	49.56 21.93 22.90	1990/10/22

		Matsushita Mitsubishi NEC Sanyo Seiko Epson Sharp Victor	49.56 49.56 49.56 22.90 21.93 4.76 49.56	
56 FR 5392-01		Fujitsu General Funai Electric Hitachi Matsushita Mitsubishi NEC Sanyo Seiko Epson Sharp Toshiba Victor	35.40 21.93 0.16 35.40 35.40 35.40 2.86 21.93 4.76 35.40 35.40	1991/02/11
Revoke Antidumping Duty Orders and Findings and To Terminate Suspended Investigations 62 FR 9735-01				1997/03/04
Sunset Review 63 FR 64677-02				2000/01/01

Source: Case sourced from Westlaw (www.westlaw.com)

CHAPTER IV. EMPIRICAL ANALYSIS

In this chapter, as discussed earlier on Chapter II, potential trade effects as a result of anti-dumping actions are empirically tested. The figure plots Japanese country specific export values for the electronic commodities that the EU and the US has targeted with AD duties. It is empirically significant to examine the relationship between the EU and the US as Japan is frequent and separate target of EU and US anti-dumping duties. An additional reason is that both the EU and the US are important export markets for Japanese electronic industries. As shown on [Graph 2] earlier as well as proved by Feenstra (2000), the US and EU were Japan's two largest export markets from 1976 and onwards comprising on average 30% total Japanese exports.

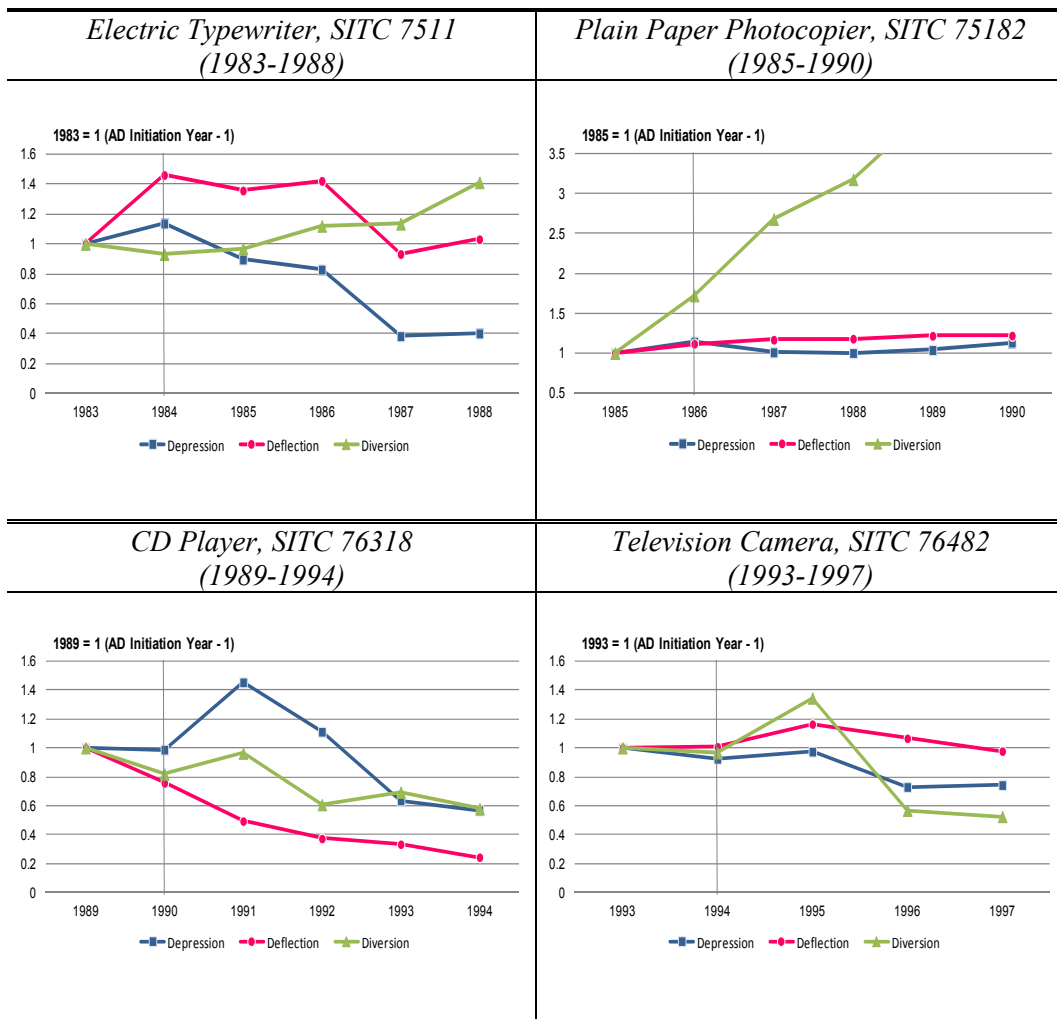
The below figures illustrate empirical results of different trade effects as a response to the US anti-dumping measure; i) Japanese electronic export to the US, ii) Japanese export to non-US markets and iii) export from non-Japanese countries to the US due to the US AD action. The configuration was indexed for the year of the AD investigation with one year preceding plus post-dating the investigation. One preceding year was normalized as the starting point of each index at 1 for better comparison.

1. Trade Effects by the EU AD Measure

When looking at the EU anti-dumping imposition on Japanese electronic products, in overall, there are dramatic shrinkage in AD applied Japanese export to the EU market in the year of the AD investigation and onwards. This is consistent with the results of Prusa (1997, 2001) in which any increase in prices is associated with the withdrawal of Japanese exports from the EU market as a result of trade depression. The [Graph 4] describes the trade depression of all four anti-dumping targeted products with the exception of CD Player, SITC 76813, which responded a year after the investigation. The complication may stem from the timing of the case filings as argued by Staiger and Wolak (1994). For example, as compared to the UN Comtrade data

which is available on an annual basis, the timing of the anti-dumping case may have occurred at quarterly or monthly basis.

[Graph 4] Trade Depression, Deflection and Diversion of Japanese Exports from the EU Anti-dumping Duty



Source: Author's own calculation based on the data from Comtrade

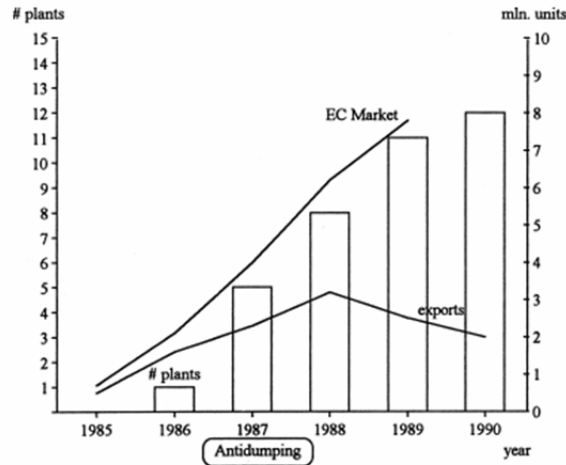
Furthermore, we can also evidence that Japanese exports that are diverted away from the EU market are compensated with a substantial increase in Japanese

exports of the same commodity to third markets (non-EU). Again, this trade deflection is consistent with the argument led by Bown and Crowley (2004). Scholars often mention that trade deflection could explain why what might of otherwise been a simple trade dispute turned into gigantic worldwide trade event.

From the above graph, trade deflection is clearly presented for case of Plain Paper Photocopier(SITC 75182) and Television Camera(SITC 76482) but the correlation is not so obvious in the case of Electric Typewriter(SITC 7511) and CD Player(SITC 76318). In case of Electric Typewriter, as the US already applied anti-dumping duty on the same product, the Japanese firms were left with no big export partners as the EU and the US together accounted about 70% of total exports.² For CD Player, the decrease in trade deflection can be explained by two factors; i) continuous reduction in total export of CD Player from Japan, ii) growth of exports in parts and components of CD Player from Japan to other third countries i.e., Malaysia, Singapore and Taiwan in 1992 and iii) creation of Japanese manufacturing plants in the EU (Belderbos, 1998). As an evidence, the EU Commission initiated anti-dumping investigations of possible circumvention by Japanese firms in CD Players in 1991 (Belderbos, 1997).

² In 1984, Japan's export to the EU and the US / total Japanese exports of Electric Typewriter = 69% according to the author's calculation based on data from UN Comtrade.

[Graph 5] Japanese Manufacturing Plants and Exports to EU: CD Player



Source: Belderbos (1994), Euromonitor (1991), CEC (1991-1992)

Lastly, as Staiger and Wolak (1994) and Prusa (1997, 2001) discussed, a reduced Japanese export to the EU market is balanced by an increase in non-Japanese exports in the year of the EU anti-dumping duty investigation. As shown below, there is slight increase in export from other countries in the EU market as their product becomes more competitive and has a price comparative advantage. However, the degree of increase is varied by the product as other factors can affect the trade volume of a certain product. For example, electronic products imported in the EU from Japan tend to be more differentiated from their European counterparts thus fewer substitutes to replace the imports in overall. Therefore, the considerable export share in CD Player and Television Camera in the EU market leaves a few room for other competitors to increase their share of exports even when anti-dumping measures were imposed.

*[Table 9] Percentage of Export Share in the EU Market of
CD Player and Television Camera from Japan*

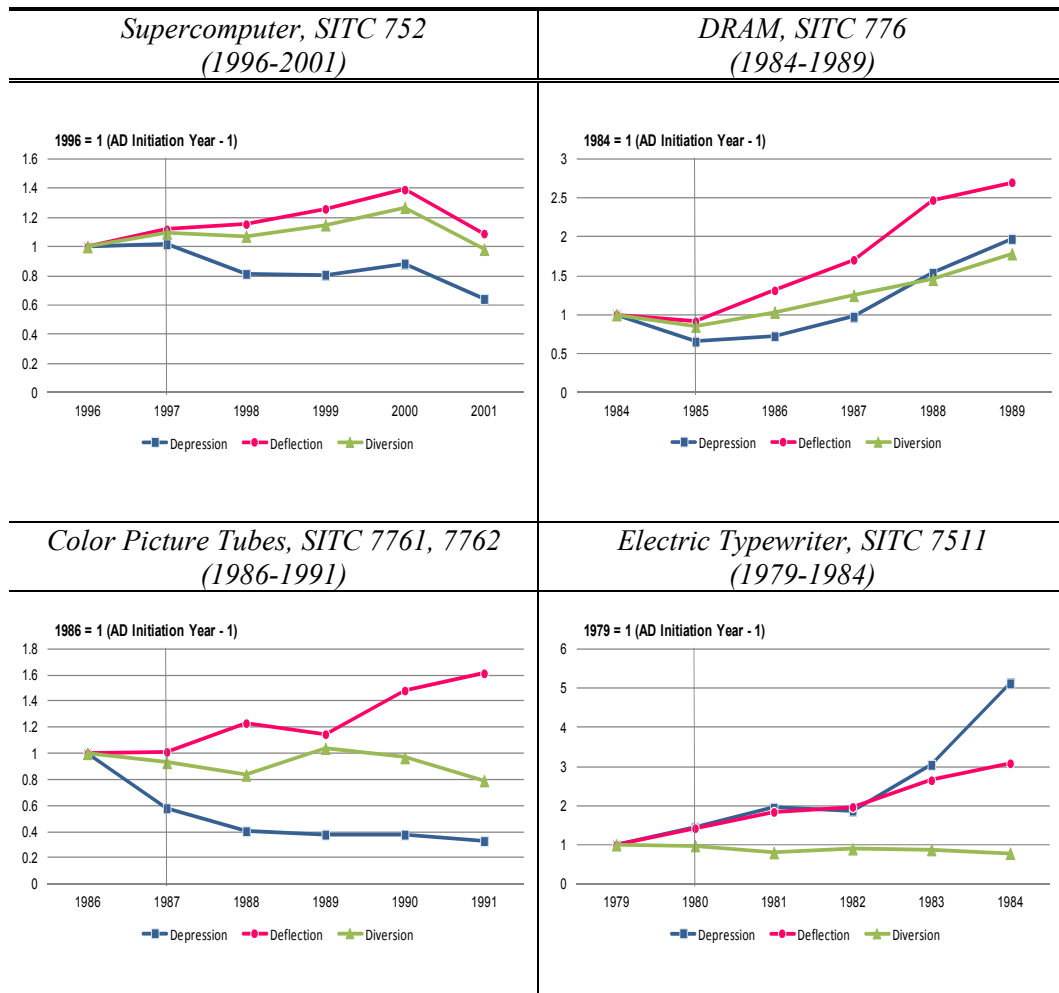
<i>CD Player, SITC 76318</i>		<i>Television Camera, SITC 76482</i>	
Year	EU Market Share	Year	EU Market Share
1989	21 %	1993	74 %
1990	24 %	1994	73 %
1991	29 %	1995	67 %
1992	33 %	1996	78 %
1993	20 %	1997	80 %
1994	21 %		

Source: Author's own calculation based on the data from Comtrade

2. Trade Effects by the US AD Measure

As explained earlier, the US anti-dumping policy is unique when compared with the EU as they put in force for an extended period of time instead of a defined maturity years. When looking at the US anti-dumping imposition on Japanese electronic products, for the case of supercomputer and color picture tubes there are shrinkage in AD applied Japanese export to the US market in the year of the AD investigation and onwards. This is consistent with the results of Prusa (1997, 2001) in which any increase in prices is associated with the withdrawal of Japanese exports from the US market as a result of trade depression. The [Graph 6] describes the trade depression with the exception of DRAM and electronic typewriters cases.

[Graph 6] Trade Depression, Deflection and Diversion of Japanese Exports from the US Anti-dumping Duty

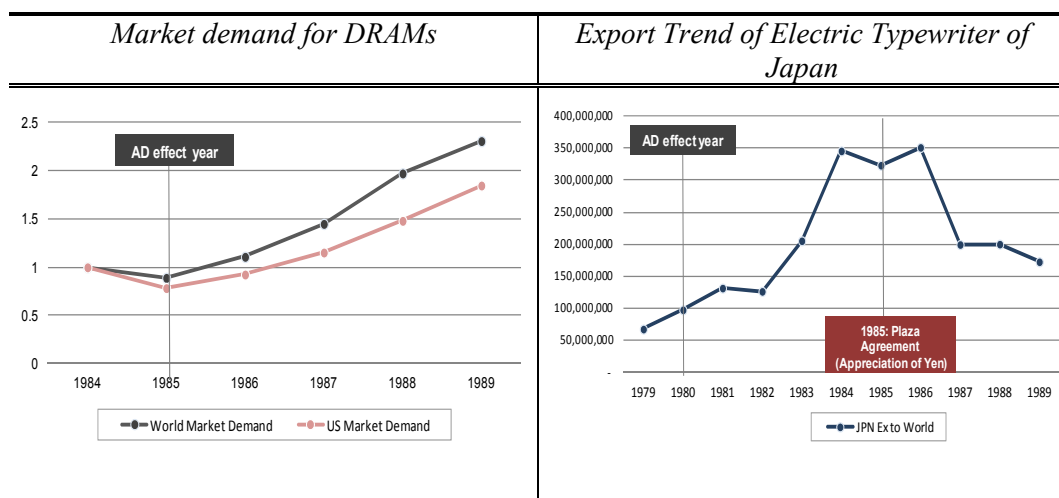


Source: Author's own calculation based on the data from Comtrade

When further investigating the causes behind the exceptions, we can derive that the overall expansion of the demand by the US and world market well explains the case. The increase in world appetite for DRAM and electric typewriter has led Japanese exports to surge despite of the US AD action thus the damage was minimal. The interesting finding is that in case of electric typewriter, the Japanese export has

increased up until “Plaza Agreement” which took place in 1985. Due to Plaza Agreement, the governments of France, West Germany, Japan, the United States, and the United Kingdom signed the accord to appreciate dollar by about 50% in relation to the Japanese Yen and German Deutsche Mark, French Franc and British Pound, the currencies of the next four biggest economies at the time. As shown on the [Graph 7] the Japanese export of electric typewriter has significantly decreased right after 1985. When we discuss the direct impact of AD measure, it is important to take consideration of other macroeconomic factors to make implications.

[Graph 7] Japanese Market Demand Trend for DRAM and Electric Typewriter



Source: Author’s own calculation based on the data from Comtrade

For the Japanese products that were the target of the US anti-dumping cases, there was a dramatic increase in Japanese exports to third country markets in the year of anti-dumping investigation. For all four US anti-dumping imposed products have considerably increased their exports to other non-US nations finding substitute markets. This implies that not only do anti-dumping measures affect trade flows to the filling country; they can also generate externalities (Bown and Crowley, 2006).

Consequently, reduced amount of export from Japan is balanced by an increase in exports from its competitors except for the product of Electric Typewriter(SITC 7511). The trade diversion for Electric Typewriter is somewhat different from expected because of its significant market share in the US market. As shown on [Table 10], the market share for Japanese Electric Typewriter expands from 22% in 1979 to 64% in 1984. Likewise, world market share increases from 12% to 42% in 6 years. As a result, despite of anti-dumping action, the export from Japan to third countries has increased but the evidence of trade depression and diversion is weak.

[Table 10] Percentage of Export Share in the US and World Market of Electric Typewriter from Japan

Electric Typewriter, SITC 7511		
Year	US Market Share	World Market Share
1979	22 %	12 %
1980	29 %	15 %
1981	40 %	21 %
1982	37 %	23 %
1983	49 %	32 %
1984	64 %	42 %

Source: Author's own calculation based on the data from Comtrade

CHAPTER V. Conclusion

This paper empirically explored a country's use of trade restriction policy distorting the subject country's exports to third markets evidenced by the impact of the US and EU imposed anti-dumping duty on Japanese electronics exports. Prior to empirical analysis, a comprehensive list of Japanese electronics anti-dumping targeted cases by the US and EU was developed and investigated potential trade effects which the international externality of anti-dumping action may be transmitted. Considering Japanese electronics industry was one of the main drivers of country's GDP growth and dominant of the world market share. It is significant to observe the impact of trade remedy done by the US and the EU as they were the two largest export markets and also two most historically active users of anti-dumping.

Based on empirical analysis, it can be concluded that the evidence of trade depression, deflection and diversion of Japanese electronics exports are strongly presented when subjected by anti-dumping action although the extent of impact vary substantially across products. Furthermore, despite there is a correlation between anti-dumping duty and trade effects, it is not causality as there are many other factors that could have affected the potential ramifications of anti-dumping use. For example, as we described above, changes in the macroeconomic environment like Japanese YEN appreciation, growth of world market demand for a particular product and expansion of electronics exports from emerging markets like Taiwan, China and South Korea may had important implications as well. Other limitations include limited scope of application as the paper discussed the export response of the US and EU only. The ability of developing countries to deflect trade may be more limited than that of a country like Japan. Therefore effect of other factors or policies will need to be explored in future research.

Despite of the limitations, empirical analysis can provide insightful inputs in understanding the trend of trade remedy on electronics industry as its use rises and anti-dumping laws proliferate worldwide, as has been the recent trend. In addition, it should be noted as presented on [Table 1], the international trend of anti-dumping measures on electronics products has shifted from Japan in 1980s to South Korea in 1990s and recently to China in 2000s. By studying and analyzing the changing paradigm of trade disputes, countries can better prepare themselves from the dynamics of trade movement.

APPENDIX

TABLE OF CITED CASES

<i>Full Case Title and Citation</i>	
•	Notices DEPARTMENT OF THE TREASURY LARGE POWER TRANSFORMERS FROM JAPAN Antidumping Proceeding Notice June 17, 1970 35 FR 9934-03
•	Rules and Regulations BUREAU OF CUSTOMS, DEPARTMENT OF THE TREASURY Television Receiving Sets, Monochrome and Color, From Japan 19 CFR Part 153 March 10, 1971 36 FR 4597-01
•	Rules and Regulations DEPARTMENT OF COMMERCE Portable Electric Typewriters From Japan; Antidumping Duty Order 19 CFR Part 353 May 9, 1980 45 FR 30618-01
•	NOTICES DEPARTMENT OF COMMERCE Large Power Transformers From Japan; Preliminary Results of Administrative Review of Antidumping Finding Tuesday, December 8, 1981 46 FR 60046-01
•	NOTICES DEPARTMENT OF COMMERCE International Trade Administration Certain Electric Motors From Japan; Final Results of Administrative Review of Antidumping Duty Order Tuesday, April 5, 1983 48 FR 14719-04
•	Commission Regulation (EEC) No 3643/84 of 20 December 1984 imposing a provisional anti-dumping duty on imports of electronic typewriters originating in Japan and terminating the anti-dumping proceeding with regard to Nakajima All Co. Ltd OJ 1984 L335/43
•	NOTICES DEPARTMENT OF COMMERCE Cellular Mobile Telephones and Subassemblies from Japan; Preliminary Determination of Sales at Less than Fair Value Tuesday, June 11, 1985 50 FR 24554-01
•	Council Regulation (EEC) No 1698/85 of 19 June 1985 imposing a definitive anti-dumping duty on imports of electronic typewriters originating in Japan OJ 1985 L163/1
•	NOTICES DEPARTMENT OF COMMERCE 64K Dynamic Random Access Memory Components (64K DRAMs) From Japan; Preliminary Determination of Sales at Less Than Fair Value Wednesday, December 11, 1985 50 FR 50649-01
•	Commission Regulation (EEC) No 2640/86 of 21 August 1986 imposing a provisional anti-dumping duty on imports of plain paper photocopiers originating in Japan OJ 1986 L239/5

•	NOTICES DEPARTMENT OF COMMERCE Preliminary Determination of Sales at Less Than Fair Value: Color Picture Tubes from Japan Tuesday, June 30, 1987 52 FR 24320-01
•	Council Regulation (EEC) No 1022/88 of 18 April 1988 extending the anti-dumping duty imposed by Regulation (EEC) No 1698/85 to certain electronic typewriters assembled in the Community OJ 1988 L101/4
•	Council Regulation (EEC) No 501/89 of 27 February 1989 imposing a definitive anti-dumping duty on imports of certain video cassette recorders originating in Japan and the Republic of Korea and definitively collecting the provisional duty OJ 1989 L57/55
•	NOTICES DEPARTMENT OF COMMERCE International Trade Administration Preliminary Determination of Sales at Less Than Fair Value: Certain Small Business Telephone Systems and Subassemblies Thereof From Japan Thursday, August 3, 1989 54 FR 31978-01
•	Council Regulation (EEC) No 112/90 of 16 January 1990 imposing a definitive anti-dumping duty on imports of certain compact disc players originating in Japan and the Republic of Korea and collecting definitively the provisional duty OJ 1990 L13/21
•	Commission Regulation (EEC) No 165/90 of 23 January 1990 imposing a provisional anti-dumping duty on imports of certain types of electronic microcircuits known as drams (dynamic random access memories) originating in Japan, accepting undertakings offered by certain exporters in connection with the anti-dumping proceeding concerning imports of these products and terminating the investigation in their respect OJ 1990 L20/5
•	NOTICES DEPARTMENT OF COMMERCE International Trade Administration Television Receivers, Monochrome and Color, From Japan; Final Results of Antidumping Duty Administrative Reviews Tuesday, September 4, 1990 55 FR 35916-02
•	NOTICES DEPARTMENT OF COMMERCE Final Determinations of Sales at Less Than Fair Value: Professional Electric Cutting Tools and Professional Electric Sanding/Grinding Tools From Japan Wednesday, May 26, 1993 58 FR 30144-03
•	Council Regulation (EC) No 1015/94 of 29 April 1994 imposing a definitive anti-dumping duty on imports of television camera systems originating in Japan OJ 1994 L111/106
•	NOTICES DEPARTMENT OF COMMERCE International Trade Administration Notice of Antidumping Duty Order in the Antidumping Investigation of Vector Supercomputers From Japan Friday, October 24, 1997 62 FR 55392-02

BIBLIOGRAPHY

- An-Chi Tung¹, Henry Wan Jr (2007), Co-evolution of the electronics industry: Policy interactions across the pacific, *Pacific Economic Review* Volume 12, Issue 4, pages 445–465
- Askari, H., Forrer J., Teegen H., Yang J. (2003), U.S. Economic Sanctions: An empirical Study, Occasional Paper Series, CSGOP-03-01, The George Washington Center for the study of Globalization
- Bael, I. van (1990). Lessons for the EU: More Transparency, Less Discretion, and, At Last, a Debate? In J. H. Jackson and E. A. Vermulst (eds.), *Antidumping Law and Practice: A Comparative Study*. New York: Harvester Wheatsheaf.
- Barber, J. (1979), Economic Sanctions as a Policy Instrument, *International Affairs*, vol. 55, n.3, pp. 367-385
- Belderbos, R.A., (1994), On the Advance of Japanese Electronics Manufacturers in the EC: Companies, Trends, and Trade Policy. In: Schutte, H. (Ed.), *The Global Competitiveness of the Asian Firm*. Macmillan, Basingstoke and London, pp. 203–231.
- Belderbos, R. A. (1997). Antidumping and tariff jumping: Japanese firms' DFI in the European Union and the United States. *Weltwirtschaftliches Archiv*, 133(3), 419-457.
- Bellis, J.-F. (1990). The EU Antidumping System, In J. H. Jackson and E. A. Vermulst (eds.), *Antidumping Law and Practice: A Comparative Study*. New York: Harvester Wheatsheaf.
- Bown, C. P. and Blonigen, B. A.(2003), Antidumping and Retaliation Threats, *Journal of International Economics*, 60: 249-273.
- Bown, C. P., Hoekman, Bernard, and Ozden, Caglar(2003), The Pattern of U.S. Antidumping: The Path from Initial Filing to WTO Dispute Settlement, *World Trade Review*, 2: 349-371.
- Bown, C. P. and Crowley, M. A. (2007), Trade deflection and trade depression, *Journal of International Economics*, 72(1), 176-201.
- Bown, C. P. and Crowley, M. A.(2004), Trade Deflection and Trade Depression, Chicago Fed Working Paper No. 2003-26

- Bown, C. P. and Crowley, M. A.(2006), Policy externalities: How US antidumping affects japanese exports to the EU. *European Journal of Political Economy*, 22(3), 696-714.
- Bown, C. P., Blonigen, B., Antidumping and retaliation threats, NBER working paper series, working paper 8576
- Commission of the European Communities (CEC), 1991–1992. *Panorama of EC Industry*. CEC, Luxembourg.
- Chu, T. and Prusa, T. J.(2004), The Reasons for and the Impact of Antidumping Protection: The Case of People’s Republic of China, *Economics Study Area Working Papers* 69, East-West Center, Economics Study Area.
- Durling, J. P. and Prusa, T. J.(2006), The trade effects associated with an antidumping epidemic: The hot-rolled steel market, 1996–2001. *European Journal of Political Economy*, 22(3), 675-695.
- Euromonitor(1991). *Consumer Europe 1991*, 8th ed. Euromonitor Publications, London.
- Feenstra, R. (2000), *World Trade Flows, 1980-1997, with Production and Tariff Data*, UC-Davis, mimeo (and accompanying CD-Rom).
- Greaney, T. M. (2001), Assessing the Impacts of US-Japan Bilateral Trade Agreements, 1980–1995. *The World Economy*, 24(2), 127-157.
- Jackson, J. H.(1997), *The world trading system: law and policy of international economic relations-2nd edition*, Massachusetts Institute of Technology
- Leidy, M.P. (1989), The Theory of International Economic sanctions, a Public Choice Approach: comment, *American Economic Review*, vol.79, no.5, pp. 1300-1304.
- Miranda, J., Torres, R. A. and Ruiz, M.(1998) ,The International Use of Antidumping: 1987-1997., *Journal of World Trade*, 32: 5-71.
- Prusa, T. J.(1997), The trade effects of U.S. antidumping actions, in *Effects of U.S. Trade Protection and Promotion Policies*, University of Chicago Press, Chicago.
- Prusa, T. J. and Skeath, S.(2001), The Economic and Strategic Motives for Antidumping Filings, NBER Working Paper No. 8424, July

- Prusa, T.,(2001), On the spread and impact of anti-dumping, *The Canadian Journal of Economics*, Vol. 34, No. 3, pp. 591-611
- Prusa, T. J. (2006), East Asia's Anti-dumping Problem, *The World Economy*, 29(6), 743-761.
- Staiger, R. and Wolak, F.(1994), Measuring Industry Specific Protection: Antidumping in the United States, *Brookings Papers in Economic Activity: Microeconomics*, 51-118.
- Van Bergeijk and Peter A.G.(1995), The Impact of Economic Sanctions in the 1990s, *World Economy*, vol. 18, no. 3, pp. 443-55.
- Vermulst, E. A. (1990), The Antidumping Systems of Australia, Canada, the EU, and the USA: Have Antidumping Laws Become a Problem in International Trade? In J. H. Jackson and E. A. Vermulst (eds.), *Antidumping Law and Practice: A Comparative Study*. New York: Harvester Wheatsheaf.

반덤핑 관세부여에 따른 일본 전자산업의 무역 영향력 분석

국문초록

일본 전자업계는 그 동안 세계 전자 시장에서 가장 큰 두각을 나타낸 국가였다. 일본 전자제품은 높은 기술력 개발을 바탕으로 1950 년대는 트랜지스터, 1970 년대는 반도체 그리고 1980 년대는 가정용 전자제품 세계 시장을 독식하였다. 2000 년대에 들어서기 전까지는 미국과 유럽연합이 일본의 가장 중요한 수출국이었으며 이 두 시장은 전체 일본 전자 수출의 거의 50%를 차지하였다. 하지만 2000 년부터 일본 전자기업들은 점차 수출 파트너를 다양화하며 의존도를 줄이기 시작하였다. 이로써 일본은 빠르게 급성장하는 아시아와 중동의 새로운 수요에 적응하여 급변하는 세계시장을 모색하기 시작하였다.

본 논문에서는 일본 전자산업 수출 변화에 대해 가장 큰 시장인 미국과 유럽연합의 일본 전자제품에 대한 반덤핑 사례를 통해 살펴보고자 한다. 그리하여 기존 문헌 연구에서 거론되어 왔던 즉각 현상인 무역 디프레션과 장기적 현상인 무역굴절과 무역전환이 각 사례별로 어떻게 나타났으며 또한 어떠한 영향력이 있었는지 각 품목별로 정리하여 분석하였다.

반덤핑은 90 년대부터 그 사례가 폭발적으로 늘어났으며 많은 국가들이 자국 산업 보호 차원의 무역제재 도구로 사용되어 왔다. 본 논문은 반덤핑 관세가 한 기업이나 국가에 얼마나 큰 피해를 가져올 수

있는지를 보여주며 그 피해가 단기적뿐만 아니라 장기적으로까지 이어 질 수 있다는 것을 증명하였다. 또한 일본과 수출품목이 비슷한 한국도 계속해서 다가오는 무역분쟁을 과거 일본 전자산업의 사례를 통하여 대비할 수 있다는 점에서 큰 의미가 있다.

Keywords: 무역 디프레션, 무역굴절, 무역전환, 반덤핑, 일본 전자산업

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