

PROTECTIONISM AND FREE TRADE:
A CASE OF APPAREL IMPORTS TO THE UNITED STATES AND JAPAN FROM
1974 TO 2004

by

JU YOUNG 'JILL' LEE

(Under the Directions of Jan Hathcote)

ABSTRACT

This research revealed price and income elasticities and built the import demand model of China, Hong Kong, Mexico, Korea and Italy to the United States and Japan from 1974, the start of the MFA, to 2004, the end of the MFA. The study covers womens' and girls' apparel articles except sleepwear, not knitted or crocheted.

The income and price elasticities and import demand models of the United States and Japan revealed insights about import and consumption pattern, apparel trade policy and apparel industry reality. The U.S. consumers are more price-sensitive but are purchasing luxury goods much faster when their income increases than Japanese consumers are. The study revealed the success of preferential treatment (NAFTA) on apparel imports and the failure of apparel import quotas. The findings also proved that the U.S. apparel industry is more labor cost focused than Japanese apparel industry.

IDEX WORDS: U.S. Apparel Imports, Japanese Apparel Imports, Multifiber Agreement,
Elasticities of Demand, Import Demand Model, Economic
Development

PROTECTIONISM AND FREE TRADE:
A CASE OF APPAREL IMPORTS TO THE UNITED STATES AND JAPAN FROM
1974 TO 2004

by

JU YOUNG 'JILL' LEE

B.S., Ewha Womens University, South Korea, 2003

A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial
Fulfillment of the Requirements for the Degree

MASTER OF SCIENCE

ATHENS, GEORGIA

2006

© 2006

JU YOUNG 'JILL' LEE

All Rights Reserved

PROTECTIONISM AND FREE TRADE:
A CASE OF APPAREL IMPORTS TO THE UNITED STATES AND JAPAN FROM
1974 TO 2004

by

JU YOUNG 'JILL' LEE

Major Professor: Jan Hathcote

Committee: Patricia Annis
Yoo-Kyoung Seock

Electronic Version Approved:
Maureen Grasso
Dean of the Graduate School
The University of Georgia
August 2006

TABLE OF CONTENTS

CHAPTER	PAGE
LIST OF TABLES	vi
LIST OF FIGURES	ix
I. INTRODUCTION	1
Research Question	2
Purpose.....	2
Objectives	2
Assumptions.....	3
Limitations	3
II. REVIEW OF LITERATURE.....	5
Principles of Internationalization.....	7
Characteristics of the Apparel Industry	11
Trade Liberalization and the Apparel Industry.....	15
The Protectionist Rules over the Textile and Apparel Industries	16
The United States and Japanese Apparel Industries	22
The United States Case: Protectionism or Free Trade?	28
Recent trend of the Apparel Industries in the United States and Japan	31
Elasticity of Demand.....	32
Import Demand Model.....	35
III METHODOLOGY	47
Price and income Elasticities Model of Demand.....	47

Import Demand Model.....	48
Data Collection	59
Hypotheses.....	62
IV. RESULTS.....	65
Incomes and Price Elasticities	65
Import Demand Model.....	91
V CONCLUSIONS, DISCUSSION, AND IMPLICATIONS	103
Conclusion	103
Further study.....	108
LIST OF REFERENCES	109
APPENDICES	118

LIST OF TABLES

TABLE	PAGE
Table 1. Apparel Imports of the World, the United States and Japan in 2000, 2002, 2003 and 2004 (in \$ billion).....	6
Table 2. Ranking of Factors Influencing Investment/Sourcing Decisions of the Apparel Industry from Developing Countries in 2003	36
Table 3. Proximity between Import Country and Export Country	43
Table 4. Overview of the Import Demand Model.....	49
Table 5. Operational Definitions.....	51
Table 6. Major Exporting Countries to Japan for 1990, 1995, 2000, and 2004	55
Table 7. Major Exporting Countries to the United States for 1990, 1995, 2000, and 2004	56
Table 8. Volume of Total Apparel Imports to the United States for 2003 and 2004 for the United States by Product Category	58
Table 9. Price and Income Elasticities of Wool Coats and Jackets	66
Table 10. Price and Income Elasticities of Cotton Coats and Jackets	67
Table 11. Price and Income Elasticities of Manmade Fiber Coats and Jackets	68
Table 12. Price and Income Elasticities of Coats and Jackets, “Not Elsewhere Specified”	69
Table 13. Price and Income Elasticities of Wool Suits	70
Table 14. Price and Income Elasticities of Cotton Suits.....	71

Table 15. Price and Income Elasticities of Manmade Suits of the United States and Japan	71
Table 16. Price and Income Elasticities of Suits, “Not Elsewhere Specified”	72
Table 17. Price and Income Elasticities of Wool Dress.....	73
Table 18. Price and Income Elasticities of Cotton Dress.....	74
Table 19. Price and Income Elasticities of Manmade Fiber Dress	75
Table 20. Price and Income Elasticities of Dress, “not elsewhere specified”	76
Table 21. Price and Income Elasticities of Wool Skirts	77
Table 22. Price and Income Elasticities of Cotton Skirts	78
Table 23. Price and Income Elasticities of Manmade Fiber Skirts.....	78
Table 24. Price and Income Elasticities of Skirts, “Not Elsewhere Specified”	79
Table 25. Price and Income Elasticities of Cotton Blouses	80
Table 26. Price and Income Elasticities of Manmade Fiber Blouses	81
Table 27. Price and Income Elasticities of Blouses, “Not Elsewhere Specified”	82
Table 28. Price and Income Elasticities of Wool Trousers.....	83
Table 29. Price and Income Elasticities of Cotton Trousers.....	84
Table 30. Price and Income Elasticities of Manmade Fiber Trousers	85
Table 31. Price and Income Elasticities of Trousers, “Not Elsewhere Specified”	86
Table 32. Price and Income Elasticities of Wool Outergarments.....	87
Table 33. Price and Income Elasticities of Cotton Outergarments.....	88
Table 34. Price and Income Elasticities of Manmade Fiber Outergarments	89
Table 35. Price and Income Elasticities of Outergarments, “Not Elsewhere Specified”	90

Table 36. Import Demand Model of Apparel Imports (by Exporters).....	93
Table 37. Variable Selection of the Import Demand Models (by Exporters).....	95

TABLES OF FIGURES

FIGURE	PAGE
Figure 1. Merchandise imports of the United States and Japan combined (\$ billion), 1994-2004	5
Figure 2. Apparel imports of the world, the United States and Japan for 2000, 2002, 2003 and 2004 (%).....	6
Figure 3. Mechanism of Tariff Imposition	8
Figure 4. Mechanism of quota imposition	9
Figure 5. . Japan’s exports to the United States, clothing, in 1954, 1957, 1960, 1961 and 1962.....	17
Figure 6. Number of employees in the apparel industry in the United States from 1990 to august 2005 in thousands	21
Figure 7. Apparel imports of the United States and Japan in 1990, 1995, 2000 and 2004	23
Figure 8. Japanese share of US imports of cotton manufacturers (%), 1956-1961	25
Figure 9. Share of US imports of cotton manufacturers (million dollars), 1956-1961 ..	26
Figure 10. Japan’s foreign trade balance, 1947-1962	27
Figure 11. Retail price of jeans produced in Easter Europe (1998).....	37
Figure 12. Proportion of Womens’ or Girl’s Articles of Apparel and Clothing Except Sleepwear, not Knitted or Crocheted in Total Apparel and Clothing Articles, Not Knitted or Crocheted in the United States for 2003 and 2004	58

CHAPTER I

INTRODUCTION

The United States and Japan are the top largest apparel importers in the world. In 2004, the United States imported \$75 billion-worth of apparel products and Japan spent \$21 billion on importing apparel products. These figures account for nearly 30% of total apparel import transactions in 2004 (WTO, 2005). In the 19th century and the early 20th century, the United States and Japan which were expanding their economies, were, however, one of the major apparel exporters to that-time-developed countries. The U.S economy started as a cotton product exporting country to Europe during in the 19th century as Japan did to the United States during the early 20th century (Dickerson, 1999).

As the U.S. and Japanese economies matured, their apparel industries were losing their competitive advantage, low labor cost. Both governments started establishing their own methods of promoting and protecting the weakening domestic apparel industries.

The U.S. government sought an answer from outside of their country but the Japanese government did so from inside of their country. The United States actively utilized the multifiber agreement (MFA) quotas introduced in 1974 to restrict the volume of apparel imports from developing countries, whereas the Japanese government restructured the whole apparel industries from the bottom (Dickerson, 1999; Friman, 1990). The differences between the apparel industries policies of the United States and Japan over five decades created large discrepancies of the preferences in deciding apparel export countries and the volume of apparel imports from the exporters.

This research will examine the influences of different factors such as tariff, exchange rate, quota, labor cost, clothing expenditure, quality and distance, to the

elasticities of demand for apparel imports from 1974 to 2004 and build the import demand model for each disaggregated product category.

Research Question

Since the United States and Japan have utilized different kinds of trade restrictions to protect their apparel industries, how have these restraints affected the elasticities of demand and the factors influencing the volume of apparel imports from the top five export countries from 1974 to 2004?

Purpose

This research will reveal price and income elasticities of the top five apparel export countries to the United States and Japan from 1974, the start of the MFA, to 2004, the end of the MFA. The study covers thirty eight six-digit Harmonized Tariff Schedule (HTS) code product categories. Additionally, it plans to compare differences of the determinants for the import decision equation for the United States and Japan.

Even though studies on individual countries' import decision making is widely carried out by scholars, there is little research which compared the apparel trade policies of the two largest importers, the United States and Japan. The purpose of this study is to calculate a quantitative measure of how trade policies influence the volume and decision making of apparel imports. The results of the study will answer the question that scholars recently argue about; what will happen to the U.S. apparel trade policies after the MFA quota phase out and where the U.S. industry should find their future.

Objectives

The objectives of the study are as follows;

1. To measure the price elasticities of apparel imports to the United States and Japan from 1974 to 2004 using multiple regression procedures.
2. To build the import demand functions of apparel imports to the United States and Japan from 1974 to 2004 using multiple regression procedures.

This study estimates and compares price and income elasticities of the United States and Japan from the top five exporting countries and creates demand functions of determinants identified by the literature by using multiple regression methodology from 1974 to 2004. The countries were decided based on their share of apparel exports to the United States and Japan. These countries include China, Hong Kong, Italy, Korea, and Mexico. They are a combined sample of top five exporters to the United States and Japan identified separately from import data, collected in 1990, 1995, 2000 and 2004. The products covered are womens' and girls' apparel articles except sleepwear, not knitted or crocheted. Those product categories account for almost the half of the volume of the total apparel imports in the United States in 2004 (United States International Trade Commission Statistics, 2005). In addition to that, the women's and girls' apparel area is used because the imports are most influenced by the recent QR paradigm due to the high frequency of fashion change in these categories (Milner & Rosenblatt, 2002).

Assumptions

1. Only linear relationships are observed in the import demand model.
2. The data, import volumes, are assumed normally independently distributed.

Limitations

1. The researcher assumes that extraneous variables are not significant in this model.

2. The number of countries included in the study is limited to the five major exporting countries and two major importing countries.
3. The number of the product categories is limited to thirty eight, womens' and girls' apparel articles except sleepwear, not knitted or crocheted.
4. Only a limited time period, from 1974 to 2004, is examined.
5. Lead time is measured by proximity between importing countries.
6. Time series of the variables is not considered.
7. The observations are normally and independently distributed.
8. No outliers are excluded.

CHAPTER II

REVIEW OF LITERATURE

The United State and Japan are two major economies of world merchandise trade. The total volume of the United States and Japanese merchandise imports stays 20% of the world total imports from 1994 to 2004 and the merchandise imports of the United States and Japan combined doubled from less than \$ 10 trillion to almost \$ 20 trillion in those ten years (See Figure 1) (WTO, Various years). Especially, apparel merchandise imports of both countries have accounted for more than 30% of the world apparel imports and its value has been more than \$ 90 billion combined each year in the 2000s (See Figure 2 and Table 1).

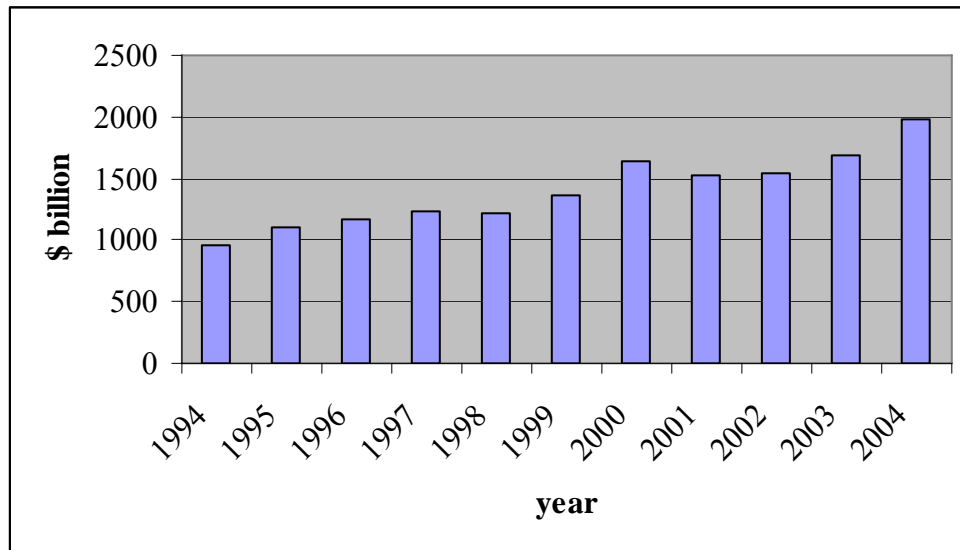


Figure 1. Merchandise imports of the United States and Japan combined (\$ billion), 1994-2004.¹

¹ From “WTO International Trade Statistics”, by WTO, Various years.

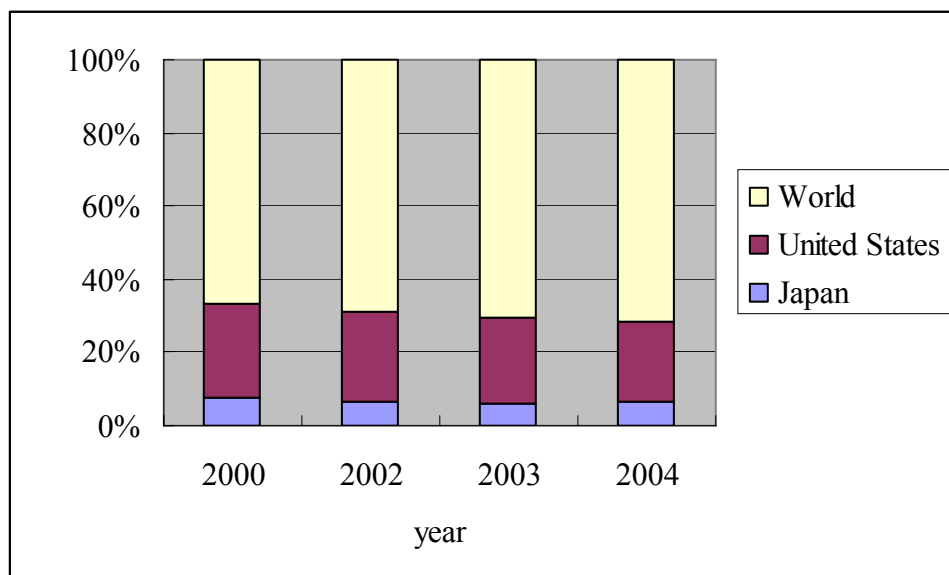


Figure 2. Apparel imports of the world, the United States and Japan for 2000, 2002, 2003 and 2004 (%).²

Table 1

Apparel Imports of the World, the United States and Japan in 2000, 2002, 2003 and 2004

(in \$ billion)

	2000	2002	2003	2004
Japan	\$ 19	\$ 17	\$ 19	\$ 21
United States	\$ 67	\$ 66	\$ 71	\$ 75
World	\$ 262	\$ 272	\$ 310	\$ 341

Note. From "WTO International Trade Statistics," by WTO, Various years.

² From "WTO International Trade Statistics," by WTO, Various years.

Principles of Internationalization

The very purpose of economic activities between countries is, ideally, “to benefit individual consumers and maximize efficient utilization of the earth's scarce resources” (Gilpin, 2001, p.23). Gilpin emphasized that the appropriate distribution of the world's limited resources to the right location is essential to accomplish this goal of economic activities. For many cases, however, the efficient allocation of limited resources among countries has not been fully achieved because of economical and political restrictions and barriers. Under this consideration, economists have started to think about how to lower the barriers and how to regulate the world’s economy more efficiently and fairly.

Theory of Trade Restrictions

Trade restrictions imposed on imports are generally categorized into four groups. They include tariffs, quotas, export subsidies and voluntary export restraints (Krugman and Obstfeld, 1994). The top two most influential restrictions imposed to apparel imports, are tariffs and quotas. Figure 3 and Figure 4 illustrate the impact of tariffs and quotas. Tariffs increase the price of import products from P_2 to P_1 (See Figure 3). Similarly, quotas also force the price raised from P_2 to P_1 (See Figure 4). L_1 and L_2 for Figure 3 and L for Figure 4 are deadweight loss generated from the unnecessary price increase and ineffective resource allocation from tariffs and quotas. With tariffs and quotas, this resource loss is paid by consumers, through increases in price. Even though, the imposition of trade restrictions cause consumer welfare loss, many countries actively utilizes trade restrictions to protect their industries. One of the most prevailing arguments on trade restrictions of apparel imports is the cheap foreign labor argument.

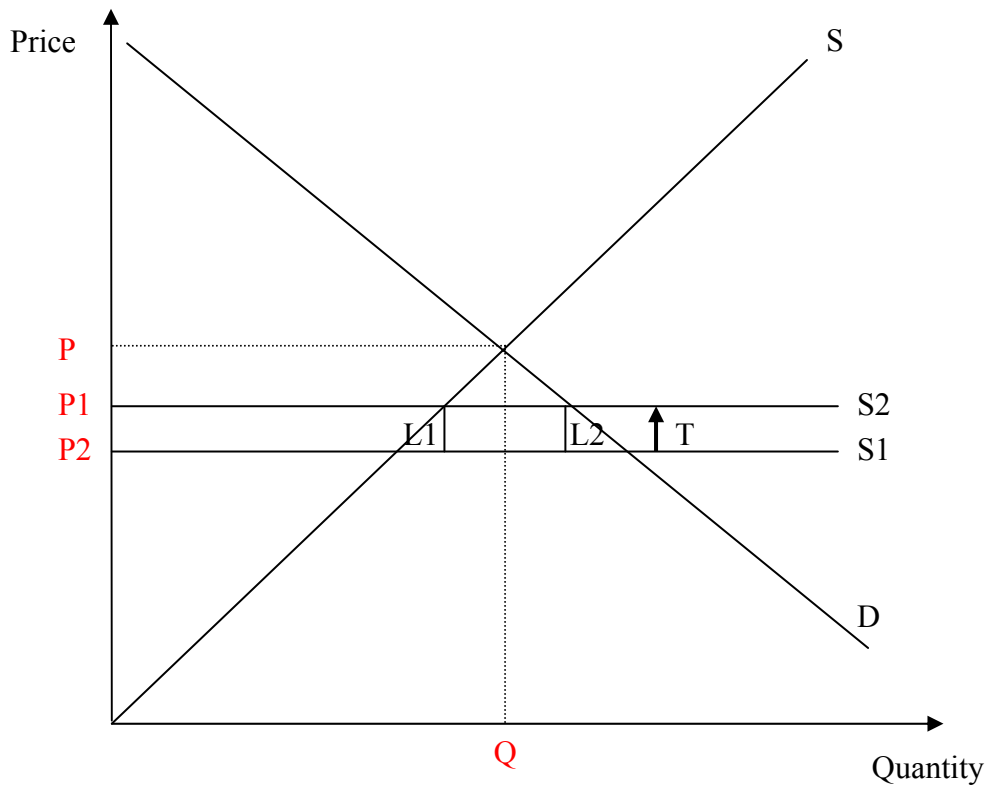


Figure 3. Mechanism of Tariff Imposition.³

³ Note. S; Domestic supply curve, S1; Supply curve of the rest of the world before tariffs, S2; Supply curve of the rest of the world after tariffs, T; Tariff increase, D; Domestic demand curve, L1 and L2; Deadweight loss, P; Equilibrium price, P1; Price of import products, P2; Price with tariff, Q; Equilibrium quantity. From "Principles of Microeconomics (4th edition)," by Gottheil, F, 2005, p.467.

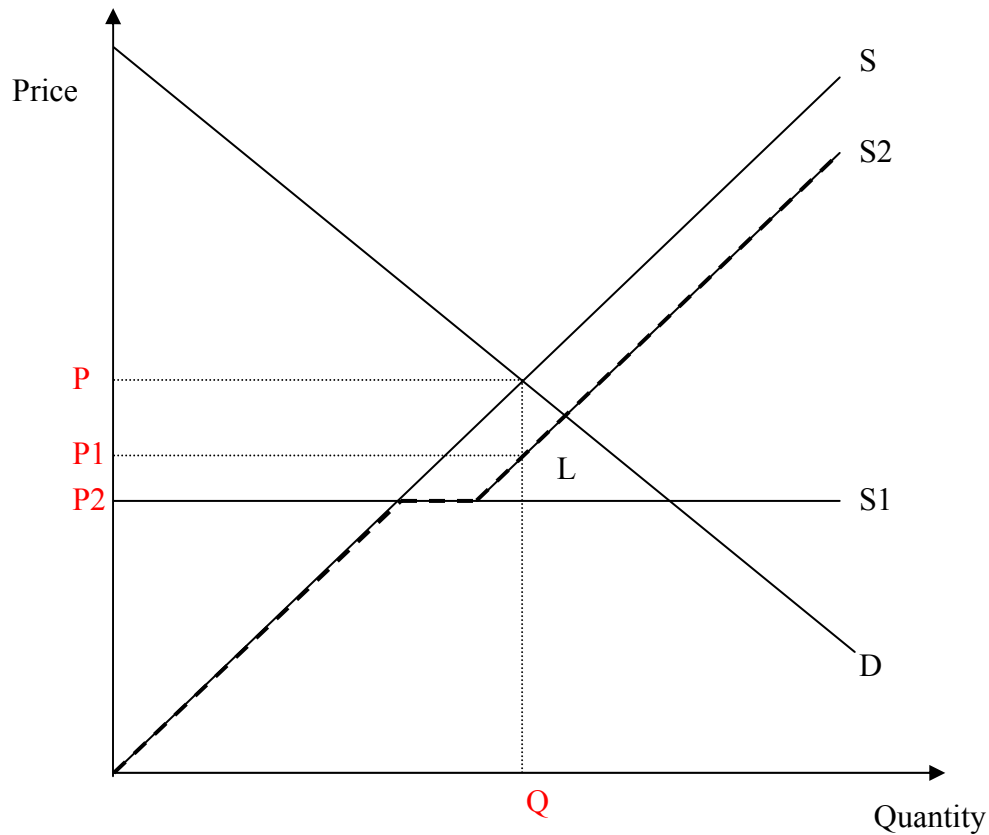


Figure 4. Mechanism of quota imposition.⁴

Scholars, however, argued that the imposition of trade protections would tamper the potential competitiveness of industries by overprotecting or making them hooked on persistently pursuing more protection rather than concentrating their potential to restructure their industry. The goal of industries' protection activities becomes diverted

⁴ Note. S; Domestic supply curve, S1; Supply curve of the rest of the world before quotas, S2; Domestic supply curve after quotas, D; Domestic demand curve, L; Deadweight loss, P; Equilibrium price, P1; Price of import products after quota imposition, P2; Price of import products before the quota imposition, Q; Equilibrium quantity.

From "Principles of Microeconomics (4th edition)," by Gottheil, F, 2005, p.468.

from fostering the infant industry or core industry of a nation to acquiring further successive trade restrictions. One of the results bearing deadweight loss is to keep inefficient workers in positions which lower the productivity of a firm significantly (James, Ray & Minor, 2002).

Historical Significance of GATT and WTO

When did countries start protecting their industries and suddenly pursue free trade? The answer is two incidents that happened during the early 20th century. The Great Depression from 1929 to 1933 and World War II were believed to be important roles in countries' changing attitudes toward the purpose of their economic activities (Cohen, Blecker & Whitney, 2002). During the 1920s, the world's economy plunged into the depression. Countries around the world became highly protective to their own industries and workers. To temporarily ease the domestic economic tensions, they started raising the import tariff rates significantly. The United States especially started collecting foreign debt and raising interest rate to conserve national capital which worsened the already severe depression of the 1930s (Cohen et al., 2002). The global economic failure instantly caused the breakout of the nationalism movement around the Europe and became one of the reasons to bring about World War II.

These two global events, the Great Depression and World War II, awakened nations that had perceived the economic activity as their money gathering mechanism from other countries to a method to "benefit customer and maximize global wealth" (Gilpin, 2001, p.23). Countries, successively, agreed on creating a global institution to govern and monitor the world's economy to increase the quality of life around the world (Cohen et al., 2002). General Agreement on Trade and Tariffs (GATT) was introduced by

the United States for its own interest. The GATT rules led the trade liberalization with the application of multilateral negotiations on trade issues (Blokker, 1989, Gilpin, 2001). Twenty three countries signed provisional trade rules in 1947 and the institution lasted until 1994 when it was replaced by the World Trade Organization (WTO) (Cohen et al., 2002). The ultimate goal of the institutions was to lower trade barriers and tariffs among the member countries and increase the efficient allocation of resources (Gilpin, 2001). The free trade philosophy, which Adam Smith and David Richardo argued to be the ultimate method for a nation's specialization and maximum allocation of world's resources, was actively introduced under the GATT and successive WTO regimes (Gilpin, 2001).

Characteristics of the Apparel Industry

The apparel industry is a starter industry, a footloose industry and a short fashion cycle industry. In this chapter, the characteristics of the apparel industry will be explained and expanded.

Starter Industry

Many countries have actively utilized the textile and apparel industries to set up the foundation of their economy. Historically, textile and apparel products are proven to be the only types of manufactures that developed countries import from developing countries in large volume (Thornblade, 1971). The British started the Industrial Revolution by implementing new technology in textile production in the late 18th century (Dickerson, 1999, p.31). The British could accumulate foreign currencies for further economic development by exporting the textile and apparel products to Europe and the United States. The United States and Japan followed the British model to boost their

economies in the 19th century and in the early 20th century respectively. More recently, the cases of Hong Kong, Taiwan and South Korea followed the same track, starting with apparel manufacturing firms to gather foreign investment and then upgrading the manufacturing ability to the heavy industry. Thus, many developing countries consider an industrialization model, using the apparel and textile industries as “stepping stones,” essential to break the cycle of poverty in their countries (*Changes in global trade rules for textiles and apparel: Implications for developing countries*, 2002).

These examples show that the apparel industry plays a critical part in economic development (Palpacuer, Gibbon & Thomsen, 2005). For developing countries, the low capital investment required to sustain the apparel industry is one of the most attractive factors to implement the apparel industry in their countries. Scholars, including Nordas (2004) and Hathaway (1998), mentioned that the amount of capital required to establish and maintain the apparel industry is less than the other industries (Nordas, 2004b, p.1; Hathaway, 1998).

Furthermore, researchers like Palpacuer, Gibbon and Thomsen suggested three reasons why the apparel and textile industries, especially the apparel industry can work as a “stepping stone” for the further economic development in developing countries (Palpacuer et al., 2005). The apparel According to their study, the apparel industry is favored by developing countries because it hires large numbers of less skilled labor and maintains the political stability, earns foreign currencies, and builds capital for the more technologically demanding sectors (Palpacuer et al., 2005). The implementation of the apparel industry can not only maximize a developing country’s competitiveness using abundant resources, unskilled labor, but also stabilize its society. Social science

researchers highly regard the apparel industries as an effective employment generator. They highly evaluate the apparel industry's job generating ability because the industry can hire large numbers of low skilled labor a country with a large establishment of apparel manufacturing firms can become politically and economically stable (Salinger, 2003). Jessen and Rogriquez (1999) agreed that the apparel industry is preferred to developing countries with the alternative source of foreign currencies such as tourism, because it stabilized the society politically and economically.

Footloose Industry

The apparel industry is called footloose industry referring to the characteristic frequent displacement of manufacturing facilities (Caves, Frankel & Jones, 1999). Because of the nature of the apparel industry, not only building the industry in developing countries in the first place but also keeping the industry for an extended period of time is considered essential. Palpacuer et al. expanded the argument that the ultimate benefit from the apparel industries suggested is to build capital to further the more technologically advanced sectors such as the automobile industry (2005). A country's ability to keep the apparel industries longer with the sufficient volume of foreign capital invested, would determine whether a country could build sufficient capital for the more technologically advanced sectors (Palpacuer et al., 2005). Salinger also agreed with the argument emphasizing that the inducement of foreign direct investment through the apparel manufacturing industry has a long term benefit other than just accumulating foreign currencies (Salinger, 2003). It is, thus, another important issue to a country to maintain the apparel industries in business long enough to securely attract foreign investment.

Short Fashion Cycle Industry

One of other characteristics of the apparel industry is that the apparel industry should adapt themselves to quick changes of fashion. Fashion apparel shops nowadays carry garments for shorter periods of time (Salinger, 2003). Recent studies on the apparel industries suggest that the competitiveness issue of apparel firms has shifted from how cheaply they can produce a product, to how quickly they can replenish a product line. Salinger (2003) added that as the price of each product increased, the more seasonality it would be subject to (Salinger, 2003). Chapple supported the argument that retailers introduce faster and shorter fashion cycles in order to remain competitive in the retail market (Chapple, 1999).

Why an apparel product cycle is getting shorter? The most prevailing theories are product life cycle, and hypercompetition theories. Nordas (2004) presented an intuitive argument about the question. He said that once the apparel product consumption has reached a maturation stage, firms try to diversify their products with a variety of "sizes, colors, and designs" at a frequent rate to meet customer's needs (Nordas, 2004).

The more detailed argument about a shorter fashion cycle, explaining behaviors of the mature market, is the D'Aveni and Gunther's (1994) and Richardson's (1996) hypercompetition theory. D'Aveni and Gunther (1994) introduced the term, "Hypercompetition," which means the market environment is extremely competitive with a tremendous number of competitors. Hypercompetition firms try to gain profit by disrupting the status quo and establishing temporary competitive advantages (D'Aveni and Gunther, 1994). He added that those activities in the hypercompetitive market are the primary goal of their economic activities. Fashion apparel, which is one of the

hypercompetitive industries, continually introduces new products to meet the customer's needs to be stylish (D'Aveni and Gunther, 1994, p.10) This hypercompetitive market in the apparel industries makes the prediction of apparel imports and exports highly risky (Arpan, Torre & Toyne, 1982, .93). This also explains why the apparel industry is one of the few manufacturing industries where economies of scale do not apply (Arpan et al., 1982).

Trade Liberalization and the Apparel Industry

Trade liberalization significantly affects the apparel industries. Apparel manufacturing industries have undergone substantial structural changes during the trade liberalization period. The most prominent structural change in the apparel industry is due to polarization of resource usage in Hanson's "regional production network" (Hanson, 1996) and Gereffi's "regional commodity chain" (Schoenberger, 1994). "Regional production network" is a term that Hanson proposed in his research describing the development of free trade, developed countries offer capital intensive resources, such as product designs, process technology and marketing services and developing countries supply labor for garment assembly (Hanson. 1996). During the 1980's, developing countries adopted a great degree of free trade philosophy and their resource were reallocated to labor intensive industries under the new agenda (Michael Michaely et al. 1991). Hanson also explained that as developing countries specialized in subcontracting from developed countries, which takes up a large portion of their total trade, the developing countries would liberalize their economies and trade more. An example in the apparel industry is where developing countries have provided off-shore assembly to serve clients from developed countries (1996).

Essentially, Hanson's (1996), and Gereffi's (Schoenberger, 1994) arguments strongly support that the core functions of the apparel industries are supposed to stay in developed countries. Even with the rapid relocation of production facilities to developing countries, developed countries will still host the core functions of the high-quality fashion market with modern technology, relatively well-paid workers and designers, and flexibility (Nordas, 2004).

The protectionist rules over the textile and apparel industries

The effort of protecting the apparel industries in the United States started after Japan's quick economic recovery from World War II. The U.S. apparel industries, which had benefited from the destruction of Japanese apparel manufacturing facilities during World War II, was suddenly experiencing the loss of their world leadership in apparel exports. Figure 5 shows the increasing value of clothing exports to the United States from Japan from 1954 to the 1962. Over the eight years, the total value of apparel imports from Japan jumped more than six times from \$ 18 million to \$ 103.1 million (Hunsberger, 1964). With the increasing concerns of apparel firms, the demand for trade restrictions on apparel imports also rose significantly in the United States.

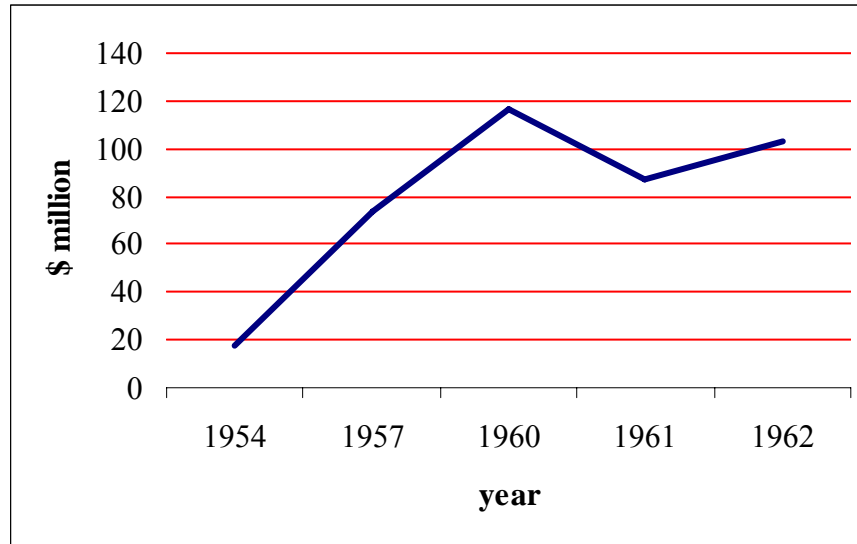


Figure 5. Japan's exports to the United States, clothing, in 1954, 1957, 1960, 1961 and 1962.⁵

To control the surge of the Japanese cotton product imports, the U.S. government utilized political tools to protect their industry. The U.S. government traded the voluntary export restraints (VERs) prior to GATT's admission of Japan, which had been eager to join in the institute. Instead of forcing the Japanese government to sign a bilateral agreement which would hinder the spirit of the newly created GATT, the U.S. government utilized VERs which had the same effect as other bilateral agreements between countries but with less compunction (Dickerson, 1999, p.342; Aggarwal, 1985; Destler, Fukui & Sato, 1979; Hunsberger, 1964). The Japanese government signed tariff concession negotiations with seventeen countries before formal admission to the GATT (Hunsberger, 1964). In 1955, Japan was finally able to gain full GATT membership after a three year trial and the Japanese government voluntarily signed a VER to control the volume of apparel and textile exports to the United States in 1957 (Pelzman, 1982).

⁵ From "Japan and the United States in World Trade," by W. Hunsberger, 1964.

Ever since the first VER was imposed on Japanese cotton products, the U.S. apparel manufacturers tried to obstruct the natural flow of apparel imports from outside of the United States and achieve consecutive trade restrictions with developing countries on cotton textile products, Short Term Arrangement (STA) from 1961 to 1962 and Long Term Arrangement (LTA) from 1962 to 1973 (Dickerson, 1999).

Multi-Fiber Agreements (the MFA)

With the strict quantitative restrictions during the 1960s and 1970s, the volume of apparel imports from developing countries seemed to stabilize. According to Dickerson (1999), agreements with the United States in the form of VERs, STA, and LTA from the early 1950s to 1970s, cotton product imports from developing countries could be controlled in a predicted way. During that time, however, many developing countries produced apparel products from the product lines where they could take advantages of loopholes in the current restrictions. For example, imports of manmade fiber textile and apparel products increased more than ten times to 319 million pounds compared to only two times for cotton products from 1960 to 1970. The reason for this surge is that manmade fiber products were not covered in the agreements (Pelzman, 1982, p.95; Davidson, Feigenoff & Chadar, 1986). The U.S. government realized the need of more extensive trade restrictions on apparel and textile products made from cotton, wool and man-made fibers.

In 1974, the multifiber agreement (the MFA) was initiated under GATT rules to protect the textile and apparel industries from developing countries by imposing bilateral quantitative limitations with the strong support from the U.S. government. From 1974 to the end of the Uruguay Round in 1994, apparel and textile trade was governed by the

MFA which primarily approved bilateral negotiations between countries (Ishido, 2004, p.3). Critics were skeptical about the goals of the MFA, fostering apparel and textile trade from less developed countries in tandem with preventing developing countries' market disruption, which were contradictory in nature (Pelzman, 1982)

Trade restrictions under the MFA, ironically have allowed many smaller, less competitive countries to participate in international trade, providing them with economic and social benefits such as foreign direct investment, construction, transportation, communication infrastructure, employment, and foreign exchange earnings. For example, the share of imports to the United States from developing countries such as Nepal, Sri Lanka, Honduras, Morocco, and Tunisia, etc. to developed countries' markets would have been much less if quotas had not severely restricted the exports of efficient producers, China, and Korea, Indonesia and India (*Changes in global trade rules for textiles and apparel: Implications for developing countries*, 2002).

Failure of Restraint in Trade Policies

The quota impositions on apparel products have been highly criticized from two perspectives, the importer's point of view and exporter's point of view. Apparel importing countries were facing consumers' and manufacturers' criticism on trade restrictions in apparel imports. Countries importing apparel products, mostly developed countries, had to encounter higher consumer cost and frustrated apparel manufacturers. For example, U.S. consumers have to pay increased prices on goods to keep the domestic industry in business. According to Hufbauer and Elliot, American consumers paid about \$ 70 billion for the cost of trade restrictions in 1990; Twenty-four billion dollars was generated from the trade restrictions on textiles and apparel (Hufbauer & Elliot, 1994).

The price increase of apparel import products due to tariffs and quotas causes the domestic product price increase and creates discrepancy in welfare cost between high wage consumers and low wage consumers. Fan, Lee & Hanna reported that the price increase of imports due to trade restrictions stimulates the price increase of domestic products (1998). Furthermore, low wage customers pay more for the trade restriction cost because unequal protectionist restrictions are imposed to low price products, mostly from developing countries, rather than high price product from developed countries such as West Germany, France and Italy (Fan et al., 1998).

On top of consumers' dissatisfaction, apparel manufacturing firms substantially criticize the degree of trade restrictions. The U.S. manufacturers claimed that protection toward the apparel industry has not been enough under the governance of the MFA from 1974 to 1995. They argued that the MFA had too many loopholes and flexibilities (Green, 1998, p.9). Hathaway (1998) also argued that the nontariff barriers imposed during the 1970s and the 1980s failed to reduce the volume of trade and were less effective than tariffs (Hathaway, 1998).

The number of workers in the apparel industries consequently declined dramatically in developed countries which created social problems. For example, the United States Department of Labor statistics show that the United States went through dramatic cuts in the number of workers in the 1990s. In the early 1990s, the total number of workers in the apparel industries was far beyond 800 thousand but in 2005, apparel workers shrank to less than a fourth of the 1990 level. Also, the trend did not reverse back and the number of employees kept decreasing dramatically through 2004 (Figure 6).

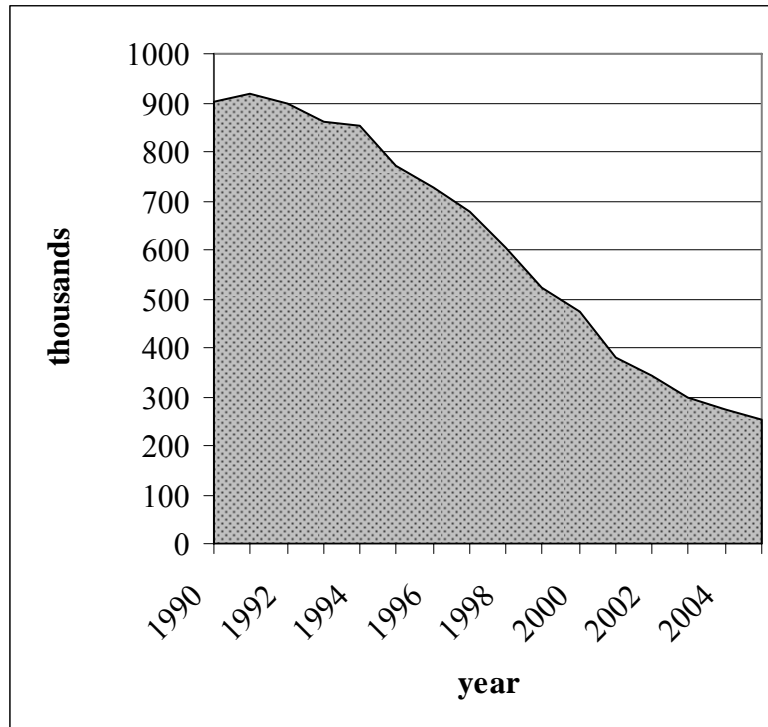


Figure 6. Number of employees in the apparel industry in the United States from 1990 to august 2005 in thousands.⁶

The reasons the apparel trade restrictions in the United States failed are because of apparel exporting countries' strategies to deal with trade restrictions; (1) the quality upgrade and (2) manufacturing facility relocation of their apparel industries. Firstly, exporters tend to increase the quality of products because quota is quantity limit not value limit. Also, exporting countries upgraded their industry to produce better, more expensive, products, whereas developed countries which have import restrictions continue producing lower quality products that they would have given up if there was no quota (Trela & Whalley, 1990, p.1191). The relocation of the manufacturing facilities from a country with tight quota allotments to one with less is another effect. For example, soon after the

⁶ From "U.S. Department of Labor, Labor Statistics," by U.S. Department of Labor, 2005.

imposition of VERs and the MFA, the apparel manufacturing industry shifted manufacturing facilities from Japan to countries with less quota restrictions, such as Hong Kong, Spain and small manufacturers such as Portugal, Spain, Egypt, and India (Pelzman, 1982).

The protectionism policies in the textile and apparel industries failed to protect the developed countries' apparel and textile industries, and distorted the global market of apparel trade. Undoubtedly, the effect of the quota has been challenged by both protected and unprotected countries, the countries which have protected their industries by setting the rules are not satisfied with less than a full protection and the countries which have to obey quotas always feel that they are unfairly banned to export their products.

The United States and Japanese Apparel Industries

Apparel Imports of the United States and Japan

The United States and Japan are increasing the volume of apparel imports during the recent two decades. From 1990, the volume of apparel imports to the United States increased significantly (See Figure 7), whereas Japan's apparel imports only increased slightly. In 1990, the U.S. apparel imports were worth nearly \$ 25,000 million and more than doubled to \$ 60,000 million in 2004. The U.S. imports increased steadily and in 2000, hit the top at \$ 65,000 million and decreased little bit in 2004. However, Japanese apparel imports increased slowly from \$ 10,000 million in 1999, to \$ 20,000 million in 2004. Figure 7 shows that Japanese apparel imports are more stabilized than that of the United States in recent years (See Figure 7).

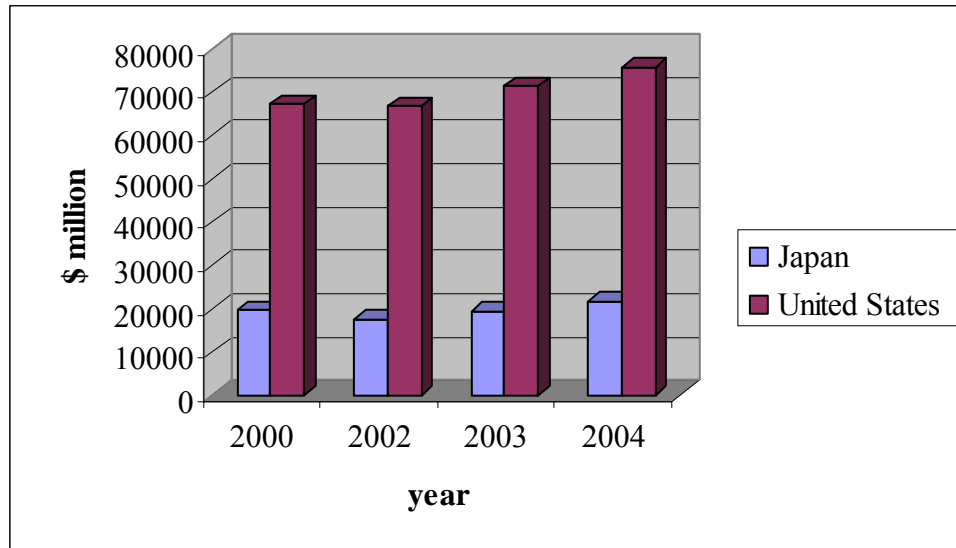


Figure 7. Apparel imports of the United States and Japan in 1990, 1995, 2000 and 2004.⁷

Arguments in the apparel industries for both the United States and Japan

The U.S. and Japanese apparel industries have faced the critical stage in the development of the apparel industries when they started importing more apparel products than exporting. According to Dickerson (1999), once the economy of a country has set up to be sustainable with the early application of the apparel industries, “critical changes” should be made to be profitable as the industry matures (Dickerson, 1999). Those “critical changes” include reducing labor cost by outsourcing assembly to lower wage countries, investing in technology development to reduce production cost, improve quality and production speed, and shielding the industry from outside competition by governmental policies (Dickerson, 1999). The U.S. and Japanese governments have gone through major changes as the apparel industries matured because they were not able to

⁷ From “U.S. Department of commerce, Trade Statistics,” by U.S. Department of Commerce, Various years, and “Japan External Trade Organization, Trade Statistics (Boeki Tokei Database),” by Japan External Trade Organization, Various years.

compete with other low labor cost countries. The Japanese government used the first two strategies, upgrading their level of performance by domestic investment, and moving their factories offshore to increase profits; whereas, The U.S. government chose to remain and protect the industry by trade restrictions.

Apparel Industry in Japan

The Japanese apparel industry has experienced two major changes during the economical development period, as an exporter in the 1950s and the 1960s and as an importer in the 1970s and 1980s. The first change came when the United States enforced strict trade restrictions on Japanese apparel products during the 1950s and the 1960s. The direction the Japanese apparel firms took to deal with the increasing pressure from outside was to move production locations to East and Southeast Asian countries.

The main purpose of the shift was to avoid trade restrictions from the United States on products from Japan (Dicken, 1992). Dicken (1992) also noted that Japanese textile and apparel firms initiated the trend of moving production to less developed countries. This shift resulted in investing in less developed countries on a larger scale and eventually encouraged the economical boost in those countries. By 1959, the major sourcing countries of the United States apparel imports had changed to other East Asian countries such as Hong Kong, Taiwan and South Korea (Blokker, 1989). Figure 8 shows the change of cotton product manufacturing countries from Japan to Hong Kong and other East Asian countries. After the 1957s VER on Japanese products, the percentage of Japanese cotton products decreased dramatically. However, cotton products imported from Hong Kong increased strikingly, especially right after the first VER on Japanese cotton products in 1957, from \$.7 million in 1956 to \$ 63.5 million in 1969 (Figure 9).

Quotas allow that investment flows more dispersedly from the newly quota constrained country to less quota constrained country (Figure 8). Moreover, the production relocation of the Japanese apparel industries compensated decreasing profits of the domestic production due to the increasing labor cost during the 1950s and 1960s.

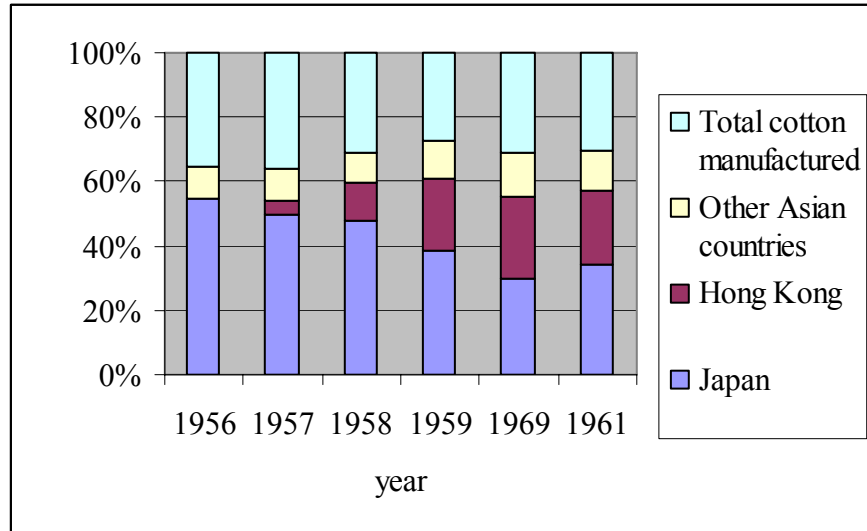


Figure 8. Japanese share of U.S. imports of cotton manufacturers (%), 1956-1961.⁸

⁸ From "Japan and the United States in World Trade," by W. Hunsberger, 1964.

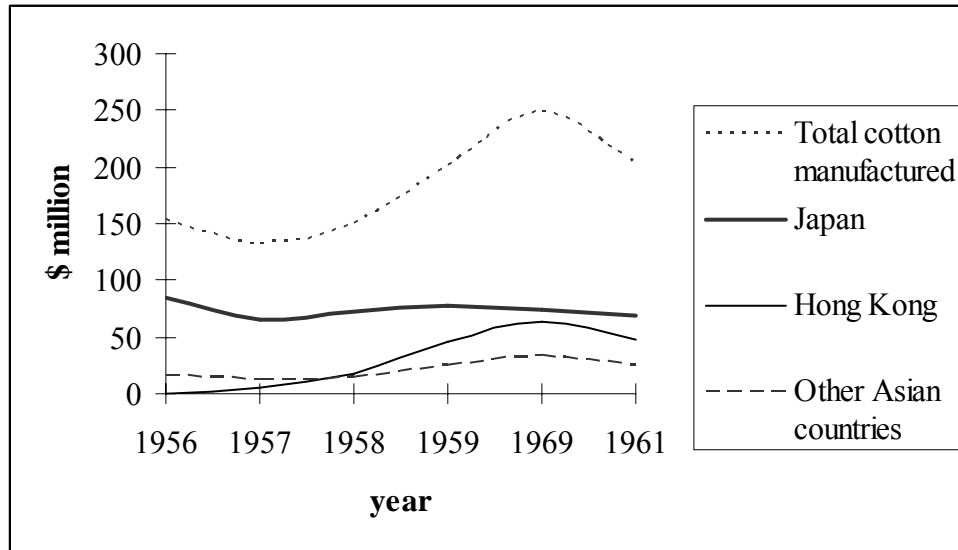


Figure 9. Share of U.S. imports of cotton manufacturers (million dollars), 1956-1961.⁹

The second challenge to the Japanese apparel industries occurred after they started importing large volumes of products from foreign producers in the 1970s and 1980s. As Japan lost their competitive advantage, they started importing significantly. Since the 1980s, the share of imports in total domestic demand rose dramatically from 16.3% in 1980 to 50.8% in 1993 (Yoshimatsu, 2000). The Japanese government's solution to the increasing foreign competition was to restructure the apparel industries not using trade barriers. Even though Japan was one of the members of the MFA, it did not maintain quotas allowed under the bilateral agreements in the MFA (Dickerson, 1999, Friman 1990). The Japanese government reformed the apparel industries through upgrading technology and utilizing low labor countries as their manufacturing platform. The changing focus of the industries to manufacturing synthetic fibers and fabrics was a major breakthrough (Kanamori, 1988). The government encouraged the reconstructing

⁹ From "Japan and the United States in World Trade," by W. Hunsberger, 1964.

and rationalization of the industry by governmental subsidizes and supports (Yoshimatsu, 2000).

The reasoning that the Japanese government went through to deal with the apparel industry was different from that of the United States by two major points. Firstly, the Japanese economy is export oriented than that of the United States. Secondly, Japanese economy was more free trade focused. The Japanese apparel industries was export oriented compared to the U.S. apparel industries (Arpan et al., 1982). Japanese apparel industries therefore became highly trade focused. Figure 10 shows Japan's import and export balance. Imports and exports during the rapid industrialization are almost the same amount (See Figure 10) proving the importance of exports in Japanese economy.

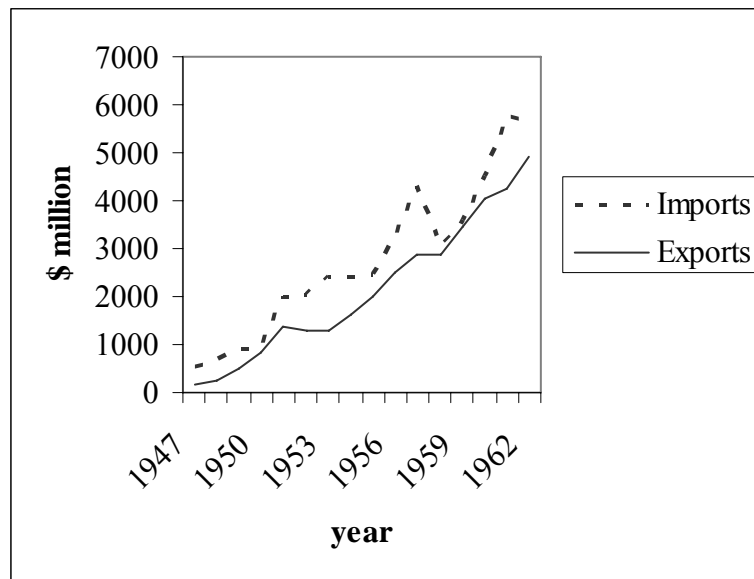


Figure 10. Japan's foreign trade balance, 1947-1962.¹⁰

Additionally, the concept of economic development in Japan is different from the United States. After World War II, scholars in Japan were into free trade idealism

¹⁰ From "Japan and the United States in World Trade," by W. Hunsberger, 1964.

(Kanamori, 1988). They thought free trade was inevitable for economic development. Therefore, their trade policies have been prone to foster the industries designated to export by lowering barriers and place them into global competition rather than to protect themselves.

Japan's choice of upgrading the apparel industries clearly shows the political and economical differences from those of the United States. Based on these thoughts, Japan's apparel industries decided to upgrade and move their production offshore. Because of Japan's being an export oriented free trade idealistic country, reactions toward open market are different from the United States. The Japanese industry is accustomed to compete with other nations because they are exporting their products to the world, whereas the U.S. apparel industry is not accustomed to compete with other nations because they are competing with companies inside a nation.

The United States Case: Protectionism or Free Trade?

The textile and apparel industries have been one of the most protected industries in the United States even under the GATT and WTO rules which favor the principle of Most Favored Nations (MFN) treatment (Fan et al., 1998; Hathaway, 1998; Palpacuer et al., 2005). The original idea to provide a temporary relief to the apparel industries three decades ago has been utilized during the every update of the tighter trade restrictions over twenty years in the United States from the STA, LTA, and the MFA.

A degree of protection achieved by the United States textile and apparel industries after World War II was enormous. Finger and Harrison indicated that the protection that the apparel industry has incomparable to the rest of the manufacturing sector (1996). Verma pointed out that the apparel industries was the only industry which was under

multilateral negotiation besides agriculture in the WTO regime (2001). Cline (1987) also claimed that the textile and apparel industries have been the “most systematically and comprehensively protected sectors in the world.” Krugman and Obstfeld (1994) said that textile and apparel industries have been protected heavily through tariffs and import quotas.

Politics on import restrictions in apparel and textiles

The apparel and textile industries have easily drawn public attention and have become subjected to be a center of trade policy discussion in the United States. The reason for active protection of the textile and apparel industries can be answered in economical and social points of views. First, the apparel and textile industry has been placed as one of the most important industries in the United States because of its political importance. The industry hired its largest number of employees from the 1950s to the 1970s (Hathaway, 1998). The workers could set up powerful unions and could pressure the government with high numbers of voters (Krugman and Obstfeld, 1994)¹¹. Because of that, Wallace, Naylor & Sasser (1968) mentioned that the apparel industry which is “extreme sensitive to changes in tariffs, changes in wage level” gathered high attention from public.

Moreover, the composition of labor workers in the apparel industry easily attracts political attention because the apparel industry hires social minorities and illegal workers in developed countries. In the United States, lower income households are more dependent on income from the apparel and textile industries (Hanson & Reinert, 1997). Dickerson also emphasized in her book (1999) that every country, even developed

¹¹ The workers in the apparel industry in the United States have traditionally had well organized unions such as the International Ladies’ Garment Worker’s Union (Krugman and Obstfeld, 1994).

countries, have people with few or no options who need to make a living by working in the textile and apparel industries which most of time does not require higher education. Therefore, the impact of liberalization in the apparel industries in the United States has been “politicized and difficult to resolve” (Dickerson, 1999).

The workers could set up powerful unions and could pressure the government with high numbers of voters (Krugman and Obstfeld, 1994)¹². The unusual bilateral agreements granted to the apparel industries also can be explained by the political power that the apparel industry has had (Krueger, 1996).

However, the stringent qualitative restrictions during the 1980s and 1990s, with the number of workers dropping dramatically, generated questions among scholars. For example, the size of protection is explained by Finger and Harrison that with only 2 % of employment in the United States economy, the protection toward the apparel and textile industries accounts for “83% of the net cost to the United States economy of all import restriction” (Finger & Harrison, 1996, p.37). Therefore, some scholars argued that the problems of the apparel trade policies have been exaggerated more than as it should have been.

The Japanese apparel industry has not gone through as severe political enlightenment processes as the U.S. apparel industry has. Since the formation of the industry unions in Japan is company based, employees in labor union, and high rank officials on boards have the stronger binding force (Yoshimatsu, 2000). Eventually, labor unions in Japan have been less extreme than the U.S. apparel industries unions (Kanamori, 1988).

¹² The workers in the apparel industry in the United States have traditionally had well organized unions such as the International Ladies’ Garment Worker’s Union (Krugman and Obstfeld, 1994).

Recent trend of the apparel industries in the United States and Japan

The apparel manufacturing industry in the United States has eroded tremendously. Recently, the biggest concern of the apparel industry is tremendous job loss (Figure 6). Arpan et al. (1982, p.96) indicated that the apparel industry has experienced especially high employee cuts, due to increasing apparel imports, than other industries with increasing imports. Sullivan and Kang (1999) suggest that during recent years, foreign manufacturers have significantly taken a share of the United States apparel market. More severe hardship is expected in the apparel industries due to the MFA trade restrictions phase out in 2005.

Phase-out of the MFA

In 1986, the new round of GATT trade talks started in Uruguay. The result of the 1994 Uruguay Round astonished apparel and textile suppliers in developing and developed countries. They agreed on the gradual abolishment of the quantitative restrictions on apparel and textile products. The settlement included the textile and apparel sectors under the GATT rules and suggested starting the new trade platform. The Agreement on Textiles and Clothing (ATC) was adopted which provided a ten year transitional program, effective January 1, 1995 (Ishido, 2004). The Agreement on Textiles and Clothing that aimed to gradually phase out the MFA rules, was one of the most significant accomplishments of the Uruguay Round (Eldehri, Hurtel & Martin, 2003).

Scholars welcomed the start of the ATC pointing out the benefits of the phase out of the quantitative restrictions on apparel products which have been blocking the natural flow of trade, eventually boost apparel trade. The MFA phase out is, moreover,

considered as a chance for developing countries to create more jobs in the apparel industries (Eldehri, 2003, p.344). Trela and Whalley predicted that higher income developing countries will gain from the MFA phase out due to consumption increase and production decrease of developed countries (Trela & Whalley, 1990).

In summary, principles of international economics, and characteristics of the apparel industries and trade restrictions were explained. In the next chapter, theories for evaluating the current trend of apparel imports of the United States and Japan will be reviewed. Elasticities of demand and variables used for the import demand model to estimate apparel imports will be explained in detail.

Elasticity of Demand

The elasticity of demand explains the relationship of demand and price in presence of income differences. The theory was introduced in *Principles of Economics* by Alfred Marshall in 1890, and is based on the universal law as to a person's desire for a commodity to diminish with every increase in supply (Marshall, 1920). The infinite supply elasticity theory hypothesizes that the impact of changes in demand rarely affects the price change in international trade studies. It assumes that when firms are not operating at full capacity, output changes can happen without changes in price. The companies fear the price competition between other factories producing the same product, therefore they choose to increase or decrease production to sustain their revenue rather than cutting or raising their price. As a result, a less complicated equation which ignores the impact of changes in demand would influence price differences. Murray and Ginman introduced to measure the elasticities of import demand using a single equation (Murray and Ginman, 1976).

Elasticity has been a useful tool in the theory of consumer behavior because it measures any demand category, assesses any determinant of the quantity demanded, and is interpreted easily as measures of responsiveness (Eastwood, 1985). Therefore, since the first introduction of the theory, many economists have developed the applications of the theory to the real economy.

Price Elasticity of Demand

Measuring price elasticities of a product reveals the sensitiveness of a product to price changes (Gottheil, 2005). Eastwood described in his book, *The Economics of Consumer Behavior* (1985), about price elasticities as, “the price elasticity of demand is a numerical measure of the degree of responsiveness of consumer demand to price change” (p.). Marshall stated that when there is a considerable fall in the price, it would cause a great increase in demand and the elasticity of demand eventually fades away if the decrease touches and goes beyond the satiety level (Marshall, 1920). The price elasticity is calculated as:

$$\text{price elasticity} = \frac{\% \Delta X_i}{\% \Delta P_i} \quad (1)$$

which represents the % change of the quantity demanded ($\% \Delta X_i$), and the % change of the price ($\% \Delta P_i$) (Equation 1) (Marshall, 1985).

One can reveal the characteristics of products by calculating price elasticities of a product. Gottheil (2005) summarized the estimated price elasticities based on product categories. He said that low priced products and basic products have low price elasticities because a price increase does not decrease the consumption significantly. He also added

that a product with many substitutes has high price elasticity because products are considered to have identical functions with other substitutes (Gottheil, 2005). The total revenue also can be estimated to increase or not with price changes based on the price elasticities of products. If the price elasticity of demand is more than 1, the total revenue of products will go up as its price increases (Gottheil, 2005). Generally, the price elasticity of apparel products is negative (Fan et al., 1998).

Elasticity of Import Demand

Using price elasticities for import demand is widely accepted among scholars in economics. Orcutt (1950) said that price elasticities of demand for imports and exports have been widely accepted as supporting the view to measure economic activities. Murray and Ginman (1975) described the import demand model being “conceptually like any other demand model.” The price and quantity demanded are assumed to be inversely related with the equilibrium price and quantity determined by the interaction of supply and demand (Murray and Ginman, 1975). Conventionally, the estimation of trade flows as a function of real incomes and relative prices is utilized to analyze the bilateral trade pattern of a country (Shanawaz, 2004).

The importance of estimating disaggregated elasticity in the industry with tariff and non tariff measures applied has been emphasized by Stern, Francis & Schumacher (1976). However, Price and Thornblade (1972) criticized desegregation in estimating the elasticity of import demand for the large data handling problem due to large data handling. Stone (1978) even pointed out that previous disaggregate research in this area had been piecemeal.

Import Demand Model

Scholars have discussed the critical factors influencing a country's retailer segment to decide where to import apparel products. Nordas divided the influencing factors into four groups including cost, lead time, and design and quality (2004a). He, however, failed to mention the import restrictions such as tariffs or quotas, which generally account for the big proportion¹³ of the apparel import cost (Abernathy et al., 1995). Andriamananjara, Dean & Spinanger estimated the determinants of a developing country's apparel export to the United States using the modified Krugman intra-industry trade model (2004). They interviewed with CEOs of textile and apparel firms and ranked the determinants of sourcing apparel products. Table 2 shows that the determinants related to labor including labor costs, policies affecting labor, health and environment, are ranked high (first and second) as well as the determinants that affect to lead time including quality of transportation infrastructure in host country, and quality of telecom infrastructure in host country (fifth and seventh). This study, however, failed to address a collinearity problem of the determinants. Adams, Gangnes, and Shachmurove (2004) investigated the competitiveness of the Chinese apparel industries. They revealed that the Chinese apparel industries could sustain its comparative advantage in the apparel industries because of undervalued exchange rate and cheap labor cost (Adams *et al.*, 2004).

¹³ The average tariff rate of the top 10 product categories from Mexico by U.S. Customs was 11.1 % in 1998 (Abernathy et al., 1995).

Table 2

Ranking of Factors Influencing Investment/Sourcing Decisions of the Apparel Industry from Developing Countries in 2003

Ranking	Factors
1	Labor costs
2	Policies affecting labor, health and environment
3	Politics and stability in host country
4	Policies affecting international trade and investment
5	Quality of transportation infrastructure in host country
6	Lack of restrictions on capital/profit transactions
7	Quality of telecom infrastructure in host country
8	Host government tax policies/incentives
9	Potential for exports to U.S.A
10	The "culture" of host country
11	Education and training of workers
12	Potential new customers/new markets
13	Availability of quotas in host country
14	Potential for exports to EU
15	HKG tax policies
16	Availability of ready-made factory units
17	Potential for exports to region
18	Existence of Overseas Chinese Community

Note. From “Trading Apparel: Developing Countries in 2005,” by Andriamananjara, et al., D, 2004. Copyright by Kiel Institute of World Economics.

Another important research study was conducted by the Center for Research on Multinational Corporations in 2003(Center for Research on Multinational Corporations (SOMO), May 2003). Figure 11 shows the price breakdown of a pair of jeans

manufactured in Eastern Europe and sold in Western Europe in 1989. The price in table is retail price based and indicates that transport, and import duties account for more than 10% of the retail price and only 13% for production cost including material, labor cost and etc. This table also shows the proportion of the labor cost in the total retail price, but fails to differentiate the proximity and trade restriction factors.

<p>Pricing example #1: JEANS PRODUCED IN EASTERN EUROPE</p> <p>Approximate price breakdown of a pair of jeans produced in Eastern Europe and sold in Western Europe (1998)</p> <p>Value-added tax: 17.5%</p> <p>Brand name company: 25%</p> <p>Retailer: 50%</p> <p>Transport, import duties: 11%</p> <p>Production costs: 13% (material, profit and other costs 12%, worker wages approximately 1%)</p>
--

Figure 11. Retail price of jeans produced in Easter Europe (1998).¹⁴

Traditionally, the factors influencing the volume of apparel imports have been explained with regard of cost competitiveness. Often scholars support low labor cost as the sole important factor in the import decision, and consider other variables, such as quality, proximity and lead time as extraneous variables. However, recently, scholars started criticizing the high focus on the labor cost factor to analyze apparel imports and

¹⁴ From “Pricing in the global garment industry”, by the Center for Research on Multinational Corporations (SOMO), May 2003, SOMO Bulletin on Garments & Textiles, Vol. 1, p. 1. Copyright by the Center for Research on Multinational Corporations.

expand research topics to the other kinds of factors in the apparel trade dynamics.

Salinger warned that the traditional attention on labor cost in the apparel industries may result in the inappropriate industry strategy set up only to reduce down the labor cost (Salinger, 2003). Also, Abernathy et al. argued a growing emphasis on the lead time and proximity between countries in the apparel trade (Abernathy et al., 1995).

Abernathy et al.'s "old news" and "new news" theory represents the recent trend of study in apparel import determinants (1995). According to Abernathy et al. (1995), there are two kinds of factors, the traditional comparative factors, and the new factors in the apparel import decision. The comparative factors including labor cost, labor productivities, capital inputs, transportation cost, international exchange rates, quotas and tariffs are traditionally considered to play an important role in import distribution (Abernathy et al., 1995). Abernathy et al. (1995) found that the apparel industry is a highly labor intensive industry with the attributes "driven by price-based competition among generally small manufacturing establishments." Therefore, the traditional factors are similar to the existing competitive strategy based on comparative advantage.

Abernathy et al. also introduced the concept of the "new news" factors which include lead time and proximity (1995). These factors become increasingly important due to lean retailing and consumer product proliferation because of the intense competition in the retail industry (Abernathy et al., 1995). Abernathy et al. (1995) explains that "lean retailers require frequent shipments made on the basis of ongoing replenishment orders placed by the retailers" (p.3). Shorter fashion cycles generated by retailers to keep the profit margin in product proliferation pressure manufactures to maintain "just-in-time inventory commitments" (Chapple, 1999). For example, the stock keeping unit level

(SKU) is regularly monitored by the real time bar code scanning system and those data are sent to manufacturers, “often on a weekly basis for each store (Abernathy et al., 1995, p.3).” Therefore, the manufacturer’s ability to fill orders quickly and flexibility becomes a crucial factor in the apparel trade.

These two sets of factors correlate more intensively as the retailing industry values the lean retailing strategy, especially when the “new news” factors play an increasingly crucial role in the apparel import with prevailing lean retailing. Abernathy et al. (1995) sets the relationship between labor cost, lead time and proximity. Labor cost and proximity, and lead time and proximity typically have a negative correlation. For example, the closer a manufacturing country is, the more expensive the labor cost becomes but the shorter lead time becomes (Abernathy et al., 1995). However, he only suggests that plus and minus relationships exist between labor cost, lead time, and proximity, but does not indicate how much one variable negatively impacts or positively influences the other variables. Therefore, more detailed research on the relationships between the two sets of variables from the “old news” and “new news” factors is required to explore further.

In this research, labor cost, exchange rates, quotas and tariffs, clothing expenditure, proximity and quality will be mainly utilized to fit to the linear model to predict the volume of apparel imports in any alterations within the calculated coefficients.

Labor cost

Scholars claim that labor cost is the main factor for the apparel manufacturing location decision. Abernathy et al. (1995) and Nordas¹⁵ (2004a) mentioned that labor cost constitutes a large share of expenses in garment production. Specifically, Silva, Lima, Carvalho, Rocha, Ferreira, Monteiro & Couto (2003) and Brown (2001) explained the importance of manual work in the apparel industries. Silva et al. specifically says that the sewing process, which is one of the most important processes in garment assembly, still is not completely automated and goes through the manual process of sewing workers due to its intricate nature (Silva et al., 2003; Fan et al., 1998).

Salinger pointed out that the apparel industry is sensitive to unskilled labor cost due to the cost factor being extremely important in apparel manufacturing (Salinger, 2003). He said that the increase of labor cost eventually forces firms to leave one country and to find another country with cheaper labor cost (Salinger, 2003, p. 11). Those shifts happen domestically and internationally. For example, the relocation of the apparel assembly factories from the Northeast to the South in the United States in the early 20th century is an example of the domestic relocation (Arpan et al., 1982, p.95). The localization of production resources in the apparel industry is evidently visible when assembly takes place where labor cost is relatively cheap. Hanson explained in his research that assembly, which is one of the major tasks in clothing manufacturing, is mostly done by companies in low-wage countries (Hanson, 1996, p.1266). In summary,

¹⁵*Note.* Nordas (2004a) suggests that labor cost is one of three major variables in measuring cost competitiveness, which include labor cost, the cost of intermediate goods and services (import tariffs, the prices of transport and communication), and the effectiveness of supply chain management are the three major variables in cost competitiveness of a country (Nordas, 2004a).

the volume of apparel imports from a country with low labor cost is larger than that from developed countries or high labor cost countries.

Lead Time

Recently, manufacturing firms' competitive strategy expands to time competition. They try to "compress time in all dimensions" to bring a new product to the market faster (Schoenberger, 1994). This also applies to the apparel industries. The apparel industries uses a term called "lean retailing" referring to the new type of retailing which emphasizes the timely closeness between retailers and producers. Lead time of a manufacturer is a term used to determine how long it takes from an order to a retail store. Many apparel firms require short lead time from an exporter and turnaround within a week (Salinger, 2003).

The research on how lead time influences an apparel firms' outsourcing pattern becomes a topic with increasing interest to scholars with different points of views. Nordas (2004) analyzed the component of lead time. He says that lead time is highly influenced by a country's quality of infrastructure, distance to the market and logistic services (Nordas, 2004). Proximity to the market is considered to be the most influential factor to determine lead time. A good example of enjoying the advantage of short lead times¹⁶ to the United States are countries such as Mexico and those in the Caribbean that stay in a better position than Asian manufacturing countries to export to the United States (Salinger, 2003; Abernathy et al., 1995). Some domestic locations such as San

¹⁶ *Note.* Chetty (1999) makes a similar argument, saying that the geographical and psychological closeness is one of the important factors in an apparel firm's internationalization.

Francisco¹⁷ can advantage of proliferation of lean retailing from its proximity to Asia (Chapple, 1999).

Many apparel retailers try to keep their inventories low to minimize risk under uncertain demand. The importance of the ability to bring what customers want quickly and precisely in apparel manufacturing results from short life cycles of apparel products and large assortments of garment pieces which can be purchased individually by a customer. Abernathy et al., (1995) assured that apparel products are perishable because if brought to market late, their value can be greatly diminished. Those holding a product after demand for the product has waned face costs associated with price markdowns, clearance sales, and liquidation (Abernathy et al., 1995, p.190).” Naturally, retailers are reluctant to keep a high level of inventory that may result in high risk (Nordas, 2004). One way to keep retail inventories low, apparel firms require manufactures to respond to orders as soon as possible (Abernathy et al., 1995). Also, retailers impose the responsibility to manufacturers to carry larger inventories of finished goods than retailers carry (Nordas, 2004).

The relationship between proximity and manufacture inventory level is clearly explained by Abernathy et al. (1995). Proximity to the market and inventory levels have a negative relationship. The further apart a manufacturer is located from a market, the higher level of inventory that the manufacture should maintain (Albernathy et al., 2002).

Salinger (2003) explained the correlation between proximity and inventory level in a different way. He touched on high fashion products as an example of products with a rapid fashion cycle which requires a high variation in inventory levels. He indicated that

¹⁷ *Note.* The apparel manufacturing industry in San Francisco has experienced a substantial growth during the 1980s (Chapple, 1999).

countries that are far away from the market should restrain from exporting fashion clothing to the market because as the distance increases, the risk of exporting the high fashion products increases (Salinger, 2003, p.19). One example would be high fashion products, which have a fast product cycle, and need a back up with highly variable inventory levels of manufacturers.

Proximity can be explained by examining five sample countries, Mexico, China, Italy, Korea, and Hong Kong, Mexico, which is the closest apparel exporter to the United States, becomes the furthest apparel exporter to Japan. The furthest exporter among sample countries to the United States is the closest apparel exporter to Japan, see Table 3.

Table 3

Proximity between Import Country and Export Country

Exporting Country Capital City	Importing Country	
	Distance mile to Washington D.C., the United States	Distance mile to Tokyo, Japan
Seoul, Korea	6943	718
Hong Kong, Hong Kong	8151	1793
Mexico City, Mexico	1883	7019
Beijing, China	6926	1302
Rome, Italy	4491	6124

Note. From “Surface Distance between Two Points of Latitude and Longitude” by Byers, J. A, 1997. From <http://www.wcrl.ars.usda.gov/cec/java/lat-long.htm>.

Quality

There are two ways of quantifying the quality of import products. One is to measure the capital investment of one country to the apparel industries and assume the quality of manufacturing countries. The other way is to measure the unit price of import products and use it as a quality proxy.

The problem of excluding the quality perspective in a trade equation is addressed by Crozet and Erkel-Rousse's study (2004). He pointed out that trade models only taking into account a labor cost factor can face serious estimation problems (Crozet and Erkel-Rousse, 2004). The apparel industry is traditionally classified as a low capital industry. According to Abernathy et al. (1995), capital per worker in apparel firms is around \$2,000 which is more than ten times smaller than that for textile firms¹⁸ (Abernathy et al., 1995). However, recent capital investments in the apparel industry keep increasing due to the lean retailing practice. The new retailing strategies also place manufacturers under greater burden either to hold more finished goods in inventory or to innovate production processes to meet retailer requirements and reduce their own exposure to risk.

Although the importance on capital investments in the apparel industry to achieve better quality products, measuring capital investment of one country can be too general to examine each product category's product quality. Therefore, the price proxy is used to estimate the quality of products from each country (Takanobu, 2002). Takanobu suggested that price is one of the most reliable numerical indicators of quality (2002). He assumed that in the market situation with unlimited competition, consumers will choose the best quality product in the same price range. If price increase is not followed by quality upgrade, the product will not be chosen. Therefore, he said that the quality failure

¹⁸Note. The textile industry technology such as spinning and weaving facilities involves substantial capital (approximately \$300,000) per worker (Abernathy et al., 1995, p.182).

in products compared to price results in disappearance of a product, and the price that is marked can indicate the quality of a product.

Quota and Tariff

The United States and Japan have gone through different strategies to deal with rapid increases in apparel imports. The quota restrictions of the United States created totally different import patterns from that of Japan. In the United States quotas are considered more influential to the protectionist system than tariffs (Arpan et al., 1982). Salinger (2003) even argued that quota imposition should be included in the cost calculations of import products in the United States. From 1957, apparel and textile imports in the United States have been restricted by quotas (Grennes, 1990). Interestingly, most of apparel imports under quantitative restrictions are from developing countries, whereas most developed countries are exempt to the quantitative restrictions (Andriamananjara et al., 2004).

Tariffs directly affect the price of import products, whereas quota only does so indirectly (Ishido, 2004). Tariffs on textile and apparel product are much higher than the average U.S. tariff on general merchandise (Grennes, 1990).

Exchange Rate

Exchange rate fluctuations substantially impact the volume of apparel imports. The Asian currency crisis was a good example. According to Amponsah and Boadu, the Asian currency meltdown created a skyrocketing increase in apparel and textile imports from Asian countries. The growth rate of the imports was about 36% from 1995 through 2001 with the sudden drop of Asian currencies (Amponsah & Boadu, 2002). Amponsah and Boadu added that the major reason apparel exporters such as Hong Kong, India, and

South Korea can produce cheaper apparel products than the United States is believed that Asian currencies are devalued than their actual values (Amponsah & Boadu, 2002).

Another example of the relationship between exchange rates and the volume of apparel imports is measured by Swenson (Swenson, 2000). He concluded that U.S. apparel imports fluctuate as the exchange rate of U.S. dollars changes. He utilized the current exchange rate rather than the lagged exchange rate which captures the “lagged” time between the time the exchange rate changed and the import decision. He emphasized that the United States natural exchange rate has more explanatory power than that of the “lagged” exchange rate because importing firms respond to the changes of the exchange rate quickly (Swenson, 2000).

CHAPTER III

METHODOLOGY

Price and income Elasticities Model of Demand

The Houthakker and Magee's import demand model is used to measure income and price elasticities (1969). They are (See Equation 2):

$$\log M_{it} = A_{0i} + A_{1i} \log Y_{it} + A_{2i} \log (PM_{it} / WPI_{it}) + u_{it} \quad (2)$$

M_{it} ; the i^{th} country's imports of merchandise during year t

Y_{it} ; an index of the country's GNP

PM_{it} ; a price of imports into the i^{th} country

WPI_{it} ; the country's wholesale price index

u_{it} ; the error term

(Houthakker and Magee, 1969, p.112)

Houthakker and Magee (1969) suggested an option to replace the country's wholesale price index (WPI_{it}), which is to "relate import prices to the GNP deflator" (p.112). They mentioned, however, that using GNP deflator is questionable because it includes non traded commodities. Therefore, in this research, because of the complication of gathering the country's wholesale price index for a disaggregated product category, clothing expenditure is used to substitute the GNP deflator which also replaces the country's wholesale price index (WPI_{it}). Price index (the import price compared to the country's wholesale price index) has changed the model as follows (CE_{it} is used as a proxy for WPI_{it}) (See Equation 3):

$$\log M_{it} = A_{0i} + A_{1i} \log Y_{it} + A_{2i} \log(PM_{it}/ CE_{it}) + u_{it} \quad (3)$$

M_{it} ; the i^{th} country's imports of merchandise during year t

Y_{it} ; an index of the country's GNP

PM_{it} ; a price of imports into the i^{th} country

CE_{it} ; the country's clothing expenditure

(PM_{it}/ CE_{it}) ; the import price index compared to a country's clothing expenditure

u_{it} ; the error term

Stern, Francis & Schumacher (1976) suggested that the elasticity model might include explanatory variables other than prices and incomes but those variables were not included in the model for this research.

Import Demand Model

In this study, a linear demand equation is used to estimate the United States and Japanese imports from five export countries, determined as major apparel exporters to both the United States and Japan; China, Korea, Italy, Hong Kong, and Mexico. The model covers data from 1974 to 2004 and product categories, Harmonized System Codes (HTS) 620211, 620212, 620213, 620219, 620292, 620293, 620299, 620411, 620412, 620413, 620419, 620421, 620422, 620423, 620429, 620431, 620432, 620433, 620439, 620441, 620442, 620443, 620444, 620449, 620451, 620452, 620453, 620459, 620461, 620462, 620463, 620469, 620610, 620620, 620630, 620640, and 620690 (See Appendix 1 for explanation for HTS code).

Each country's dollar export values to the United States and Japan are evaluated separately with six variables, labor cost, tariffs, quota fill level, quality, exchange rate, and clothing expenditure.

Table 4 shows the overall picture of the import demand equation. This model measures the United States and Japanese imports of a k^{th} product category from a j^{th} exporter.

Table 4

Overview of the Import Demand Model

importer (i) exporter (j)	the United States	Japan
China	product ₁ , product ₂ ..product ₃₇	product ₁ , product ₂ ..product ₃₇
Hong Kong	product ₁ , product ₂ ..product ₃₇	product ₁ , product ₂ ..product ₃₇
Italy	product ₁ , product ₂ ..product ₃₇	product ₁ , product ₂ ..product ₃₇
Korea	product ₁ , product ₂ ..product ₃₇	product ₁ , product ₂ ..product ₃₇
Mexico	product ₁ , product ₂ ..product ₃₇	product ₁ , product ₂ ..product ₃₇

The import demand model includes six independent variables, tariff, labor cost, exchange rate, clothing expenditure, quality and quota fill level. The dependent variable is import volume to the United States and to Japan for each product category. Leamer and Stern (1970) suggested the log linear relationship for the time series import demand models. The log linear relationship between the dependent variable and the independent variables is shown as follows (See Equation 4);

$$\ln(\text{volume})_{ijkm} = \beta_0 + \beta_1 \ln(\text{tariff})_{ijkm} + \beta_2 \ln(\text{labor cost})_{jm} + \beta_3 \ln(\text{exchange rate})_{jm} + \beta_4 \ln(\text{clothing expenditure})_{im} + \beta_5 \ln(\text{quality proxy})_{ijkm} + \beta_6 (\text{quota fill level})_{ijkm} + \varepsilon_{ijkm}$$

(4)

$\ln(\text{volume})_{ijkm}$; the natural logarithm of import volume in U.S. dollar

$\ln(\text{tariff})_{ijkm}$; the natural logarithm of tariff rate

$\ln(\text{labor cost})_{jm}$; the natural logarithm of labor cost

$\ln(\text{exchange rate})_{jm}$; the natural logarithm of exchange rate

$\ln(\text{clothing expenditure})_{im}$; the natural logarithm of clothing expenditure

$\ln(\text{quality proxy})_{ijkm}$; the natural logarithm of quality proxy

$(\text{quota fill level})_{ijkm}$; the percent quota fill level

The following table describes the variables (See Table 5).

Table 5

Operational Definitions

Variable	Definition
Import volume	<p>Value of apparel imports in U.S. dollar. The import data include the imports from China, Hong Kong, Italy, Korea and Mexico to the United States and Japan from 1974 to 2004. The U.S. import data from 1974 to 1988 are collected under the <i>Tariff Schedule of the United States of America (TSUSA)</i> category (United States International Trade Commission & United States Tariff Commission, Various years) and the data from 1989 to 2004 are collected under <i>Harmonized Tariff Schedule (HTS)</i> category (United States International Trade Commission Office of Tariff Affairs and Trade Agreements, Various years).</p> <p>The U.S. import data were gathered from two main sources; <i>USITC Interactive Tariff and Trade DataWeb Version 2.7.4.</i> (USITC, 2005) and <i>1972-2001 U.S. import data - SAS and STATA from the Center for International Data at U.C. Davis</i> (Feenstra, Various years).</p> <p>The Japanese import data from 1974 to 1987 are collected from <i>Japan Exports & Imports: Commodity by Country</i> (Nihon Kanzei Kyokai, Various years). The data from 1988 to 2004 are collected from <i>Trade Statistics (Boeki Tokei Database)</i> (Japan External Trade Organization (JETRO), Various years). The U.S. import data are customs value and the Japanese import data are f.o.b. value. The unit price of each product was calculated by total import amount divided by total import volume.</p>
Quality	<p>Proxies of the quality of apparel products are measured by quality. It is based on the Takanobu's theory of price as a quality indicator (2002). The unit price of each individual product for each country is measured and divided by the U.S. and Japanese clothing expenditure for each country to level the weight of price the same in both countries.</p>

GNI per capita	<p>Gross National Income per capita. The U.S. and Japanese Gross National Incomes (GNI) were gathered and divided by population information to calculate GNI per capita for each country. GNI information and population are gathered from <i>International Financial Statistics Yearbook</i> (International Monetary Fund., Various years).</p>
Tariff	<p>Import-weighted ad volume tariff rates. Tariff rates for the U.S. data from 1989 to 2004 are gathered from <i>Harmonized tariff schedule of the United States</i> (United States International Trade Commission Office of Tariff Affairs and Trade Agreements, Various years). Tariff rates from 1974 to 1988 were gathered by the TSUSA system from <i>Tariff Schedule of the United States Annotated</i> (United States International Trade Commission & United States Tariff Commission, Various years). The Japanese data from 1974 to 2002 were gathered from <i>Customs tariff schedule of Japan (Jikko kanzeiritsuhyo)</i> and the data from 2003 to 2004 were collected from <i>Japan Customs'</i> webpage (Nihon Kanzei Kyokai, Various years-b; "Customs Tariff Schedules of Japan and Japan Customs," 2003 and 2004). Those data were recalculated to correlate the current import commodity category, HTS, using SAS. The tariff data from 1974 to 1980 for the United States were not used due to the data missing.</p>
Labor cost	<p>Hourly compensation rate in manufacturing production workers in U.S. dollar for Hong Kong, Italy, Korea and Mexico from 1975. <i>International Comparisons of Hourly Compensation Costs for Production Workers in Manufacturing, Supplementary Tables</i> were used to gather Hong Kong, Italian, Korean and Mexican labor cost data in manufacturing from 1975 to 2004 (United States Department of Labor, Various years). Average yearly labor cost data for Chinese workers were collected from <i>China Statistical Yearbook</i> (International center for the advancement of science and technology & University of Illinois at Chicago, Various years). The data are divided by 1944 yearly base hours to get labor cost per hour.</p>

Exchange rate	Nominal "Par Rate/Market Rate" exchange rate (rf exchange rate). "period-average national currency per unit of U.S. dollar (International Monetary Fund, 2005)". Yuan in China, Dollar in Hong Kong, Lire in Italy (in 1999, old lire was replaced by the euro and the conversion rate is 1936.27 lire to the euro), Won in Korea and New Pesos in Mexico were used. Exchange rates of China, Hong Kong, Italy, Korea, and Mexico were obtained from <i>International Financial Statistics Yearbook</i> (International Monetary Fund., Various years).
Clothing expenditure	Household clothing expenditure. Apply only women's apparel. Clothing expenditure for the United States was collected from <i>Average Annual Expenditures and Characteristics of All Consumer Unites; Consumer Expenditure Survey</i> and <i>Consumer Quality</i> (United States Bureau of Labor Statistics, Various years-a; United States Bureau of Labor Statistics, Various years-b). Clothing expenditure for Japan was collected from <i>Japan Statistical Yearbook</i> (Nihon Tokei Kyokai, Various years).
Quota fill level	Percent of quota filled. Textile quota data from 1997 to 2004 were gathered from <i>Year-End Archived Textile Status Report for Absolute Quotas</i> prepared by U.S. Customs and Border Protection ("Year-end textile status report for absolute quotas", 1997-2004). Those data are described in the U.S. Textile and Apparel Category System (Appendix 2) (Office of Textiles and Apparel, 2005). The data from 1980 to 1996 were collected from <i>Year-End Archived Textile Status Report for Absolute Quotas</i> from Office of Textiles and Apparel in Washington D.C. The data from 1974 to 1979 were not used because of the product category matching problem. The quota fill percentage was collected based on the U.S. Textile and Apparel Category System and converted into the Harmonized Tariff System code by using SAS.

Distance	The distance between capital cities. 6943 miles between Seoul, Korea and Washington D.C., United States, 8151 miles between Hong Kong and Washington D.C., United States, 1883 miles between Mexico City, Mexico and Washington D.C., United States, 6926 miles between Beijing, China and Washington D.C., United States, and 4491 miles between Rome, Italy and Washington, D.C., United States. 718 miles between Seoul, Korea, and Tokyo, Japan, 1793 miles between Hong Kong and Tokyo, Japan, 7019 miles between Mexico City, Mexico and Tokyo, Japan, 1302 miles between Beijing, China and Tokyo, Japan and 6124 miles between Rome, Italy and Tokyo, Japan. The proximity information were collected from the <i>U.S. Department of Agriculture webpage</i> (Byers, 1997).
----------	---

Product Categories and Exporters

The top five exporting countries to the United States and Japan for 1990, 1995, 2000, and 2004 are chosen for this study. Over the past fifteen years, China, Korea, Italy, the United States, Taiwan, Thailand, and Viet Nam were top exporters to Japan (Table 6).

Table 6

Major Exporting Countries to Japan for 1990, 1995, 2000, and 2004

1990			1995			2000			2004		
Country	\$ million	%	Country	\$ million	%	Country	\$ million	%	Country	\$ million	%
China	2,649	30.5	China	11,376	56	China	15,708	73	China	18,845	80
Korea	2,062	23.7	Korea	1,894	9.4	Korea	1,034	4.8	Italy	1,030	4.4
Italy	1,094	12.6	Italy	1,514	7.5	Italy	919	4.3	Viet Nam	640	2.7
World	8,690	100	World	20,172	100	World	21,432	100	World	23,649	100

Note. Imports include textile manufacturing products (GC0000). Values in million U.S. dollars. From “Japan External Trade Organization (JETRO), Trade Statistics (Boeki Tokei Database),” by Japan External Trade Organization (JETRO), Various years.

For U.S. apparel imports, the top three importers for each year were Hong Kong, China, Korea, Mexico, and Vietnam (Table3-

3)

Table 7

Major Exporting Countries to the United States for 1990, 1995, 2000, and 2004

1990			1995			2000			2004		
Country	\$ million	%	Country	\$ million	%	Country	\$ million	%	Country	\$ million	%
Hong Kong	3,974	15.7	China	5,849	14.8	Mexico	8,729	13.6	China	11,503	18.9
China	3,422	13.5	Hong Kong	4,340	11.0	China	8,473	13.2	Mexico	5,869	9.6
Korea	3,244	12.8	Mexico	2,875	7.3	Hong Kong	4,571	7.1	Hong Kong	3,315	5.5
World	25,313	100	World	39,437	100	World	64,180	100	World	60,874	100

Note. Imports include apparel, clothing and accessories (SITC 84). Values in million U.S. dollars. From “U.S. Department of Commerce, Trade Statistics,” by U.S. Department of Commerce, Various years, and “Interactive Tariff and Trade Dataweb Version 2.7.4,” by United States International Trade Commission (USITC), Various years.

Therefore, China, Korea, Italy, Hong Kong, and Mexico were chosen as major exporters to the two countries in this study.¹⁹

Product categories covered in this paper are Harmonized System Codes (HTS) 620211, 620212, 620213, 620219, 620291, 620292, 620293, 620299, 620411, 620412, 620413, 620419, 620421, 620422, 620423, 620429, 620431, 620432, 620433, 620439, 620441, 620442, 620443, 620444, 620449, 620451, 620452, 620453, 620459, 620461, 620462, 620463, 620469, 620610, 620620, 620630, 620640, and 620690 (Harmonized System Codes (HTS)). They are thirty eight products representing womens' or girl's articles of apparel and clothing except sleepwear which is not knitted or crocheted (See Appendix 1).

The reason of choosing womens' or girl's articles of apparel and clothing as the sample is that these products represent almost half of the volume of the total apparel and clothing import (not knitted or crocheted) in the United States which is the largest apparel import category in the world (See Figure 12). Table 8 shows that in 2003 and 2004, the import volume of the sample product categories exceeded \$ 15 million. Another reason to choose this sample is that women's and girls apparel is significantly influenced by the fashion trend; therefore, the difference of the proximity from an individual exporter to the United States and Japan can be compared more distinctively. Milner and Rosenblatt (2002) also categorized women's apparel as short life cycle products influenced tremendously by fashion.

¹⁹ *Note.* Viet Nam was deleted due to the complications of data collection during and after the Viet Nam war.

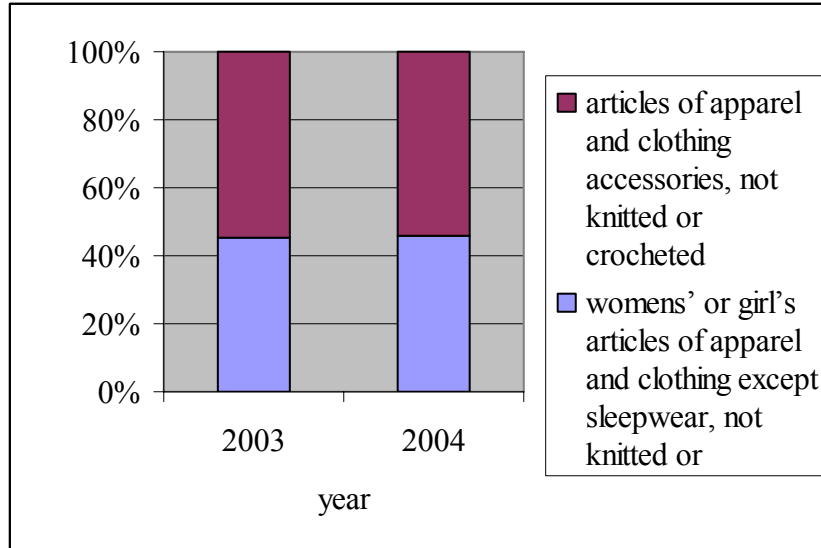


Figure 12. Proportion of Womens' or Girl's Articles of Apparel and Clothing Except Sleepwear, not Knitted or Crocheted in Total Apparel Imports to the United States for 2003 and 2004.²⁰

Table 8

Volume of Total Apparel Imports to the United States for 2003 and 2004 for the United States by Product Category

	2003	2004
	\$ million	\$ million
womens' or girl's articles of apparel and clothing except sleepwear, not knitted or crocheted	15,012	16,143
articles of apparel and clothing accessories, not knitted or crocheted (HTS62)	33,140	35,215

Note. "United State International Trade Commission, Trade Statistics," by United State International Trade Commission, Various years.

²⁰ From "United States International Trade Commission, Trade Statistics," by United States International Trade Commission, Various years.

Data Collection

In this paper, secondary data were used to calculate the import price and income elasticities and import demand model. The data gathering process consisted of two categories. The first process is to obtain the United States and Japanese trade data including import volume and import value, absolute quota level for U.S. apparel import products, tariff schedules of the United States and Japan and the Gross National Product (GNP). It also included exporters' product information, namely, labor cost, exchange rates, quality proxies of individual products and distances from exporter to import countries. Each data set was sorted and merged by the SAS software when required.

The U.S. import data were gathered from two main sources; *USITC Interactive Tariff and Trade DataWeb Version 2.7.4.* and *1972-2001 U.S. import data - SAS and STATA from the Center for International Data at U.C. Davis* (United States International Trade Commission (USITC), 2005; Feenstra, Various years). The first data source covers import data from 1989 to 2004 and the second data source covers import data from 1974 to 1988. The unit price of each product was calculated by import value divided by import volume with a SAS program. U.S. imports for consumption and customs value, not including tariffs, freight, and insurance charges, were used in this paper (United States International Trade Commission (USITC), 2005).

The U.S. government converted import classification codes from the Tariff Schedule of the United States of America (TSUSA) to Harmonized Tariff Schedule (HTS) in 1989. The conversion table from TSUSA and HTS, *Conversion of the tariff schedules of the United States into the nomenclature structure of the harmonized system, revised, showing administrative changes approved by the Trade Policy Staff Committee,*

was used to isolate required data from the TSUSA based import data set (United States Office of the U.S. Trade Representative. Trade Policy Staff Committee, 1986). The converted TSUSA based import data from 1974 to 1988 were merged into the existing HTS based import data from 1989 to 2004 by using SAS.

The Japanese import data were collected from two sources; *Boeki Tokei Database (Trade Statistics Database)* by Japan External Trade Organization and *Japan exports & imports: Commodity by country* (Japan External Trade Organization (JETRO), 2006; Nihon Kanzei Kyokai, Various years-a). The trade information was collected based on the Harmonized Commodity Description and Coding System (HS) which is comparable to Harmonized Tariff Schedule (HTS) from 1988 to 2004. The Commodity Classification for Foreign Trade Statistics (CCFTS) based on the Harmonized Commodity Description and Coding System (HS) was used for trade data from 1974 to 1987. The Japanese trade data are FOB value. The unit price of each product was calculated by total import amount divided by total import volume.

Textile quota data from 1997 to 2004 were gathered from *Year-End Archived Textile Status Report for Absolute Quotas* prepared by U.S. Customs and Border Protection ("Year-end textile status report for absolute quotas", 1997-2004). Those data are described in the U.S. Textile and Apparel Category System (Appendix 2) (Office of Textiles and Apparel, 2005). The data from 1980 to 1996 were collected from *Year-End Archived Textile Status Report for Absolute Quotas* from Office of Textiles and Apparel in Washington D.C. The data from 1974 to 1979 were not used because of the product category matching problem. The quota fill percentage was collected based on the U.S. Textile and Apparel Category System and converted into the Harmonized Tariff System

code. The quota level for the apparel product imports to Japan was assigned 0 because of no quota imposition in Japan.

The U.S. tariff data was obtained from *Harmonized tariff schedule of the United States* and *Tariff schedules of the United States Annotated* (United States International Trade Commission Office of Tariff Affairs and Trade Agreements, Various years; United States International Trade Commission & United States Tariff Commission, Various years). *Customs Tariff Schedules of Japan* from 1974 to 2002 and *Japan Customs'* webpage (Nihon Kanzei Kyokai, Various years-b; "Customs Tariff Schedules of Japan and Japan Customs," 2003 and 2004) were used to gather Japanese tariff schedule.

The U.S. and Japanese Gross National Income (GNI), previously know as Gross National Product (GNP), was gathered from *International Financial Statistics Yearbook* and divided by population information from *International Financial Statistics Yearbook* to calculate GNI per capita (International Monetary Fund., Various years).

Data on labor cost of Hong Kong, Italy, Korea and Mexico were gathered from the *Foreign Labor Statistics* operated by U.S. Department of Labor. *International Comparisons of Hourly Compensation Costs for Production Workers in Manufacturing, Supplementary Tables* were used to gather labor cost data in manufacturing from 1975 to 2004 (United States Department of Labor, Various years). Average yearly labor cost data for Chinese workers were collected from *China Statistical Yearbook* (International center for the advancement of science and technology & University of Illinois at Chicago, Various years). The data were divided by 1944 yearly base hours to get labor cost per hour.

The quality of import products were approximated by import price which is the unit price of each product category divided by the yearly household clothing expenditure of the United States and Japan. Quality proxies were calculated by each product category for each importer and exporter. The U.S. clothing expenditure is from *Average annual expenditures and characteristics of all consumer units, Consumer Expenditure Survey* by United States Bureau of Labor Statistics (Various years-a). The database covers from 1984 to 2004. The first sixteen years of clothing expenditure data of the U.S. household were obtained from *Consumer Quality* (United States bureau of labor statistics, Various years-b). Japanese consumer expenditure data on clothing were gathered from *Japan Statistical Yearbook* (Nihon Tokei Kyokai, Various years).

Proximity between an importing country to an exporting country was calculated by the *Surface Distance Between Two Points of Latitude and Longitude software* available on the U.S. Department of Agriculture webpage (Byers, 1997). The distances between capitals are measured in actual miles (Table 7).

Exchange rates of China, Hong Kong, Italy, Korea, and Mexico were obtained from *International Financial Statistics Yearbook* (International Monetary Fund., Various years). The nominal "Par Rate/Market Rate" exchange rate (rf exchange rate) was collected. The Italian Lira is converted to Euro from 1936.27 lire to the euro in 1999.

Hypotheses

The deterministic parameters for the independent variables in price elasticities of apparel imports are estimated and compared with multiple regression procedures. The apparel import demand includes the coefficient determinants which are

calculated. Each corresponding model for a product category is compared between the United States and Japan.

Multiple Regression Analysis

H1, if the import volume of women's apparel from China, Hong Kong, Italy, Korea and Mexico is related to the U.S. and Japanese GNI per capita, GNI per capita of the United States and Japan will have a positive relationship with the import volume of women's apparel.

H2, if the import volume of women's apparel from China, Hong Kong, Italy, Korea and Mexico is related to the U.S. and Japanese quality, quality of the United States and Japan will have a negative relationship with the import volume of women's apparel.

H3, the coefficient of the U.S. and Japanese quality of women's apparel from China, Hong Kong, Italy, Korea and Mexico is equal for both countries, the United States and Japan, when assumed that the U.S. and Japanese GNI per capita is equal.

H4, the coefficient of the U.S. and Japanese GNI per capita is equal for both countries, the United States and Japan, when assumed that the U.S. and Japanese quality of women's apparel from China, Hong Kong, Italy, Korea and Mexico is equal.

H5, if the import volume of women's apparel from China, Hong Kong, Italy, Korea and Mexico to the United States and Japan is related to the China, Hong Kong, Italy, Korea and Mexico's labor cost, labor cost of China, Hong Kong, Italy, Korea and Mexico will have a negative relationship with the import volume of women's apparel.

H7, if the import volume of women's apparel from China, Hong Kong, Italy, Korea and Mexico to the United States and Japan is related to quality of China, Hong

Kong, Italy, Korea and Mexico, quality of China, Hong Kong, Italy, Korea and Mexico will have a positive relationship with the import volume of women's apparel.

H8, if the import volume of women's apparel from China, Hong Kong, Italy, Korea and Mexico to the United States and Japan is related to a tariff to women's apparel from China, Hong Kong, Italy, Korea and Mexico, a tariff to women's apparel from China, Hong Kong, Italy, Korea and Mexico will have a positive relationship with the import volume of women's apparel.

H9, if the import volume of women's apparel from China, Hong Kong, Italy, Korea and Mexico to the United States and Japan is related to an exchange rate of China, Hong Kong, Italy, Korea and Mexico's currency, an exchange rate of China, Hong Kong, Italy, Korea and Mexico's currency will have a positive relationship with the import volume of women's apparel.

H10, if the import volume of women's apparel from China, Hong Kong, Italy, Korea and Mexico to the United States and Japan is related to clothing expenditure of the United States and Japan, GNI per capita of the United States and Japan will have a direct relationship with the import volume of women's apparel.

H11, if the import volume of women's apparel from China, Hong Kong, Italy, Korea and Mexico to the United States and Japan is related to a quota of China, Hong Kong, Italy, Korea and Mexico, a quota of China, Hong Kong, Italy, Korea and Mexico's currency will have a positive relationship with the import volume of women's apparel.

CHAPTER IV

RESULTS

The result of this study is divided into two parts; the result of the price and income elasticities and then the result of the import demand model building. Each model was constructed for both importer; the United States and Japan, and from each five exporters China, Hong Kong, Italy, Korea and Mexico on thirty eight women's apparel product categories.

Incomes and Price Elasticities

The incomes and price elasticities models for the U.S. apparel imports and the Japanese apparel imports were calculated by using SAS. The significance level, .05, was used to evaluate the global model and individual parameters. The observations were included into the explanation for individual the price and income elasticities only when the p-value of the parameter was significant.

The multiple regression models were used to calculate incomes and price elasticities of apparel imports from China, Hong Kong, Italy, Korea and Mexico to the United States and Japan from 1974 to 2004. The dependent variable was the natural logarithm of the total import volume from the United States and Japan. The independent variables were the natural logarithm of the U.S. and Japanese GNI per capita and the natural logarithm of the quality described in the methodology chapter. The coefficients of the natural logarithm of the U.S. GNI per capita were interpreted as income elasticities and the coefficients of the natural logarithm of the quality were referred as price elasticities. The resulted of the U.S. incomes and price and elasticities were reported by the exporting countries and product category.

Coats and Jackets

The incomes elasticities of wool coats or jackets were not statistically significant for the imports from China and Korea to Japan; whereas, all the income elasticity estimates to the United States were significant. The estimates of Japanese imports were higher than the counterpart of the United States indicating that higher incomes in Japan resulted in higher demand in wool coats or jackets from China (2.71778) and Korea (6.7054) than that in the United States. Only Hong Kong had an inverse relationship with the incomes increase and the import volume. The coefficients for the price elasticities of Japan indicate that the imports depending on the price change were inelastic for Hong Kong, Italy and Mexico except for the imports from China increasing as the Japanese income went up. The only statistically significant price elasticity for the United States was China which had almost 0 price elasticity (Table 9).

Table 9

Price and Income Elasticities of Wool Coats and Jackets

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	1.9927	.0141*	.20246	.0157*	2.71778	.0106*	1.77297	<.0001**
Hong Kong	-1.17009	.028*	1.07635	.2777	.05822	.9478	1.06372	.0013**
Italy	8.39394	<.0001**	-1.6797	.0566	1.81278	.0515	.92791	.0004**
Korea	5.55548	.0002**	.99265	.243	6.7054	.0254*	-.58866	.2063
Mexico	143.39416	<.0001**	.52675	.4416	2.55687	.2219	.99852	.024*

Note. Wool coats jackets include HTS 620211 and 620431 (ccfts 6102251).

* P<.05. ** P<.01.

The income elasticities of China, Italy and Korea for U.S. imports were statistically significant; whereas, the Japanese counterparts were not. The income elasticities ranged from 4.73 to 6.82 indicating that the income increase in the United States resulted in increasing shipments for cotton coats and jackets. The coefficients of price elasticities of Japan were near to 1 but the imports from Italy increases 1.4 % when the incomes increased by 1%. The elasticity findings indicate that imports from Mexico to the United States consists of inferior products (Table 10).

Table 10

Price and Income Elasticities of Cotton Coats and Jackets

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	4.73344	.0033**	1.5202	.08	.85981	.5384	1.14177	.0007**
Hong Kong	.6331	.4428	1.80337	.0736	-.50055	.2557	.84091	<.0001**
Italy	6.81652	<.0001**	.14275	.6484	-.10423	.8086	1.40155	<.0001**
Korea	5.20064	<.0001**	-.6578	.1932	-2.15527	.3346	.06558	.8931
Mexico	-.42303	.6719	-2.95122	<.0001**	3.53672	.2387	.38714	.2916

Note. Cotton coats or jackets include HTS 620212 and 620432 (ccfts 6102252).

* P<.05. ** P<.01.

China and Mexico had statistically significant income elasticities to Japan. The United States had statistically significant income elasticities for China, Italy, Korea and Mexico. The income elasticities for the Japanese and U.S. imports were positive ranging from 3.71 to 12.25. Only the imports from Mexico to Japan had a negative income elasticity (-6.22). The coefficients of the price elasticities for Japan all had positive values but the U.S. counterparts all had negative values. Among them, the imports from Italy to

Japan had the highest price elasticity indicating that Japan imports luxury goods from Italy (Table 11).

Table 11

Price and Income Elasticities of Manmade Fiber Coats and Jackets

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	3.70587	<.0001**	-1.0556	.0167*	4.7715	.0016**	1.63319	<.0001**
Hong Kong	.27968	.1927	-.39722	.0223*	-.76964	.3562	1.06314	.0006**
Italy	6.54727	<.0001**	-1.32123	.1	1.46993	.3617	2.33855	.0001**
Korea	4.99385	.0005**	-4.21088	.0159*	1.74806	.4966	.01834	.9697
Mexico	12.25105	.0001**	1.60253	.32	-6.21539	.0205*	.15533	.5998

Note. Manmade fiber coats and jackets include HTS 620213 and 620433 (ccfts 6102253).

* P<.05. ** P<.01.

The income elasticities of Japan and the United States for the imports of coats and jackets made of “not elsewhere specified” fiber were positive except the imports from Hong Kong to the United States. The price elasticities to Japan were inelastic. The imports from China, Korea and Mexico to the United States had positive values more near to 2 (Table 12).

Table 12

Price and Income Elasticities of Coats and Jackets, “Not Elsewhere Specified”

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	3.21049	<.0001	2.20579	<.0001	4.2315	.0029	.91572	.0005
Hong Kong	-3.44303	<.0001	-.65625	.0574	4.17392	<.0001	.2176	.3985
Italy	6.31302	.0001	.5069	.4159	1.53593	.1574	1.02128	.0008
Korea	-.41979	.1878	1.90597	<.0001	-.02865	.989	.15041	.6518
Mexico	10.72203	<.0001	2.39059	.0364	-	-	-	-

Note. Coats and jackets, “not elsewhere specified,” include HTS 620219 and HTS

620439 (ccfts 6102254).

* P<.05. ** P<.01.

Suits

The determinants of the income elasticities for Japan were not statistically significant at the .05 level. The U.S. income elasticities were positive except Hong Kong had negative income elasticity. The price elasticities of Korea and Italy were near to 1 which means that the demand for the imports of those countries was inelastic for price changes. However, Hong Kong showed a negative elastic pattern in wool suits shipments (Table 13).

Table 13

Price and Income Elasticities of Wool Suits

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	2.38755	.0041**	.07005	.8249	3.39294	.2203	-.57774	.3818
Hong Kong	-3.61904	<.0001**	-1.8485	.0004**	-2.36765	.2086	.71836	.4048
Italy	2.37701	.0003**	.78065	.0026**	.66098	.0883	-.23436	.2126
Korea	1.10333	.125	.89095	.0004**	-.28713	.6772	.83701	.0187*
Mexico	1.82611	.6281	1.16059	.2568	-	-	-	-

Note. Wool suits include HTS 620411 (ccfts 6102255).

* P<.05. ** P<.01.

The price elasticities of Italy showed an opposite result depending on which country they export to. Japan had a negative income elasticities on cotton suits from Italy; whereas, the United States had a positive value on the same product category. The imports from Korea to the United States also showed a strong negative relationship between the U.S. incomes increase and the shipment. The price elasticity of Italian products to the United States was inelastic. The shipment of the “not elsewhere specified” products decreases significantly as its price increases (Table 14).

Table 14

Price and Income Elasticities of Cotton Suits

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	2.36435	.3897	-3.98448	.0042**	1.47152	.2774	.27929	.6756
Hong Kong	.26345	.9249	-.25495	.8476	-1.88128	.1905	.000216	.9964
Italy	1.66195	<.0001**	.70062	.0038**	-2.2024	.0333*	.66534	.0636
Korea	-8.07411	<.0001**	.08415	.9448	1.88461	.0959	.30344	.6244
Mexico	2.78052	.1379	-1.28335	.1358	-	-	-	-

Note. Cotton suits include HTS 620412 (ccfts 6102256)

* P<.05. ** P<.01.

The U.S. income elasticities for cotton suits ranged from -3.99 to 9.67. As the U.S. incomes increased by 1%, the imports from Mexico and China increased by 9.67% and 5.55% respectively. However, the imports from Hong Kong decreased by 3.99%. The price elasticities had negative values ranging from -.43 to -1.26 (Table 15).

Table 15

Price and Income Elasticities of Manmade Suits of the United States and Japan

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	5.55419	<.0001**	.00511	.9887	.59415	.7194	.82789	.1043
Hong Kong	-3.99152	.0031**	-1.26245	.0372*	-2.30777	.0817	.79557	.2431
Italy	.01331	.9814	-1.25772	.0002**	-1.24115	.0741	.17435	.5241
Korea	.05396	.8929	-.42943	.0138*	.2567	.6675	-.39632	.3707
Mexico	9.67186	<.0001**	-.00336	.9926	-	-	-	-

Note. Manmade suits include HTS 620413 (ccfts 6102257).

* P<.05. ** P<.01.

Only the imports from Hong Kong to the United States had negative income elasticity. The rest of the countries with statistically significant income elasticity coefficients were from 1.95 to 7.4. The highest income elasticity was 7.40 for the imports from China. The price elasticities of China is suits imported to the United States had a negative value; whereas, Italy and Mexico had positive price elasticities (Table 16).

Table 16

Price and Income Elasticities of Suits, “Not Elsewhere Specified”

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	7.39596	<.0001**	-.92612	.011*	3.8356	.1425	.40687	.7437
Hong Kong	-2.89205	.0031**	-.26359	.5964	.13134	.9005	.82396	.1312
Italy	1.94586	.0034**	.60986	.0373*	.39895	.2228	-.20631	.2244
Korea	1.01889	.2321	.19103	.6227	4.87491	.0012**	.1276	.5483
Mexico	5.36549	.147	2.69127	.0097**	-	-	-	-

Note. Suits, “not elsewhere specified,” include HTS 620419 (ccfts 6102258).

* P<.05. ** P<.01.

Dress

Again, Hong Kong had negative income elasticity; whereas, the China, Italy, and Korea had positive elasticities. The income elasticities of the products made in Hong Kong were negative for both countries and that of Italy was negative. The U.S. consumers tend to consume more Italian wool dress as their incomes increased compared to the Japanese consumers. They also import more products from China and Korea as their incomes increased. Only the price elasticity of Hong Kong for Japanese imports was statistically significant and was near to 1 (Table 17).

Table 17

Price and Income Elasticities of Wool Dress

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	3.05916	.0016**	1.09083	.3177	2.81172	.2339	-.36265	.6273
Hong Kong	-4.73237	.0003**	.33364	.7082	-3.73316	.0135*	1.01775	.049*
Italy	7.32139	<.0001**	20.9441	.0684	1.98214	.0011**	-.20139	.3795
Korea	4.42765	.0052**	3.7368	.0874	-.69398	.5159	.89027	.1013
Mexico	-2.17008	.4884	-.96178	.1493	-	-	-	-

Note. Wool dresses include HTS 620441 (ccfts 6102261).

* P<.05. ** P<.01.

The income elasticities of Chinese and Italian cotton dresses imported by Japan were less drastic than that of the United States. The U.S. consumers increase their purchased of cotton dresses two times more than Japanese consumers as their incomes increase at the same rate. Especially, cotton dress imports from Mexico increase dramatically with the U.S. incomes increase (Table 18).

Table 18

Price and Income Elasticities of Cotton Dress

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	1.72101	.0016**	1.40489	.1056	.90124	.0385*	.01835	.9318
Hong Kong	.17196	.8298	-.92609	.1092	-2.01371	.0581	-.0521	.9313
Italy	1.7882	.0004**	.63452	.0917	.69016	.0317*	-.04395	.7491
Korea	-1.11032	.2184	1.48108	.1798	.48562	.6677	.40354	.483
Mexico	3.29394	.0384*	-.33111	.8573	-	-	-	-

Note. Cotton dresses include HTS 620442 (ccfts 6102262).

* P<.05. ** P<.01.

The price elasticities of U.S. imports of manmade fiber dresses ranged from 2.34 to 9.80 for four of the export countries with the exception of Hong Kong. The highest price elasticity was the imports from Italy to the United State which increases the total export to the United States as the unit price increases. The imports from Korea to Japan had inelastic demand. And the imports from Hong Kong to the United States decreases as the unit price increases (Table 19).

Table 19

Price and Income Elasticities of Manmade Fiber Dress

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	2.85584	.0001**	.22237	.4241	1.45195	.1822	-.11139	.8298
Hong Kong	-1.56599	.1318	-1.28104	.0364*	-.89703	.2	.39477	.4207
Italy	2.33939	.0098**	1.49341	.0126*	.89912	.2535	-.2827	.3842
Korea	8.3208	.0057**	2.93522	.188	-.60358	.3351	.60208	.0181*
Mexico	9.80434	<.0001**	.79812	.248	-1.96559	.45	-.32155	.4277

Note. Manmade fiber dresses include HTS 620443 (cfts 6102263).

* P<.05. ** P<.01.

The income elasticities of China for both countries were statistically significant and highly elastic. Especially, the Japanese income elasticity of dresses made in China was higher than that of the U.S. income elasticity. The U.S. income elasticity for the Mexican dresses was also significantly high. The imports from Hong Kong and Korea, however, decrease as the U.S. incomes increased. The shipment from Hong Kong decreased more than four times more than that from Korea (Table 20).

Table 20

Price and Income Elasticities of Dress “not elsewhere specified” fiber

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	4.83535	<.0001**	1.69581	<.0001**	6.79996	.0174*	1.11626	.0919
Hong Kong	-5.2442	.0002**	-1.72278	.0301*	1.34859	.0998	.65194	.0301*
Italy	2.56345	<.0001**	.39071	.2481	2.36375	.0109*	.85695	.001**
Korea	-1.21539	.0163*	1.27435	.1293	1.27969	.3105	.07333	.7842
Mexico	6.24551	<.0001**	.30893	.6652	-	-	-	-

Note. Dresses, “not elsewhere specified,” include HTS 620444, 620449 (ccfts 6102264).

* P<.05. ** P<.01.

Skirts

The income elasticities for both countries ranged from 3.81 to 6.86. The highest income elasticity was the wool skirt imports from Italy to the United States, and the lowest was the imports from China to Japan. But all of the income elasticities which were statistically significant showed that the demand on wool skirts was highly elastic. The price elasticity of Italy for the Japanese import had inelastic demand. The import of wool skirts from China increases dramatically as the unit price increases (Table 21).

Table 21

Price and Income Elasticities of Wool Skirts

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	1.40279	.1362	2.63387	.0062**	3.80398	.0051**	-.50962	.4075
Hong Kong	-.85301	.2805	-.00977	.9913	.41493	.7742	.47006	.5092
Italy	6.86355	<.0001**	-.27646	.7454	.02774	.9512	.52312	.0129*
Korea	4.92041	.0039**	-2.2389	.2836	.50965	.5184	.39625	.341
Mexico	5.41827	.0166*	.88143	.4184	-	-	-	-

Note. Wool skirts include HTS 620451 (ccfts 6102265).

* P<.05. ** P<.01.

The income elasticities of Hong Kong for cotton skirts had opposite resulted. The Japanese consumers decreased their imports from Hong Kong as their incomes increased; whereas, the U.S. consumers increased their imports. The U.S. consumers also increased their imports from China and Korea as their incomes increased. The increase in the unit price of cotton skirts made in Italy resulted in a small increase in total shipments to Japan. The imports from Mexico to the United States decreased as the unit price increases (Table 22).

Table 22

Price and Income Elasticities of Cotton Skirts

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	2.10775	.0004**	-.18924	.7769	1.42218	.1664	-.12394	.8078
Hong Kong	1.67682	.0002**	.36915	.5111	-2.82192	.0265*	.79591	.2244
Italy	1.25022	.0639	.44171	.2979	.45949	.5131	.63711	.0263*
Korea	-.90181	.1959	-1.51693	.1547	.65085	.5096	.67535	.2121
Mexico	4.83112	<.0001**	-1.86102	.0056**	-	-	-	-

Note. Cotton skirts include HTS 620452 (ccfts 6102266).

* P<.05. ** P<.01.

None of the price and income elasticities of manmade fiber skirts for Japan were statistically significant. The imports from Hong Kong and Korea increased by 1% as the U.S. incomes increased by 1%. Mexico and China export dramatically large volumes as the U.S. incomes increased (Table 23).

Table 23

Price and Income Elasticities of Manmade Fiber Skirts

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	2.19475	.0002**	.45128	.6555	1.36876	.2631	-.37476	.5399
Hong Kong	1.00665	.0249*	-.72514	.0658	.62275	.6642	-.10359	.8809
Italy	-.42434	.5529	.12145	.8023	-.99514	.1065	.31865	.2214
Korea	1.12137	.0105*	1.71899	.082	-.07655	.904	-.14634	.6605
Mexico	8.71203	<.0001**	-1.92824	.0849	-	-	-	-

Note. Manmade fiber skirts include HTS 620453 (ccfts 6102267).

* P<.05. ** P<.01.

The income elasticities of skirts, not elsewhere specified, made in China had positive values for both importing countries. The imports from Italy to Japan and the imports from Mexico to United States increased as their incomes increased. However, the imports of skirts from Hong Kong to the United States decreased dramatically as the U.S. incomes increased. The increase in the unit price of the imported from China resulted in the increase of the import to the United States (Table 24).

Table 24

Price and Income Elasticities of Skirts, “Not Elsewhere Specified”

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	4.2958	<.0001**	1.41769	.0017**	7.34195	.0074**	-.60808	.5253
Hong Kong	-3.74721	<.0001**	-.4184	.4384	3.32719	.1041	-1.41063	.2855
Italy	.18143	.7122	.34083	.1968	2.01492	.0005**	-.32386	.1565
Korea	.51179	.3346	.38638	.7908	1.82836	.3177	.38371	.644
Mexico	6.20001	.0021**	-.92586	.0844	-	-	-	-

Note. Skirts, “not elsewhere specified,” include HTS 620459 (ccfts 6102268).

* P<.05. ** P<.01.

Blouses

The cotton blouse shipment from China increased as the incomes of Japan and the United States increased. Especially, the United States imported two times more blouses when the incomes increase at the same rate as Japan. Inversely, the imports blouses of Hong Kong did not increase as fast as the rate of the incomes increase in both countries. Furthermore, the import blouses to Japan decreased even when their incomes increased. The imports from Italy and Mexico increased as the other countries when the U.S.

incomes increased. The unit price increase in cotton blouse imports resulted in the import increase for both countries ranging from .81 to 2.52 (Table 25).

Table 25

Price and Income Elasticities of Cotton Blouses

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	6.57051	.001**	-4083	.2025	3.24672	.0005**	-.29328	.4298
Hong Kong	.528	.0205*	1.70751	.0158*	-1.33842	.0387*	.55603	.1329
Italy	1.99798	<.0001**	-.16156	.5707	.41399	.0752	-.01818	.8517
Korea	.33128	.7017	-.13781	.8717	-.40997	.5224	.80667	.0489*
Mexico	3.2548	.0009**	2.52001	.0024**	5.96948	.2655	3.48357	.1357

Note. Cotton blouses include HTS 620630 (ccfts 6102271).

* P<.05. ** P<.01.

The income elasticities of manmade fiber blouses from Hong Kong for Japan and the United States were negative indicating that the imports decreased as both countries' incomes decreased. The rest of the countries exporting manmade fiber blouses to the United States had positive price elasticities ranging from 1.19 to 4.53. The price elasticity was only available for the imports from Hong Kong to Japan and was near to 1. The U.S. price elasticities of China, Korea and Mexico also had positive coefficients from 2.03 to 3.83 (Table 26).

Table 26

Price and Income Elasticities of Manmade Fiber Blouses

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	1.50924	<.0001**	2.03466	.0056**	.18791	.5336	-.03284	.8426
Hong Kong	-2.17398	.0025**	-1.04836	.0668	-3.05678	.002**	.91084	.0064**
Italy	1.1949	.0026**	.20728	.306	-.16815	.8324	.34599	.3051
Korea	1.49291	.0434*	3.03204	.0004**	-.54115	.2104	-.22859	.2681
Mexico	4.5281	<.0001**	3.83008	<.0001**	-	-	-	-

Note. Manmade fiber blouses include HTS 620640 (ccfts 6102272).

* P<.05. ** P<.01.

The income elasticities of China were more than double for the blouses, not elsewhere specified, of Japan and the United States. The elasticities of Hong Kong had opposite values for Japan and the United States, the imports to Japan increased; whereas, the imports to the United State decreased as the incomes increased. The Italian income elasticity to the United States was inelastic and the elasticity of Mexico was higher than any of the other countries. The price elasticities for both importing countries were positive ranging from .87 to 1.31 (Table 27).

Table 27

Price and Income Elasticities of Blouses, “Not Elsewhere Specified”

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	3.19666	.0019**	-1.3181	.2218	2.48816	.0369*	.5243	.0539
Hong Kong	-2.29547	.0038**	.87113	.0016**	2.70571	.0048**	-.0073	.9811
Italy	.98997	.0009**	.96184	<.0001**	.79512	.3631	1.03755	.0006**
Korea	-1.2311	.1228	1.30603	.0007**	-1.71164	.4848	.44808	.4309
Mexico	7.86522	.0002**	.66037	.4269	-	-	-	-

Note. Blouses “not elsewhere specified,” include HTS 620610, 620620, 620690 (ccfts 6102273).

* P<.05. ** P<.01.

Trousers

The income elasticities for wool trouser imports to Japan and the United States were highly elastic. The highest elasticity was for wool trousers made in Korea exporting to the United States (7.71) and the lowest was for those made in Korea imported to the United States (2.99). The rest of the countries, China for the imports of Japan, and Italy for the imports of the United States also had statistically significant incomes elasticities. Only the price elasticity of Korea for the U.S. import was statistically significant at the .05 level (Table 28).

Table 28

Price and Income Elasticities of Wool Trousers

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	1.42022	.1573	.57237	.4275	6.32341	.0048	-1.19037	.2673
Hong Kong	.53153	.1709	-.01377	.9758	-2.79953	.1416	1.89759	.086
Italy	6.75102	<.0001	1.08127	.1692	.77596	.266	-.15629	.6454
Korea	2.99103	.0201	.83017	.0021	1.64715	.3216	.41353	.6619
Mexico	7.71122	.0029	-.67537	.5936	-	-	-	-

Note. Wool trousers include HTS 620461 (ccfts 6102274).

* P<.05. ** P<.01.

The income elasticities of the United State were generally higher than those of Japan. Only cotton trouser imports from Hong Kong to Japan had a negative elasticity; whereas, that to the United States had a positive but inelastic elasticity. The rest of the countries exporting to Japan had elasticities ranging from 2.51 to 3.08. The incomes elasticities of the United States for the imports from China, Italy, Korea and Mexico cover from 4.56 to 11.00. The price elasticity of Japan was only available for the cotton trouser imports from Hong Kong. The shipment from Hong Kong increases a little as the unit price increased. However, the shipments from China, Italy, and Korea to the United States decreased when the unit prices for each country increased (Table 29).

Table 29

Price and Income Elasticities of Cotton Trousers

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	4.56029	<.0001**	-4.35658	<.0001**	2.50631	.0034**	-.31291	.3802
Hong Kong	.64131	.0005**	.23974	.5565	-1.39327	.0025**	.73609	.0003**
Italy	5.23131	<.0001**	-2.06799	<.0001**	3.07741	.0072**	-.96548	.0715
Korea	4.90705	.0002**	.89053	.6126	2.59163	.0254*	.0342	.9483
Mexico	11.00325	<.0001**	-3.32157	.041*	-	-	-	-

Note. Cotton trousers included 620462 (ccfts 6102275).

* P<.05. ** P<.01.

The income elasticities of the manmade fiber trouser import to the United States were statistically significant for all the exporting countries. The highest income elasticities among those countries were for the imports from Mexico and the lowest was for Hong Kong. The income elasticity of the manmade fiber trouser imports from China to the United States was higher than that to Japan. All of the statistically significant price elasticities were for the imports of the United States. They ranged from -1.52 to -1.93 (Table 30).

Table 30

Price and Income Elasticities of Manmade Fiber Trousers

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	5.24322	<.0001**	-1.51506	<.0001**	4.62876	.0056**	-.9995	.1197
Hong Kong	2.76216	.0006**	-.25881	.8337	-1.51071	.2676	1.10554	.178
Italy	4.01743	<.0001**	-1.937	<.0001**	-.13786	.8695	.39498	.4175
Korea	5.26745	<.0001**	-.45301	.2752	.73513	.3979	-.01505	.9718
Mexico	9.80108	<.0001**	-1.71112	.0097**	-	-	-	-

Note. Manmade fiber trousers include HTS 620463 (ccfts 6102276).

* P<.05. ** P<.01.

The income elasticities of other trousers from China for the imports to Japan and the United States had positive values. The Japanese consumers demand trousers “not elsewhere specified” two times more than the U.S. consumers purchased at the same rate of the incomes increase. The income elasticities of Hong Kong were positive for the import to Japan but negative for the import to the United States. The U.S. consumers purchased trousers “not elsewhere specified” from Italy and Mexico more as their incomes increased. The price elasticity of Hong Kong to the United States was inelastic; whereas, the price elasticities of the rest of countries had positive values indicating that the unit price increase for the products from those countries resulted in the increase in imports (Table 31).

Table 31

Price and Income Elasticities of Trousers, “Not Elsewhere Specified”

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	4.16818	<.0001**	.07901	.8775	8.35545	.005**	-1.538	.1717
Hong Kong	-2.66163	<.0001**	-.62606	.0215*	4.07449	.0157*	-1.06894	.1815
Italy	2.93196	<.0001**	.55924	.3447	.72197	.461	.66601	.0084**
Korea	.65393	.0711	1.04837	.0475*	6.08074	.009**	-.64119	.1247
Mexico	8.79833	<.0001**	-1.20867	.381	-	-	-	-

Note. Trousers, “not elsewhere specified,” include HTS 620469 (ccfts 6102277).

* P<.05. ** P<.01.

Outergarments

The income elasticities were positive for the countries exporting wool outergarments to Japan and the United states. The price elasticity of Italian outergarments to Japan was almost four times higher than that to the United States indicating that the Japanese consumers purchased Italian outergarments at a higher rate than the U.S. consumers did when its price went up. The Japanese market also demanded more outergarments made in China as their price increased; whereas, the demand for the garments made in Korea decreased if the price was higher (Table 32).

Table 32

Price and Income Elasticities of Wool Outergarments

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	5.0458	.0228*	-1.67118	.2188	1.80118	.1597	1.5231	.0001**
Hong Kong	-.14298	.8605	-.15988	.8148	2.37152	.0184*	.07954	.804
Italy	2.3879	.0004**	.39024	<.0001**	-.06744	.9392	1.3108	<.0001**
Korea	1.81506	.1929	-.81782	.4236	4.84371	.186	-1.48437	.0206*
Mexico	3.0219	.2771	.98939	.19	-	-	-	-

Note. Wool outergarments include HTS 620291, 620421 (ccfts 6102281).

* P<.05. ** P<.01.

Again, the income elasticities of cotton outergarments made in China showed that the United States imported more product than Japan did when their incomes increase at the same rate. The income elasticities for the rest of the countries, Italy, Korea and Mexico exporting to the United States were statistically significant at the .05 level and the rate of import increase exceeded the rate of incomes increases in the United States. The price elasticity of Chinese outergarments exported to Japan was positive; whereas, those exported to the United States was negative. As the unit price of the imports from Hong Kong increased, the Japanese and the U.S. consumers purchased more from the country. Interestingly, Japan imports more Italian cotton outergarments when the unit price increased but the United States purchased less when the price increases. This was the similar pattern for the import of wool outergarments. U.S. imports from the rest of countries, Hong Kong and Korea showed that the price elasticities of those products were positive (Table 33).

Table 33

Price and Income Elasticities of Cotton Outergarments

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	2.59527	.0067**	-1.31312	.0136*	1.51905	.0212*	.73444	.0006**
Hong Kong	.49895	.3138	1.08548	.0388*	-.38526	.6192	.52077	.0216*
Italy	3.74843	<.0001**	-1.91245	.0002**	1.27677	.2737	1.28873	.0003**
Korea	3.41641	.0003**	1.41346	.0021**	-3.55794	.1904	.24596	.4128
Mexico	6.1378	.0002**	.61888	.2181	-	-	-	-

Note. Cotton outergarments include HTS 620292, 620422 (ccfts 6102282).

* P<.05. ** P<.01.

The income elasticities of China to Japan and the United States, again, showed that the United States import more manmade fiber outergarments at the same rate of incomes increase. The highest was Italy and the lowest was Mexico. The goods from Italy were purchased at the higher rate than those made in Mexico were when the U.S. incomes increased. Generally, the price increase in manmade fiber outergarments resulted in the increase in demand in both countries. The ranged was from .59% to 2.11% when the price increased by 1% (Table 34).

Table 34

Price and Income Elasticities of Manmade Fiber Outergarments

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	5.35836	<.0001**	.26062	.3983	.305618	.0278*	1.41808	<.0001**
Hong Kong	-.52067	.3089	.32372	.5568	.60925	.56	.74102	.0325*
Italy	6.06338	<.0001**	-.29502	.4095	-.17398	.8948	2.10654	<.0001**
Korea	3.01144	<.0001**	1.57315	.0023**	-.09193	.9601	.34804	.338
Mexico	1.8233	.0299*	.58965	.0313*	-	-	-	-

Note. Manmade fiber outergarments include HTS 620294, 620423 (ccfts 6102283).

* P<.05. ** P<.01.

Only outergarments, “not elsewhere specified,” made in China increased its shipments to Japan and to the United States when the importing countries’ incomes increased. Japan imported two times more when the incomes increased at the same rate of the U.S. incomes increase, which was different from the imports of outergarments made of other fibers. The rest of the countries exported less to the United States when the U.S. incomes increased. None of the price elasticities were statistically significant (Table 35).

Table 35

Price and Income Elasticities of Outergarments, “Not Elsewhere Specified”

	U.S.				Japan			
	incomes	p-value	price	p-value	incomes	p-value	price	p-value
China	2.16278	.0043**	.3811	.3848	4.36219	.0011**	.9837	.0006**
Hong Kong	-6.25794	<.0001**	.27914	.4722	1.90081	.1348	.48211	.2025
Italy	-1.97268	.0364*	-.1055	.9084	1.7847	.19	1.14194	.0037**
Korea	-4.1858	.0005**	.32409	.4723	-1.57252	.6379	.20606	.2513
Mexico	-2.66883	.4363	.007858	.8879	-	-	-	-

Note. Outergarments, “not elsewhere specified,” include HTS 620299, 620429 (ccfts 6102284).

* P<.05. ** P<.01.

In summary, the price and income elasticities of the United States and Japan for the imports from China, Hong Kong, Italy, Korea and Mexico were showed as follows by product category.

The income elasticities of the coat and jacket imports from Hong Kong to the United States were negative; whereas, the shipments from the rest of the countries were positive. All of the coat and jacket imports to Japan were increasing as the incomes increased. This reveals that the imports from Hong Kong become less desirable in the United States but still marketable in Japan. The difference could be the result from the strong corporate relationship that Japan had to the companies in Hong Kong was stronger than that of the United States. Mexico always had the highest determinant to the United States in income elasticities regardless of fiber content.

The suit income elasticities of Hong and Korea for the United States were negative; whereas, China and Italy had positive income elasticities. The suit price elasticities for Japan were positive.

Regardless of fiber contents, the income elasticities of dress as from China and Italy exported to the United States were positive but Hong Kong were negative. Italy had positive income elasticities in the dress imports to Japan. The income elasticities of Hong Kong for both countries were negative.

The skirt income elasticities of Mexico and Hong Kong exported to the United States were positive. The income elasticities of Chinese skirts for the United States and Japan were positive. The price elasticities for skirt imports to the United States were always positive. The price elasticities for Japan were positive but near to 1.

The trouser incomes elasticities from Mexico for the United States were the highest for each fiber. The incomes elasticities of trousers from Italy for the United States were available at the .05 significance and had positive values. The income elasticities of trousers from China to Japan were positive. All of the income elasticities for the United States and Japan were positive except for the cotton trouser imports from Hong Kong to Japan.

Mexico did not have the highest income elasticities for the U.S. outer garment imports in all fiber contents. China had positive incomes elasticities for the United States regardless of fiber contents. China and Italy had positive price elasticities for Japan.

Import Demand Model

The multiple regression models were constructed to find the effects of tariff, labor cost, exchange rates, quality, clothing expenditure and quota fill rate on the import

volume of the apparel products from China, Hong Kong, Italy, Korea and Mexico. The models were built and categorized by country and product category.

Results by country

The models for China, Hong Kong, Italy, Korea and Mexico were created based on where they export their products. The adjusted R-squares of the import models for the United States and Japan ranged from .2328 to .5352 and .4514 to .7009, respectively. The difference of the adjusted r square of both countries was significant at the .05 significance level (.0211). The analysis of variance test showed, however, that the R-squares of the United States and Japan were not statistically different at the .05 level (p-value, .1071). All of the models had global p-values less than .01 (Table 36).

Table 36

Import Demand Model of Apparel Imports (by Exporters)

	U.S.					Japan				
	China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
R-square (adjusted)	.4098	.3096	.5075	.2328	.5352	.7009	.4413	.6966	.4625	.4514
global p-value	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**
intercept	-18.3261	158.8666	-4.82834	-20.4862	-110.4361	1.7467	7.9064	12.1346	9.6626	-.5944
p-value	.1400	.0028**	<.0001**	.2434	<.0001**	.6581	.0008**	.0002**	.0973	.9590
ln (tariff)	-.39949	-.3966	.84478	.8428	-.6785	.5687	-1.6205	-1.3912	.1719	-.3538
p-value	.0093**	.0359*	<.0001**	<.0001**	<.0001**	.1045	.0024**	.0869	.7941	.7775
ln (labor cost)	-.33534	-1.9537	1.7276	.2291	-2.4701	2.9630	4.1863	.2679	1.6976	1.9423
p-value	.1344	.0002**	<.0001**	.4916	.0005**	<.0001**	<.0001**	.6428	<.0001**	.1185
ln (exchange rate)	2.1996	-67.4987	-.04623	-.4901	-.3480	3.1709	-3.6735	-.0202	-1.6486	1.2862
p-value	<.0001**	.0107*	.0330*	.2659	.0015**	<.0001**	<.0001**	.6185	.0046**	.0067**
ln (quality)	-.94026	-1.4898	-.1381	-.3956	-1.2372	-.1889	-.1428	.8267	-.1484	.6685
p-value	<.0001**	<.0001**	.0929	.0011**	<.0001**	.1625	.1212	<.0001**	.1015	<.0001**
ln (clothing expenditure)	3.3486	-1.2203	7.1675	5.2322	16.0080	1.8745	.2833	.2284	1.9159	1.0174
p-value	.0569	.6402	<.0001**	.0253	<.0001**	.0051**	.5310	.6718	.0033**	.4694
quota	.0152	.01113	0	.0195	-.01505	-	-	-	-	-
p-value	<.0001**	<.0001**	0	<.0001**	.1773	-	-	-	-	-

Note. * P<.05. ** P<.01.

Stepwise selection process was utilized to choose the best set of variables for each model. The variables chosen as significant in the whole model were also selected after the stepwise process. Tariffs had explanatory power in the U.S. women's apparel import for all five exporters; whereas, only the imports from Hong Kong and Italy had significant p-values in tariff. Quality was important in the imports of the women's apparel products to the United States except when imported from Korea. Notably, the quality of Italy and Mexico were statistically significant to explain the variation of the import volume in Japan.

The stepwise selection procedure chose different variables even when the United States and Japan imported from the same country. Tariffs, exchange rates, quality and quota fill level were statistically significant to the United States when they import from China; whereas, in Japan, labor cost, exchange rates and clothing expenditure had explanatory power. It was notable that labor cost, which had been considered as one of the most important factors in apparel imports, especially from China, had little statistical significance in the United States (Table 37).

Table 37

Variable Selection of the Import Demand Models (by Exporters)

	U.S.					Japan				
	China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
R-square (adjusted)	.4053	.3111	.5057	.2338	.5341	.6988	.4406	.6976	.4613	.4700
global p-value	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**
intercept	6.1282	155.7537	-41.4741	-31.6033	-112.7817	4.1717	9.8706	14.0510	10.7160	9.1449
p-value	<.0001**	.0031**	<.0001**	<.0001**	<.0001**	.1782	<.0001**	<.0001**	.0578	<.0001**
ln (tariff)	-.35724	-.3966	.8630	.8294	-.6868	-	-1.7605	-1.5812	-	-
p-value	.0184*	.0357*	<.0001**	<.0001**	<.0001**	-	.0001**	.0112*	-	-
ln (labor cost)	-	-2.0556	1.6628	-	-2.4680	2.6284	3.8479	-	1.4019	-
p-value	-	<.0001**	<.0001**	-	.0005**	<.0001**	<.0001**	--	<.0001**	-
ln (exchange rate)	2.5948	-70.3319	-.0430	-	-.3381	2.7961	-3.4079	-	-1.5898	.9053
p-value	<.0001**	.0063**	.0467*	-	.0020**	<.0001**	<.0001**	-	.0056**	.0011**
ln (quality)	-.9532	-1.4874	-	-.3866	-1.2386	-	-	.9106	-	.7084
p-value	<.0001**	<.0001**	-	.0014**	<.0001**	-	-	<.0001**	-	<.0001**
ln (clothing expenditure)	-	-	7.3456	6.3314	16.3131	1.4586	-	-	1.7956	-
p-value	-	-	<.0001**	<.0001**	<.0001**	.0172*	-	-	.0002**	-
quota	.0150	.0111	-	.0194	-	-	-	-	-	-
p-value	<.0001**	<.0001**	-	<.0001**	-	-	-	-	-	-

Note. * P<.05. ** P<.01.

Results by Product Category

Coat and Jacket (Appendix 4)

The adjusted r square of the coat and jacket import demand models, which were statistically significant at the level of .05, were between .5957 and .9999. The difference of the adjusted r square of both countries was significant at the .05 significance level (.0211). The models of the United States had 8.24% less explanatory power in the model built.

All of the wool coat and jacket models were significant at the .05 significance which proves that the models had explanatory power. The adjusted r square for the U.S. import ranged from .6488 to .9189 and for Japanese imports from .8479 to .9999. The highest r square was for the imports from Mexico to Japan which had .999. The lowest r square was for the imports from Hong Kong to the United States (.6488). One of the most important variables in importing wool coats and jackets were quality, seven out of ten models had quality as predictive values and all of them were positive values. The imports from China could be easily estimated by looking at the quality changes. Both of the importing countries had adjusted r square higher than .85 for the models of China with quality as only statistically significant independent variable. For the cotton coats and jackets, the import demand models of Mexico were not statistically significant. Quality was the most important single index for the “not elsewhere specified” coat and jacket imports from Korea to both importing countries.

Appendix 4 showed that exchange rates and labor cost of the exporters did not influence the shipment of wool coats and jackets to both importing countries. Quality was predictive in the coat and jacket imports other than made of manmade fiber. The

shipment of coats and jackets was influenced by quality when it was imported to Japan than to the United States. Table also showed that Japan did not import coats and jackets in large volumes from Mexico and even if it did, the imports from Mexico could not be estimated by the independent variables, tariff, labor cost, exchange rates, quality, and clothing expenditure.

Only several models were statistically significant in the suit imported to the United States and Japan. Especially, none of the models for the wool suit imports to the U.S. and cotton and “not elsewhere specified” suit imports to Japan were statistically significant. More than 85% of the variability of the manmade fiber suit imports from Mexico to both importing countries could be estimated by the combination of the independent variables, tariff, labor cost, exchange rates, quality, quota fill level and clothing expenditure.

Suits (Appendix 4)

The variability of the import volume in wool suit imports was hardly explained by the combination of the independent variables in the United States and Japan. Only the import demand model of Italy for the export to Japan had adjusted r square more than .7. The adjusted r square of the U.S. cotton suit import ranged between .7268 and .8746 except for the imports from Hong Kong. The adjusted r square of Japan ranged from .2837 to .6737 except for the imports from Italy. The highest adjusted r square was for the import of Italy (.8746). The import demand models of China, Italy, and Korea for U.S. imports were statistically significant at the .05 level.

The adjusted r square of the U.S. manmade fiber suit import ranged from -.1368 to .9328. Japan ranged from .2192 to .8717. The highest adjusted r square was for Mexico

in U.S. imports. The imports from China, Italy and Mexico in U.S. imports had statistically significant p-values. The imports from Italy in Japanese imports had a statistically significant p-value.

The adjusted r square of the “not elsewhere specified” suits imports for the United States was from .673 to .9985. Japan ranged from .0419 to .7297. The highest adjusted r square for U.S. imports was the import from China (.9558). The lowest adjusted r square for Japanese imports was the imports from Italy (.0419).

Dress (Appendix 4)

The import demand models of dresses made of all fiber contents from China and Mexico were statistically significant. However, individually, depending on fiber contents, the variation of adjusted r square and p values were considerable. For example, all of the wool dress imports demand models were statistically significant except the Hong Kong import model to Japan was statistically insignificant. The adjusted r square of the wool dress import demand models for the United States ranged between .5372 and .8226; whereas, those for Japan ranged around .75. None of the complete models had adjusted r squares higher than .85.

The import demand models of cotton dresses had improved adjusted r square but still ranged from .2378 to .8322 which was less than .85. China, Italy and Mexico had p-value less than .05 among the U.S. import models. China and Hong Kong had p-value less than .05 among the Japanese import models.

Only the models of the manmade fiber dresses imported to the United States, those which were statistically significant, had adjusted r squares of more than .8 indicating that the models of manmade fiber dresses for U.S. imports could be utilized to

estimate the imports from those countries. In the “not elsewhere specified” fiber dress imports, the shipment from China to the United States could be determined by exchange rates, quality, and clothing expenditure but to Japan it requires only labor cost to estimate the future import.

Skirt (Appendix 4)

The import demand models of skirts for imports to Japan showed less explanatory power than those for the United States. None of the statistically significant skirt import models for Japan had adjusted r square more than .85; whereas, for the United States, the manmade fiber skirt model of Mexico, the “not elsewhere specified” fiber skirt models of China, Hong Kong and Mexico, the cotton skirt model of Mexico had strong explanatory power. All of the skirt import models of Mexico to the United States had significant p-values. The most important indicator of the skirt imports from Mexico to the United States, regardless of fiber contents was quality. The increase of price resulted in less shipment to the United States.

The wool skirt import demand models of China, Italy and Korea in U.S. imports had r squares around .7. However, the model of Hong Kong did not have any explanatory power. In Japan, only China had a statistically significant whole import demand model. The imports from China to the United States was strongly influenced by quality but to Japan, exchange rates was a sole statistically valid variable.

Ninety percent of the mean variability of the cotton skirt import volume from Mexico to the United States could be explained with tariff, labor cost, exchange rates, quality and clothing expenditure of the United States. All the import demand models, except for the imports from Mexico to the United States had global p values less than .05.

In the manmade fiber skirt imports, the adjusted r square of U.S. imports ranged between .2115 and .9253. The highest was Mexico (.9253) and the lowest was Hong Kong (.019). The U.S. “not elsewhere specified” fiber skirt import demand models of China, Hong Kong and Mexico had strong explanatory power. The adjusted r square was more than .85 and the models were statistically significant at the .01 level.

Blouse (Appendix 4)

The adjusted r square of the blouse import models with a p-value less than .05 ranged from .6164 to .9594. Regardless of fiber contents, the imports from China to the United States could be estimated by the combinations independent variables at the .05 significance. One of the most import variables in the manmade fiber and “not elsewhere specified” fiber blouse imports to the United States and Japan was quality. In the cotton blouse imports, the adjusted r square for the models of China for both importing countries were more than .8. However, the adjusted r square of Korea for both importers was less than .35. The highest adjusted r square was the import demand model of China for Japan (.8863).

None of the adjusted r square for the import demand models of man made fiber blouses showed that they had statistical explanatory power. The adjusted r squares of the “not elsewhere specified” fiber blouse import demand models for the United States ranged from .3547 (Korea) to .9034 (China). The p values of those models were statistically significant except the Korean model. For Japan, all of the models had p values less than .05 with independent variables, tariff, labor cost, exchange rates, quality and clothing expenditure.

Trouser (Appendix 4)

Most of the trouser import models for the United States had p-values less than .05. Moreover, regardless of fiber contents, the trouser import models of China, Mexico and Italy were statistically significant. The models of Chinese exports to the United States and Japan had strong explanatory power and in those models, exchange rates plays an important role to the shipment to the importers in Japan and labor cost and quality were predictive variables for the United States.

The wool trouser import models had adjusted r square ranging from -.193 to .9012. The models of China were statistically significant for the United States and Japan. For the United States, tariff, labor cost and clothing expenditure were predictive variables; whereas only exchange rates were useful to predict the imports to Japan. The cotton trouser models of China, Hong Kong and Italy were statistically significant for both importing countries. Exchange rates were important for the models of Italy and quality was important for the models of China, which also had strong explanatory power no matter where it exports. None of the manmade fiber trouser models for Japan were statistically significant; whereas, all of the models for the United States were not only statistically significant but also had strong explanatory power. Quota fill level was not significant to any of exports to the United States. The “not elsewhere specified” trouser model of China for the United States included statistically significant variables, tariff, labor cost, exchange rates, quality, clothing expenditure and quota fill level and possessed strong explanatory power.

Outergarments (Appendix 4)

All of the outergarments models for Japan were statistically significant at the .05 level. Especially, quality had predictive power in the imports for Japan regardless of fiber

contents. Those determinants for each fiber were positive indicating that the incomes increase resulted in the more shipment of outergarments to Japan.

In the wool outergarment imports, none of the models for the United States were statistically significant; whereas, all of the models for Japan were statistically significant. The adjusted r square of Japan ranged from .5506 (Korea) and .9149 (Italy). Table showed that all of the cotton outergarment models were statistically for U.S. imports significant except Hong Kong. The most important variable in cotton outergarments was quality. All of the manmade outergarment models had explanatory power with the variables in the models. The imports from China could be estimated with the selected variables due to high adjusted r square. All of the U.S. “not elsewhere specified” outergarment imports included labor cost and exchange rates as their predictive independent variables.

CHAPTER V

CONCLUSIONS, DISCUSSION, AND IMPLICATIONS

Conclusions

In conclusion, the income and price elasticities and import demand models of the U.S. and Japanese womens' and girls apparel imports show distinctive characteristics depending on where they import from and what they import.

The income elasticities of Mexico were statistically higher than those of Hong Kong, Italy, Korea and Mexico. The determinant of the Mexican income elasticity was 9.238 and the p-value of the individual variable was .00513. The reason for high income elasticities in the United States with the products from Mexico was attributed to the proximity advantage that Mexico has. Mexico's distance from the United States was more than four times shorter than China, Hong Kong and Korea which shares a similar price range in the U.S. market. The sudden increase in apparel orders due to the GNP increase can be absorbed by Mexico which was located close to the market. This result strongly supports that Abernathy et al. (2002) and Salinger (2003)'s research finding that Mexico experiences an advantage in exporting products to the United States compared to exporting countries in Asia. For Japan, it can be interpreted that imports from Mexico were specialty products, which can be purchased only in Mexico. Japan only imports a small amount of products from Mexico, but due to the specialty products they import, the increase in income results in rapid increase in import from Mexico.

The income elasticities for the United States and Japan were not, however, statistically different (p-value .3623). The income elasticities for the United States and Japan for different fiber content were not statistically different (p-value .1879). The

income elasticities with Italian imports to the United States were statistically higher than for those to Japan. The determinant of the U.S. income elasticities for the Italian imports was 2.517 higher than that of Japan (p-value, .0382). This result reveals that the U.S. consumers' spending on luxury goods (products from Italy) increases faster than that of Japanese consumers as their income increases at the same rate.

However, the price elasticities were not statistically different depending on fiber contents (p-value .1342). The elasticities were statistically different depending on the importer. The determinant for the United States was -.9738 and the p-value was .006402. It reveals that the U.S. sensitivity on price change was stronger than that of Japan. The price elasticities were not statistically different depending on the exporter (p-value .9617). The result in price elasticities shows that the United States consumers purchase fewer products than the Japanese consumers do when the price of import products increases. This accounts for the number of countries being different. Due to the number of apparel exporters to Japan being limited, the Japanese consumers have little choice but to buy the higher priced products even though the unit price from one country increases (Figure 12). However, because of the diversified sourcing strategy as Table 8 shows, the U.S. consumers can be more reactive to the price change.

The import demand models for the U.S. and Japanese women's apparel imports from China, Hong Kong, Italy, Korea and Mexico were built to determine the influence of tariff, labor cost, exchange rates, quality, clothing expenditure and quota fill level. In general, the stepwise selection procedure (Appendix 5) of the import demand models revealed that tariff was the most important determinant to predict the import from five countries exporting to the United States.

The determinants of tariffs were not statistically different based on an importer, an exporter and fiber contents (p-value, .5599, .1928 and .296) (Appendix 5). The determinants of labor cost in the U.S. models were 2.9664 lower than those of Japan (p-value, .01084). This means that the United States was more sensitive on the changes in labor cost of manufacturing countries. This was an example of Salinger's argument, frequent relocation of apparel manufacturing due to labor cost change (2003). Based on the result, it can be interpreted that the speed of the U.S. firms changing sourcing firms or countries was faster than that of Japanese firms or importers. The determinants of labor cost based on exporters and fibers were not statistically different (.05206, .9011) (Appendix 5).

The determinants of exchange rate were not statistically different based on an importer, an exporter and fiber contents (p-value, .5827, .8102 and .8551) (Appendix 5).

The determinants of quality were statistically different for the U.S. import from the Japanese counterpart (p-value, .02462). The U.S. import quality was 1.2739 lower than that of Japan (p-value, .0246). This shows the consistency of the U.S. consumption pattern revealed in the price elasticities results. Price change results in faster reaction in imports in the United States than in Japan. The determinants of quality based on exporters and fiber contents were not statistically different (p-value, .6293 and .1664) (Appendix 5).

The determinants of clothing expenditures in the selected models were not statistically different based on importers, exporters and fiber contents (p-value, .2058, .7389 and .6426) (Appendix 5).

The determinant of quota fill levels in the import demand models were not statistically different based on importers, exporters and fiber contents (p-value, .5599, .1928 and .296). The research proves that only the imports of several product categories were affected by the quota.

The income and price elasticities and import demand models of the United States and Japan revealed four important insights about import and consumption pattern, apparel trade policy, apparel industry reality, and future prospect.

U.S. apparel imports are influenced by price and income heavily compared to Japanese imports. The lower price elasticities of the U.S. imports prove that the U.S. consumers are more price sensitive than Japanese consumers are. They decrease their purchases more quickly as apparel prices increase than Japanese consumers do. However, when incomes increase, the U.S. consumers start spending more money on luxury goods (products from Italy) than Japanese consumers do. Japanese consumers, differently, tend to increase their imports from all exporting countries faster than the U.S. consumers do when the quality of import products increases. The high income elasticity of Mexico to Japan also reveals that Japan imports basic apparel from closely located countries such as China, Hong Kong but specialty products from Mexico which is inherently income elastic.

More importantly, the findings of this research magnify successes and failures of the apparel trade policies of the United States. The high income elasticities of Mexican products revealed that North American Free Trade (NAFTA), which allows preferential tariff exemption of Mexican apparel products, boosts the proximity advantage that Mexico has over the rest of the exporting countries. However, the research revealed that

the quota restrictions that the United States had over China, Hong Kong and Korea did not significantly affect apparel imports from those countries. The argument that the low labor cost of developing countries harms the U.S. domestic apparel industry can not be proven in this research but this research revealed that the United States buyers are sensitive more to labor cost than Japanese buyers when importing from outside of the United States. This result can be interpreted that domestic buyers in the United States also are highly labor cost sensitive compared to Japanese domestic buyers.

Based on the findings of U.S. import and consumption patterns and the reality of its apparel trade policy and the industry, some strategies for the U.S. apparel industry are suggested; Concentrate on high quality and high-priced domestic apparel production and move their apparel manufacturing expertise and technology to other politically and socially unstable countries. The United States spends too many resources such as creating and maintaining textile and apparel quotas to keep the apparel industry. However, the nature of the sensitiveness to labor cost in the U.S. apparel industry, deteriorates the quality of living of workers in the industry. Therefore, the U.S. government could reconsider the trade restrictions on apparel imports and restructure the industry into a dual system; move low-end apparel production offshore while maintaining and reinforcing high-end apparel production.

In tandem with the domestic restructure of the apparel industry the U.S. apparel industry should utilize their technology and expertise to a new venue. As Palpacuer et al. mentioned (2005), the apparel industry has a power of initiating economic development and stabilizing a society at the same time. By exporting the apparel assembly to politically and socially unstable developing countries, such as countries in the middle east

and in South East Asia, those countries can find their firm ground to be a member of the global economy. The United States, which has the biggest purchasing power and strong technological expertise in the apparel manufacturing, should be a leading role in the offshore manufacturing implementation. Additionally, because of the nature of apparel products, which require the proximity advantage for exports, the ally with other developed countries, such as Japan, would be essential. These activities can benefit the U.S. apparel industry economically, strengthen the presence of the United States in the world politically and stabilize political volatility of underdeveloped countries.

Further Study

The findings of this research can extend to future studies as follows:

1. Explore the manufacturing country diversification and the cost of the consumer lost due to the quota imposition can be calculated and compared.
2. Expand product category, importer, and exporter.
3. Analyze the import data with more upgraded statistical methods such as time series analysis and factor analysis.
4. Explore the difference of the U.S. and Japanese apparel consumer market.
5. Examine the significance of the apparel industries as the motive power in developing country's economy.

LIST OF REFERENCES

- Feenstra, R. (15 March 2006). 1972-2001 U.S. Import data - SAS and STATA. from <http://cid.econ.ucdavis.edu/data/sasstata/usiss.html>
- Abernathy et al., F. H., Dunlop, J. T., Hammond, J. H., Weil, D., Bresnahan, T. F., & Pashigian, P. (1995). The information-integrated channel: A study of the U.S. Apparel industry in transition. *Brookings Papers on Economic Activity. Microeconomics*, 1995, 175-246.
- Adams, F. G., Gangnes, B., & Shachmurove, Y. (2004). Why is china so competitive?
- Aggarwal, V. K. (1985). *Liberal protectionism: The international politics of organized textile trade*. Berkeley: University of California Press.
- Alfred, M. (1920). The elasticity of wants. In *principles of economics*. London: Macmillan.
- Amponsah, W. A., & Boadu, V. O. (2002). Crisis in the U.S. Textile and apparel industries: Is it caused by trade agreements and Asian currency meltdowns?
- Andriamananjara, S., Dean, J., & Spinanger, D. (2004). *Trading apparel: Developing countries in 2005*: Kiel Institute of World Economics.
- Arpan, J. S., Torre, J. d. l., & Toyne, B. (1982). *The U.S. Apparel industry: International challenge, domestic response*. Atlanta: Business Publishing Division: Georgia State University.
- Blokker, N. (1989). *International regulation of world trade in textiles*. Dordrecht, the Netherlands: Martinus Nijhoff Publishers.
- Brown, B. C. (2001). Wages and employment in apparel. *Contemporary Economic Policy*, Vol. 19(No. 4), 454-464.

- Byers, J. A. (1997, 10 February 2006). Surface distance between two points of latitude and longitude. from <http://www.wcrl.ars.usda.gov/cec/java/lat-long.htm>
- Caves, R. E., Frankel, J. A., & Jones, R. W. (1999). World trade and payments: An introduction (8th ed.). Reading, Mass.: Addison-Wesley Publishers.
- Center for Research on Multinational Corporations (SOMO). (May 2003). Pricing in the global garment industry, SOMO Bulletin on Garments & Textiles (Vol. 1, pp. 1-8): Center for Research on Multinational Corporations.
- Changes in global trade rules for textiles and apparel: Implications for developing countries. (2002. Research Report). Arlington, VA: Nathan Associates Inc.
- Chapple, K. (1999). Just-in-time intervention: Economic development policy for apparel manufacturing in San Francisco. *Economic Development Quarterly*, Vol. 13 (No. 1), 78-96.
- Chetty, S. K. (1999). Dimensions of internationalisation of manufacturing firms in the apparel industries. *European Journal of Marketing*, 33 (1), 121-142.
- International Centre for the Advancement of Science & Technology., & University of Illinois at Chicago. China Statistics Archives. (Various years). China statistical yearbook (English ed.). Hong Kong
- Cline, W. R. (1987). The future of world trade in textiles and apparel. Washington, D.C.: Institute for International Economics.
- Cohen, S. D., Blecker, R. A., & Whitney, P. D. (2002). Fundamentals of U.S. Foreign trade policy: Economics, politics, laws, and issues (2nd ed.). Boulder, Colo.: Westview Press.

- Crozet, M., & Erkel-Rousse, H. (2004). Trade performance product quality perceptions, and the estimation of trade price elasticities. *Review of International Economics*, 12(1), 108-129.
- Customs Tariff Schedules of Japan and Japan Customs. (2003 & 2004). Customs tariff schedules of Japan (Jikkokanzeiritsuhyo). from <http://www.customs.go.jp/tariff/index.htm>
- D'Aveni, R. A., & Gunther, R. E. (1994). *Hypercompetition: Managing the dynamics of strategic maneuvering*. New York
- Davidson, W., Feigenoff, C., & Chadar, F. (1986). *International competition in textiles and apparel: The U.S. Experience*. Washing, DC: National Chamber Foundation.
- Destler, I. M., Fukui, H., & Sato, H. (1979). *The textile wrangle: Conflict in Japanese-American relations, 1969-1971*. Ithaca, N.Y.: Cornell University Press.
- Dicken, P. (1992). *Global shift: The internationalization of economic activity* (2nd ed.). New York: Guilford Press.
- Dickerson, K. G. (1999). *Textiles and apparel in the global economy* (3rd ed.). Upper Saddle River, NJ: Merrill/Prentice-Hall.
- Eastwood, D. B. (1985). *The economics of consumer behavior*. Newton: Allyn and Bacon, Inc.
- Elbehri, A., Hertel, T., & Martin, W. (2003). Estimating the impact of WTO and domestic reforms on the Indian cotton and textile sectors: A general-equilibrium approach. *Review of Development Economics*, 7(3), 343-359.
- Fan, J. X., Lee, J., & Hanna, S. (1998). Are apparel trade restrictions regressive? *The Journal of Consumer Affairs*, Vol. 32(No. 2), 252-274.

- Fernie, J., & Azuma, N. (2004). The changing nature of Japanese fashion. *European Journal of Marketing*, Vol.38(No.7), 790-808.
- Finger, J. M., & Harrison, A. (1996). Import protection for U.S. Textiles and apparel: Viewed from the domestic perspective. In A. O. Krueger (Ed.), *The political economy of trade protection*. Chicago: University of Chicago Press.
- Friman, H. R. (1990). *Patchwork protectionism*. New York: Cornell University Press.
- Gilpin, R. (2001). *Global political economy: Understanding the international economic order*. Princeton New Jersey: Princeton University Press.
- Gottheil, F. (2005). *Principles of microeconomics (4th ed.)*. Mason, Ohio: Thomson Publishing.
- Green, C. (1998). The Asian connection: The U.S.-Caribbean. *Latin American Research Review*, 33(3), 7-47.
- Grennes, T. (1990). The collision course on textile quotas. *Policy Analysis*(no. 140).
- Hanson, G. H. (1996). Localization economies, vertical organization and trade. *The American Economic Review*, 86(5), 1266-1278.
- Hanson, K. A., & Reinert, K. A. (1997). The distributional effects of U.S. Textile and apparel protection. *International Economics Journal*, 11(3), 1-12.
- Hathaway, O. A. (1998). Positive feedback: The impact of trade liberalization on industry demands for protection. *International Organization*, Vol. 52(No. 3), 575-612.
- Houthakker, H. S., & Magee, S. P. (1969). Income and price elasticities in world trade. *The Review of Economics and Statistics*, 111-125.
- Hufbauer, G. C., & Elliot, K. A. (1994). *Measuring the costs of protection in the United States*. Washington, DC: Institute of International Economics.

- Hunsberger, W. (1964). *Japan and the United States in world trade*. New York.
- International Monetary Fund. (Various years). *International financial statistics yearbook* (English ed.). Washington, D.C.: International Monetary Fund.
- Ishido, H. (2004). *The economic impact of trade liberalization on the Asean plus three: The case of textile industries* (Working Paper): Development Studies Center.
- James, W., Ray, D. J., & Minor, P. J. (2002). *Indonesia's textile and apparel industry: Meeting the challenges of the changing international trade environment* (Project for Economic Growth). Jakarta, Indonesia.
- Japan external trade organization (JETRO). (2006, 20 February 2006). Boeki tokei database (trade statistics database). from <http://www3.jetro.go.jp/cgi-bin/nats/cgi-bin/search.cgi>
- Jessen, A., & Rodríguez, E. (1999). *The Caribbean community: Facing the challenges of regional and global integration* (Occasional Paper): ACP-EU Trade Organization.
- Kanamori, H. (1988). *Nyumon nihon keizai* (Introduction to Japanese Economy). Tokyo: Chuo Keizaisha.
- Krugman, P., & Obstfeld, M. (1994). *International economics: Theory and policy*. New York: HarperCollins College Publishers.
- Leamer, E. E., & Stern, R. M. (1970). *Quantitative international economics*. Boston: Allyn and Bacon.
- Milner, J. M., & Rosenblatt, M. J. (2002). Flexible supply contracts for short life-cycle goods: The buyer's perspective. *Naval Research Logistics*, Vol. 49.
- Murray, T., & Ginman, P. J. (1976). An empirical examination of the traditional import demand model. *Review of Economics and Statistics*, 58, 74-80.

- Nihon Kanzei Kyokai. (Various years-a). Japan exports & imports: Commodity by country. Tokyo: Japan Tariff Association etc.
- Nihon Kanzei Kyokai. (Various years-b). Customs tariff schedules of Japan (Jikkokanzeiritsuhyo). Tokyo: Nihon Kanzei Kyokai.
- Nihon Tokei Kyokai. (Various years). Japan statistical yearbook. Tokyo: Japan Statistical Association etc.
- Nordas, H. K. (2004a). Textiles and clothing after quota elimination: Winners and losers. *Textile Outlook International* (November-December), 100-120.
- Nordas, H. K. (2004b). The global textile and clothing industry post the agreement on textiles and clothing (WTO discussion papers). Geneva: World Trade Organization.
- Office of Textiles and Apparel (OTEXA). (2004). U.S. Textile and apparel category system. Retrieved 20 November, 2005, from <http://otexa.ita.doc.gov/corr.htm>
- Orcutt, G. H. (1950). Measurement of price elasticities in international trade. *Review of Economics and Statistics*, XXXII, 117-132.
- Palpacuer, F., Gibbon, P., & Thomsen, I. (2005). New challenges for developing country suppliers in global clothing chains: A comparative European perspective. *World Development*, Vol. 33(No. 3), 409-430.
- Pelzman, J. (1982). The textile industries. *Annals, AAPSS*(460), 92-99.
- Price, J. E., & Thornblade, J. B. (1972). U.S. Import demand functions disaggregated by country and commodity. *Southern Economic Journal*, 39(1), 46-57.
- Richardson, J. (1996). Vertical integration and rapid response in fashion apparel. *Organization Science*, 7(4).

- Salinger, B. L. (2003, April 4-5). Qualitative dimensions to competitiveness assessments: Lessons from textile and garment industry assessments in South Africa, Viet Nam, and morocco. Paper presented at the International Industrial Organization Conference, Boston, MA.
- Schoenberger, E. (1994). Competition, time and space in industrial change. In G. Gereffi & M. Korzeniewicz (Eds.), *Commodity chains and global capitalism* (pp. 51-66). 1994: Praeger Publishers.
- Shanawaz, S. (2004). Market power and United States sectoral textile imports. *Economic Issues*, 9, 69-84.
- Silva, L. F., Lima, M., Carvalho, H., Rocha, A. M., Ferreira, F. N., Monteiro, J. L., et al. (2003). Actuation, monitoring and closed-loop control of sewing machine presser foot. *Transactions of the Institute of Measurement and Control*, 25(5), 419-432.
- Stern, R. M., Jonathan Francis, and Bruce Schumacher. (1976). *Price elasticities in international trade: An annotated bibliography*.
- Sullivan, P., & Kang, J. (1999). Quick response adoption in the apparel manufacturing industry: Competitive advantage of innovation. *Small Business Management*, 37(1).
- Swenson, D. (2000). Firm outsourcing decisions: Evidence from U.S. Foreign trade zones. *Economic Inquiry*, Volume 38(Number 2), 175 -189.
- Takanobu, N. (2002). Measurement of quality in monopolistic product market. *Japan and the World Economy* (14), 265-280.

- Thornblade, J. B. (1971). Textile imports from the less-developed countries: A challenge to the American market. *Economic Development and Cultural Change*, Vol. 19 (Issue 2), 277-286.
- Trela, I., & Whalley, J. (1990). Global effects of developed country trade restrictions on textiles and apparel. *The Economic Journal*, 100(403), 1190-1205.
- U.S. Department of labor, labor statistics. (Various years). Washing, DC: U.S. department of labor.
- United States Bureau of Labor Statistics. (Various years-a). Average annual expenditures and characteristics of all consumer units, consumer expenditure survey. Washington, DC: U.S. Dept. of Labor Bureau of Labor Statistics.
- United States Bureau of Labor Statistics. (Various years-b). Consumer price index. from <http://purl.access.gpo.gov/GPO/LPS60215>
- United States Department of Commerce (Various years). Trade statistics. from http://www.commerce.gov/economic_analysis.html
- United States Department of Labor. (Various years). Comparisons of hourly compensation costs for production workers in manufacturing, supplementary tables. from <http://stats.bls.gov/fls/home.htm>
- United States Office of the U.S. Trade Representative. Trade Policy Staff Committee. (1986). Conversion of the tariff schedules of the United States into the nomenclature structure of the harmonized system, revised, showing administrative changes approved by the trade policy staff committee (3rd ed.). Washington, D.C.

- United States International Trade Commission Office of Tariff Affairs and Trade
Agreements. (Various years). Harmonized tariff schedule of the United States.
Washington, D.C.
- United States International Trade Commission & United States Tariff Commission.
(Various years). Tariff schedules of the United States annotated. Washington D. C.
- USITC. (2005, 20 March 2006). USITC interactive tariff and trade dataweb version 2.7.4.
from http://dataweb.usitc.gov/scripts/user_set.asp
- Verma, S. (2001). WTO agreement on textiles and clothing: Impact on Indian textile &
clothing industry. In G. K. Chadha (Ed.), WTO and the Indian economy.
- Wallace, W. H., Naylor, T. H., & Sasser, W. E. (1968). An econometric model of the
textile industries in the United States. *The Review of Economics and Statistics*,
50(1), 13-22.
- WTO. (Various years). WTO international trade statistics. from
http://www.wto.org/english/res_e/statis_e/statis_e.htm
- Year-end textile status report for absolute quotas. (1997-2004, 5 March 2006). from
http://www.cbp.gov/xp/cgov/import/textiles_and_quotas/textile_status_report/archived/
- Yoshimatsu, H. (2000). Internationalization, corporate preferences and commercial
policy in Japan. New York: St. Martin's Press.

APPENDIX 1
CHART FOR PRODUCT CATEGORY

HTS code	Product Description
620211	Women's or Girls' Overcoats, Car-coats, Capes, Cloaks, of Wool
620212	Women's or Girls' Overcoats, Car-coats, Capes; Cloaks, of Cotton
620213	Women's or Girls' Overcoats, Car-coats, Capes, Cloaks of Man-made Fibers
620219	Women's Overcoats, Carcoats, Capes, Cloaks, of Other Textile Materials
620291	Women's or Girls' Anoraks, Wind-cheaters, Wind-jackets of Wool
620292	Women's or Girls' Anoraks, Wind-cheaters, Wind-jackets of Cotton
620293	Women's or Girls' Anoraks, Wind-cheaters, Wind-jackets of Man-made Fibers
620299	Women's Anoraks, Wind-cheaters, Wind-jackets of Other Textile Materials
620411	Women's or Girls' Suits, of Wool or Fine Animal Hair
620412	Women's or Girls' Suits, of Cotton
620413	Women's or Girls' Suits, of Synthetic Fibers
620419	Women's or Girls' Suits, of Other Textile Materials
620421	Women's or Girls' Ensembles, of Wool or Fine Animal Hair
620422	Women's or Girls' Ensembles, of Cotton
620423	Women's or Girls' Ensembles, of Synthetic Fibers
620429	Women's or Girls' Ensembles, of Other Textile Materials
620431	Women's or Girls' Jackets, of Wool or Fine Animal Hair
620432	Women's or Girls' Jackets, of Cotton
620433	Women's or Girls' Jackets, of Synthetic Fibers
620439	Women's or Girls' Jackets, of Other Textile Materials
620441	Women's or Girls' Dresses, of Wool or Fine Animal Hair
620442	Women's or Girls' Dresses, of Cotton
620443	Women's or Girls' Dresses, of Synthetic Fibers
620444	Women's or Girls' Dresses, of Artificial Fibers
620449	Women's or Girls' Dresses, of Other Textile Materials
620451	Women's or Girls' Skirts, Divided Skirts, of Wool or Fine Animal Hair
620452	Women's or Girls' Skirts, Divided Skirts, of Cotton
620453	Women's or Girls' Skirts, Divided Skirts, of Synthetic Fibers
620459	Women's or Girls' Skirts, Divided Skirts, of Other Textile Materials
620461	Women's or Girls' Trousers, Breeches, of Wool or Fine Animal Hair
620462	Women's or Girls' Trousers, Breeches, of Cotton
620463	Women's or Girls' Trousers, Breeches, of Synthetic Fibers
620469	Women's or Girls' Trousers, Breeches, of Other Textile Materials
620610	Women's or Girls' Blouses, Shirts, Shirt-blouses, of Silk or ilk Waste

620620	Women's or Girls' Blouses, Shirts, of Wool or Fine Animal Hair
620630	Women's or Girls' Blouses, Shirts, of Cotton
620640	Women's or Girls' Blouses, Shirts, of Man-made Fibers
620690	Women's or Girls' Blouses, Shirts, of Other Textile Materials

Note. "Harmonized tariff schedule of the United States," by United States International Trade Commission Office of Tariff Affairs and Trade Agreements, Various years.

APPENDIX 2

TARIFF SCHEDULE OF THE UNITED STATES OF AMERICA (TSUSA)

CONVERSION TO HARMONIZED TARIFF SCHEDULE (HTS)

6 digit HTS	8 digit HTS	TSUSA
620211	62021100	3841580
620211	62021100	3842748
620211	62021100	3842755
620211	62021100	3845548
620211	62021100	3846530
620211	62021100	3847205
620211	62021100	3847220
620211	62021100	3847570
620211	62021100	3847826
620212	62021210	7484545
620212	62021220	3840508
620212	62021220	3840509
620212	62021220	3840510
620212	62021220	3840522
620212	62021220	3840924
620212	62021220	3840926
620212	62021220	3840927
620212	62021220	3842743
620212	62021220	3842750
620212	62021220	3843705
620212	62021220	3843710
620212	62021220	3843715
620212	62021220	3843716
620212	62021220	3843720
620212	62021220	3843721
620212	62021220	3843722
620212	62021220	3843724
620212	62021220	3843725
620212	62021220	3843730
620212	62021220	3843732
620212	62021220	3843735
620212	62021220	3843740
620212	62021220	3843741
620212	62021220	3843742
620212	62021220	3843745
620212	62021220	3843746
620212	62021220	3843747
620212	62021220	3843769

620212	62021220	3843770
620212	62021220	3843774
620212	62021220	3843780
620212	62021220	3843790
620212	62021220	3845201
620212	62021220	3845202
620212	62021220	3845210
620212	62021220	3845511
620212	62021220	3847821
620213	62021310	7484563
620213	62021330	3847205
620213	62021340	3842316
620213	62021340	3842318
620213	62021340	3842601
620213	62021340	3842604
620213	62021340	3842605
620213	62021340	3842771
620213	62021340	3842773
620213	62021340	3845566
620213	62021340	3847860
620213	62021340	3849135
620213	62021340	3849136
620213	62021340	3849137
620213	62021340	3849138
620213	62021340	3849140
620213	62021340	3849141
620213	62021340	3849142
620213	62021340	3849144
620213	62021340	3849152
620213	62021340	3849401
620213	62021340	3849402
620213	62021340	3849403
620291	62021900	3845511
620291	62021900	3845566
620291	62021900	3845690
620291	62021900	3847821
620291	62021900	3847826
620291	62021900	3847860
620291	62029110	3841680
620291	62029110	3846695
620291	62029110	3847595

620291	62029120	3841580
620291	62029120	3842748
620291	62029120	3842755
620291	62029120	3845548
620291	62029120	3846530
620291	62029120	3847220
620291	62029120	3847826
620292	62029210	7484545
620292	62029210	7484547
620292	62029210	7484549
620292	62029215	3765412
620292	62029215	3765430
620292	62029220	3840510
620292	62029220	3840522
620292	62029220	3840644
620292	62029220	3840645
620292	62029220	3840645
620292	62029220	3840646
620292	62029220	3840648
620292	62029220	3840650
620292	62029220	3840652
620292	62029220	3840924
620292	62029220	3840926
620292	62029220	3840927
620292	62029220	3842555
620292	62029220	3843500
620292	62029220	3843600
620292	62029220	3843770
620292	62029220	3843776
620292	62029220	3843777
620292	62029220	3843780
620292	62029220	3843790
620292	62029220	3844300
620292	62029220	3844410
620292	62029220	3844415
620292	62029220	3844416
620292	62029220	3844420
620292	62029220	3844421
620292	62029220	3844422
620292	62029220	3845201
620292	62029220	3845202

620292	62029220	3845210
620292	62029220	3845511
620292	62029220	3847821
620292	62029220	3849464
620292	62029220	3849465
620292	62029220	3849466
620293	62029310	7484563
620293	62029310	7484565
620293	62029310	7484570
620293	62029320	3842554
620293	62029320	3842556
620293	62029320	3842664
620293	62029320	3842697
620293	62029320	3849497
620293	62029340	3847220
620293	62029345	3765612
620293	62029345	3765640
620293	62029350	3842601
620293	62029350	3842604
620293	62029350	3842605
620293	62029350	3842771
620293	62029350	3842773
620293	62029350	3845566
620293	62029350	3847860
620293	62029350	3848805
620293	62029350	3849144
620293	62029350	3849152
620293	62029350	3849153
620293	62029350	3849154
620293	62029350	3849155
620293	62029350	3849401
620293	62029350	3849402
620293	62029350	3849403
620299	62029900	3842750
620299	62029900	3842789
620299	62029900	3845511
620299	62029900	3845690
620299	62029900	3847821
620299	62029900	3847826
620299	62029900	3847860
620411	62041100	3841614

620411	62041100	3841616
620411	62041100	3841618
620411	62041100	3841619
620411	62041100	3841621
620411	62041100	3841626
620411	62041100	3841628
620411	62041100	3841629
620411	62041100	3841630
620411	62041100	3842755
620411	62041100	3842756
620411	62041100	3842757
620411	62041100	3842758
620411	62041100	3842758
620411	62041100	3842759
620411	62041100	3842759
620411	62041100	3842760
620411	62041100	3842761
620411	62041100	3842761
620411	62041100	3842762
620411	62041100	3842763
620411	62041100	3842763
620411	62041100	3842764
620411	62041100	3842765
620411	62041100	3842766
620411	62041100	3842767
620411	62041100	3845549
620411	62041100	3845550
620411	62041100	3845551
620411	62041100	3845553
620411	62041100	3845554
620411	62041100	3845555
620411	62041100	3845557
620411	62041100	3845558
620411	62041100	3845559
620411	62041100	3846632
620411	62041100	3846634
620411	62041100	3846636
620411	62041100	3846638
620411	62041100	3846642
620411	62041100	3846644
620411	62041100	3846646

620411	62041100	3846647
620411	62041100	3846648
620411	62041100	3847532
620411	62041100	3847534
620411	62041100	3847536
620411	62041100	3847538
620411	62041100	3847542
620411	62041100	3847544
620411	62041100	3847546
620411	62041100	3847548
620411	62041100	3847552
620411	62041100	3847836
620411	62041100	3847837
620411	62041100	3847839
620411	62041100	3847840
620411	62041100	3847843
620411	62041100	3847845
620411	62041100	3847846
620411	62041100	3847847
620411	62041100	3847941
620412	62041200	3840701
620412	62041200	3840702
620412	62041200	3840704
620412	62041200	3840705
620412	62041200	3840706
620412	62041200	3840708
620412	62041200	3840709
620412	62041200	3840710
620412	62041200	3840711
620412	62041200	3840712
620412	62041200	3840739
620412	62041200	3840740
620412	62041200	3840741
620412	62041200	3840757
620412	62041200	3840758
620412	62041200	3840759
620412	62041200	3842739
620412	62041200	3842740
620412	62041200	3842746
620412	62041200	3842747
620412	62041200	3842748

620412	62041200	3844705
620412	62041200	3844706
620412	62041200	3844707
620412	62041200	3844710
620412	62041200	3844711
620412	62041200	3844712
620412	62041200	3844714
620412	62041200	3844715
620412	62041200	3844716
620412	62041200	3844723
620412	62041200	3844724
620412	62041200	3844725
620412	62041200	3844780
620412	62041200	3844781
620412	62041200	3844783
620412	62041200	3844787
620412	62041200	3845506
620412	62041200	3845507
620412	62041200	3845509
620412	62041200	3845533
620412	62041200	3847817
620412	62041200	3847819
620412	62041200	3847820
620413	62041310	3841630
620413	62041310	3847552
620413	62041320	3842323
620413	62041320	3842327
620413	62041320	3842328
620413	62041320	3842329
620413	62041320	3842329
620413	62041320	3842331
620413	62041320	3842332
620413	62041320	3842333
620413	62041320	3842334
620413	62041320	3842336
620413	62041320	3842337
620413	62041320	3842770
620413	62041320	3842772
620413	62041320	3842774
620413	62041320	3842775
620413	62041320	3842776

620413	62041320	3842776
620413	62041320	3842777
620413	62041320	3842778
620413	62041320	3842778
620413	62041320	3842779
620413	62041320	3842779
620413	62041320	3842780
620413	62041320	3842781
620413	62041320	3842781
620413	62041320	3842782
620413	62041320	3842783
620413	62041320	3842784
620413	62041320	3842786
620413	62041320	3842787
620413	62041320	3842788
620413	62041320	3845673
620413	62041320	3845674
620413	62041320	3845675
620413	62041320	3845677
620413	62041320	3845678
620413	62041320	3845679
620413	62041320	3845680
620413	62041320	3845681
620413	62041320	3845683
620413	62041320	3847863
620413	62041320	3847865
620413	62041320	3847866
620413	62041320	3847867
620413	62041320	3847869
620413	62041320	3847870
620413	62041320	3847871
620413	62041320	3847873
620413	62041320	3847875
620413	62041320	3849143
620413	62041320	3849145
620413	62041320	3849146
620413	62041320	3849156
620413	62041320	3849157
620413	62041320	3849158
620413	62041320	3849159
620413	62041320	3849161

620413	62041320	3849162
620413	62041320	3849163
620413	62041320	3849164
620413	62041320	3849166
620413	62041320	3849674
620419	62041910	3841630
620419	62041910	3847552
620419	62041920	3842327
620419	62041920	3842770
620419	62041920	3842772
620419	62041920	3845673
620419	62041920	3847863
620419	62041920	3849143
620419	62041920	3849145
620419	62041920	3849146
620419	62041930	3842791
620419	62041930	3842795
620419	62041930	3845690
620419	62041930	3845693
620419	62041930	3847887
620419	62041930	3847888
620421	62042100	3841521
620421	62042100	3841580
620421	62042100	3842747
620421	62042100	3842754
620421	62042100	3845547
620421	62042100	3846515
620421	62042100	3846516
620421	62042100	3846531
620421	62042100	3847020
620421	62042100	3847021
620421	62042100	3847215
620421	62042100	3847216
620421	62042100	3847825
620422	62042210	3840950
620422	62042210	3845000
620422	62042230	3840501
620422	62042230	3840502
620422	62042230	3840503
620422	62042230	3840504
620422	62042230	3840505

620422	62042230	3840505
620422	62042230	3840506
620422	62042230	3840510
620422	62042230	3840644
620422	62042230	3840645
620422	62042230	3840646
620422	62042230	3840722
620422	62042230	3840731
620422	62042230	3840732
620422	62042230	3840759
620422	62042230	3840936
620422	62042230	3840936
620422	62042230	3842738
620422	62042230	3842745
620422	62042230	3843753
620422	62042230	3843768
620422	62042230	3844300
620422	62042230	3844420
620422	62042230	3844421
620422	62042230	3844422
620422	62042230	3844609
620422	62042230	3844614
620422	62042230	3844723
620422	62042230	3844724
620422	62042230	3844725
620422	62042230	3845105
620422	62042230	3845222
620422	62042230	3845223
620422	62042230	3845224
620422	62042230	3845227
620422	62042230	3845228
620422	62042230	3845229
620422	62042230	3845234
620422	62042230	3845237
620422	62042230	3845238
620422	62042230	3845239
620422	62042230	3845516
620422	62042230	3847816
620422	62042230	3849519
620423	62042300	3842305
620423	62042300	3842306

620423	62042300	3842319
620423	62042300	3842346
620423	62042300	3842400
620423	62042300	3842535
620423	62042300	3842544
620423	62042300	3842545
620423	62042300	3842546
620423	62042300	3842771
620423	62042300	3842773
620423	62042300	3842784
620423	62042300	3842791
620423	62042300	3845570
620423	62042300	3847859
620423	62042300	3849000
620423	62042300	3849010
620423	62042300	3849116
620423	62042300	3849143
620423	62042300	3849144
620423	62042300	3849145
620423	62042300	3849146
620423	62042300	3849177
620423	62042300	3849200
620423	62042300	3849310
620423	62042300	3849414
620423	62042300	3849415
620423	62042300	3849416
620423	62042300	3849670
620429	62042920	3842305
620429	62042920	3842319
620429	62042920	3842400
620429	62042920	3842550
620429	62042920	3842551
620429	62042920	3842552
620429	62042920	3842771
620429	62042920	3842773
620429	62042920	3845570
620429	62042920	3847859
620429	62042920	3849000
620429	62042920	3849143
620429	62042920	3849144
620429	62042920	3849145

620429	62042920	3849146
620429	62042920	3849310
620429	62042920	3849670
620429	62042940	3842787
620429	62042940	3842796
620429	62042940	3842799
620429	62042940	3845687
620429	62042940	3847887
620429	62042940	3847892
620429	62042940	3849693
620431	62043110	3842747
620431	62043110	3842754
620431	62043110	3847825
620431	62043120	3841580
620431	62043120	3842747
620431	62043120	3842754
620431	62043120	3845547
620431	62043120	3846530
620431	62043120	3847215
620431	62043120	3849634
620431	62043120	7917440
620432	62043210	3842742
620432	62043210	3842749
620432	62043210	3845510
620432	62043220	3840508
620432	62043220	3840509
620432	62043220	3840510
620432	62043220	3840522
620432	62043220	3842742
620432	62043220	3842749
620432	62043220	3843752
620432	62043220	3843753
620432	62043220	3843754
620432	62043220	3843755
620432	62043220	3843756
620432	62043220	3843757
620432	62043220	3843758
620432	62043220	3843760
620432	62043220	3843767
620432	62043220	3845510
620432	62043220	7917415

620433	62043310	3842770
620433	62043310	3842772
620433	62043310	3847859
620433	62043320	3842770
620433	62043320	3842772
620433	62043320	3845565
620433	62043340	3847215
620433	62043350	3842318
620433	62043350	3842770
620433	62043350	3842772
620433	62043350	3845565
620433	62043350	3849143
620433	62043350	3849145
620433	62043350	3849146
620433	62043350	7917473
620439	62043920	3847215
620439	62043930	3842318
620439	62043930	3845565
620439	62043930	3847859
620439	62043930	3849143
620439	62043930	3849145
620439	62043930	3849146
620439	62043940	3842789
620439	62043940	3842793
620439	62043940	3845690
620439	62043940	3847887
620441	62044110	3842733
620441	62044110	3842746
620441	62044110	3847828
620441	62044120	3841611
620441	62044120	3842733
620441	62044120	3842746
620441	62044120	3845542
620441	62044120	3845563
620441	62044120	3846610
620441	62044120	3847510
620441	62044120	3849632
620442	62044210	3840005
620442	62044210	3844510
620442	62044220	3842732
620442	62044220	3842742

620442	62044220	3845512
620442	62044230	3840905
620442	62044230	3840915
620442	62044230	3842732
620442	62044230	3842742
620442	62044230	3844810
620442	62044230	3844820
620442	62044230	3844821
620442	62044230	3844822
620442	62044230	3844914
620442	62044230	3844916
620442	62044230	3844917
620442	62044230	3844918
620442	62044230	3844921
620442	62044230	3844922
620442	62044230	3844923
620442	62044230	3844924
620442	62044230	3844925
620442	62044230	3844926
620442	62044230	3845512
620442	62044230	3847808
620442	62044230	3849506
620443	62044310	3848810
620443	62044320	3842773
620443	62044320	3842775
620443	62044320	3847851
620443	62044330	3841611
620443	62044330	3847510
620443	62044340	3842505
620443	62044340	3842510
620443	62044340	3842515
620443	62044340	3842773
620443	62044340	3842775
620443	62044340	3845569
620443	62044340	3849320
620443	62044340	3849425
620443	62044340	3849430
620443	62044340	3849431
620443	62044340	3849432
620443	62044340	3849662
620444	62044420	3848810

620444	62044430	3841611
620444	62044430	3847510
620444	62044440	3842505
620444	62044440	3842510
620444	62044440	3849320
620444	62044440	3849425
620444	62044440	3849662
620449	62044900	3842786
620449	62044900	3842788
620449	62044900	3842792
620449	62044900	3845689
620449	62044900	3849680
620449	62044990	3847883
620451	62045100	3841000
620451	62045100	3841610
620451	62045100	3842752
620451	62045100	3842756
620451	62045100	3845546
620451	62045100	3845563
620451	62045100	3846630
620451	62045100	3846800
620451	62045100	3847522
620451	62045100	3847829
620452	62045210	3840010
620452	62045210	3844515
620452	62045220	3840938
620452	62045220	3840941
620452	62045220	3840943
620452	62045220	3840944
620452	62045220	3840945
620452	62045220	3842734
620452	62045220	3842744
620452	62045220	3843142
620452	62045220	3845110
620452	62045220	3845114
620452	62045220	3845115
620452	62045220	3845116
620452	62045220	3845120
620452	62045220	3845124
620452	62045220	3845125
620452	62045220	3845126

620452	62045220	3845130
620452	62045220	3845140
620452	62045220	3845141
620452	62045220	3845145
620452	62045220	3845146
620452	62045220	3845147
620452	62045220	3845239
620452	62045220	3845251
620452	62045220	3845516
620452	62045220	3847816
620452	62045220	3847861
620452	62045220	3849521
620453	62045310	3848815
620453	62045320	3841610
620453	62045320	3847522
620453	62045330	3842550
620453	62045330	3842551
620453	62045330	3842552
620453	62045330	3842772
620453	62045330	3842774
620453	62045330	3845570
620453	62045330	3849445
620453	62045330	3849446
620453	62045330	3849447
620453	62045330	3849448
620453	62045330	3849672
620459	62045910	3848815
620459	62045920	3841610
620459	62045920	3847522
620459	62045930	3842550
620459	62045930	3842551
620459	62045930	3842552
620459	62045930	3842772
620459	62045930	3842774
620459	62045930	3845570
620459	62045930	3849443
620459	62045940	3845698
620459	62045940	3845699
620459	62045940	3847892
620459	62045990	3849672
620461	62046100	3841613

620461	62046100	3841680
620461	62046100	3842767
620461	62046100	3842768
620461	62046100	3845561
620461	62046100	3846651
620461	62046100	3847526
620461	62046100	3847556
620461	62046100	3847835
620461	62046100	3849650
620462	62046210	7485050
620462	62046220	3765450
620462	62046220	3840015
620462	62046220	3840936
620462	62046220	3845105
620462	62046220	3845222
620462	62046220	3845223
620462	62046220	3845224
620462	62046220	3845227
620462	62046220	3845228
620462	62046220	3845229
620462	62046230	3840015
620462	62046230	3844520
620462	62046240	3765440
620462	62046240	3840608
620462	62046240	3840618
620462	62046240	3840722
620462	62046240	3840724
620462	62046240	3840731
620462	62046240	3840732
620462	62046240	3840733
620462	62046240	3840736
620462	62046240	3840739
620462	62046240	3840740
620462	62046240	3840741
620462	62046240	3842744
620462	62046240	3842751
620462	62046240	3844647
620462	62046240	3844650
620462	62046240	3844650
620462	62046240	3844651
620462	62046240	3844652

620462	62046240	3844723
620462	62046240	3844724
620462	62046240	3844725
620462	62046240	3844735
620462	62046240	3844745
620462	62046240	3844746
620462	62046240	3844747
620462	62046240	3844750
620462	62046240	3844760
620462	62046240	3844763
620462	62046240	3844764
620462	62046240	3844765
620462	62046240	3844766
620462	62046240	3844774
620462	62046240	3844775
620462	62046240	3844776
620462	62046240	3844787
620462	62046240	3845526
620462	62046240	3847815
620462	62046240	3849527
620462	62046240	3940612
620462	62046240	7917420
620462	62046240	7917426
620463	62046310	7485067
620463	62046315	3765645
620463	62046315	3849310
620463	62046315	3849311
620463	62046315	3849312
620463	62046315	3849313
620463	62046320	3848820
620463	62046325	3841613
620463	62046325	3847556
620463	62046330	3765623
620463	62046330	3849177
620463	62046335	3842342
620463	62046335	3842343
620463	62046335	3842344
620463	62046335	3842345
620463	62046335	3842346
620463	62046335	3842348
620463	62046335	3842355

620463	62046335	3842783
620463	62046335	3842789
620463	62046335	3845684
620463	62046335	3847858
620463	62046335	3849000
620463	62046335	3849010
620463	62046335	3849169
620463	62046335	3849170
620463	62046335	3849171
620463	62046335	3849172
620463	62046335	3849176
620463	62046335	7917481
620469	62046910	3849310
620469	62046920	3841613
620469	62046920	3847556
620469	62046920	3849177
620469	62046925	3842346
620469	62046925	3849000
620469	62046925	3849010
620469	62046930	3842794
620469	62046930	3842799
620469	62046930	3847886
620469	62046990	3842794
620469	62046990	3842798
620469	62046990	3845697
620461	62061000	3842785
620461	62061000	3842792
620461	62061000	3842797
620461	62061000	3847881
620620	62062010	3841000
620620	62062020	3842737
620620	62062020	3842754
620620	62062020	3847824
620620	62062030	3841520
620620	62062030	3841521
620620	62062030	3842754
620620	62062030	3842757
620620	62062030	3845534
620620	62062030	3845563
620620	62062030	3846515
620620	62062030	3846516

620620	62062030	3847020
620620	62062030	3847021
620620	62062030	3847565
620620	62062030	3849642
620630	62063010	3840020
620630	62063010	3844505
620630	62063020	3840501
620630	62063020	3840505
620630	62063020	3842738
620630	62063020	3842745
620630	62063020	3845504
620630	62063030	3840501
620630	62063030	3840502
620630	62063030	3840503
620630	62063030	3840504
620630	62063030	3840505
620630	62063030	3840505
620630	62063030	3840506
620630	62063030	3842738
620630	62063030	3842745
620630	62063030	3844602
620630	62063030	3844603
620630	62063030	3844603
620630	62063030	3844604
620630	62063030	3844605
620630	62063030	3844606
620630	62063030	3844607
620630	62063030	3844608
620630	62063030	3844609
620630	62063030	3844610
620630	62063030	3844611
620630	62063030	3844612
620630	62063030	3844614
620630	62063030	3844616
620630	62063030	3844618
620630	62063030	3844783
620630	62063030	3844787
620630	62063030	3844789
620630	62063030	3845504
620630	62063030	3847804
620630	62063030	3849519

620640	62064010	3848825
620640	62064020	3842769
620640	62064020	3842770
620640	62064020	3847850
620640	62064025	3846515
620640	62064030	3842305
620640	62064030	3842306
620640	62064030	3842310
620640	62064030	3842314
620640	62064030	3842769
620640	62064030	3842770
620640	62064030	3845564
620640	62064030	3849110
620640	62064030	3849115
620640	62064030	3849116
620640	62064030	3849120
620640	62064030	3849125
620640	62064030	3849129
620640	62064030	3849670
620690	62069000	3842785
620690	62069000	3842792
620690	62069000	3842797
620690	62069000	3845687
620690	62069000	3849670
620690	62069000	3849693

Note. From “Conversion of the tariff schedules of the United States into the nomenclature structure of the harmonized system, revised, showing administrative changes approved by the Trade Policy Staff Committee”, by United States Office of the U.S. Trade Representative, Trade Policy Staff Committee, 1986.

APPENDIX 3

HARMONIZED TARIFF SCHEDULE (HTS) CONVERSION TO COMMODITY
CLASSIFICATION FOR FOREIGN TRADE STATISTICS (CCFTS)

HTS	ccfts
620211	6102251
620212	6102252
620213	6102253
620219	6102254
620291	6102281
620292	6102282
620293	6102283
620299	6102284
620411	6102255
620412	6102256
620413	6102257
620419	6102258
620421	6102281
620422	6102282
620423	6102283
620429	6102284
620431	6102251
620432	6102252
620433	6102253
620439	6102254
620441	6102261
620442	6102262
620443	6102263
620444	6102264
620449	6102264
620451	6102265
620452	6102266
620453	6102267
620459	6102268
620461	6102274
620462	6102275
620463	6102276
620469	6102277
620610	6102273
620620	6102273
620630	6102271
620640	6102272
620690	6102273

APPENDIX 4
RESULTS OF IMPORT DEMAND MODEL

Coat and Jacket

		U.S.					Japan				
		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Wool	R-square (adjusted)	.8625	.6488	.9189	.8913	.8066	.9724	.8479	.9067	.9253	.9999
	global p-value	<.0001**	.0265*	<.0001**	<.0001**	.0004**	<.0001**	<.0001**	<.0001**	<.0001**	.006**
	intercept	4.7778	27.2110	-89.0514	25.2985	-218.1527	8.3885	7.4496	4.8041	-22.2039	-2.5335
	p-value	.8259	.7988	.0062**	.6748	.0279*	.2687	.1259	.4498	.1462	.0831
	ln (tariff)	-4.6673	1.2563	.4833	6.8708	-.4830	.1999	-1.2311	-2.3831	-.8515	-.1780
	p-value	.4810	.7515	.1912	.0002**	.6811	.7071	.2579	.0308*	.1676	.0951
	ln (labor cost)	-.4978	-1.4528	3.8237	.3816	-1.0828	.7951	-.0225	.2849	-.5331	2.7656
	p-value	.3579	.2471	.0401*	.7169	.7525	.3038	.9881	.7365	.4477	.0066**
	ln (exchange rate)	.4961	-8.1240	.0056	1.2272	-.5744	2.4591	-4.6923	.0712	.4883	1.6626
	p-value	.4744	.8904	.9462	.3400	.3080	.0223*	.0089**	.0896	.6412	.0125*
	ln (quality)	1.1140	1.9094	-3.0234	1.7522	-.1540	1.2843	1.0603	1.1787	.7402	.2900
	p-value	.0077**	.1737	.0886	.011*	.8280	.0016**	.0048**	<.0001**	.025*	.0442*
	ln (clothing expenditure)	.7052	2.3318	11.9894	.1211	31.4431	1.5915	2.4063	1.3336	.5436	.9721
	p-value	.8034	.4712	.0187*	.9878	.0217*	.1826	.0144*	.0717	.0009**	.0312*
	quota fill level	-.0008	.0005	-	.0007	-	-	-	-	-	-
p-value	.8533	.2986	-	.9533	-	-	-	-	-	-	
Cotton	R-square (adjusted)	.7892	.8085	.9040	.6307	.0118	.7479	.9082	.9287	.8087	-.3988

	global p-value	<.0001**	.0037**	<.0001**	.0011**	.4779	.0079**	<.0001**	<.0001**	.0007**	.7427
	intercept	-50.1149	234.9752	-49.5589	-203.2380	-28.5273	9.9268	17.0771	13.8039	47.9283	-92.5081
	p-value	.2710	.0141*	.035*	.0164*	.5686	.3843	<.0001**	.0101*	.0097**	.7753
	ln (tariff)	7.9747	-61.2553	-.5911	.2003	-.2155	-.3644	-.2766	-.4814	2.0181	-22.2401
	p-value	.0006**	.0013**	.1115	.7062	.6073	.6782	.5910	.4565	.0134*	.8064
	ln (labor cost)	.0842	-4.0551	4.1400	-2.5944	-.6867	.5597	-.1765	1.3303	-2.7525	-2.3303
	p-value	.9341	.0116*	.0012**	.1228	.5948	.6307	.7968	.0707	.0016**	.7571
	ln (exchange rate)	1.0713	-176.5186	-.1147	.8138	.1720	1.1131	-2.8013	-.0193	-3.0134	2.1048
	p-value	.5001	.007**	.0689	.6895	.4489	.4131	.0011**	.4880	.0162*	.3992
	ln (quality)	1.9464	1.8200	-2.3397	-.4025	-.1639	.7062	.8122	1.2368	1.0672	.0838
	p-value	.0047**	.0705	.0014**	.4416	.9166	.0634	<.0001**	<.0001**	.0047**	.8969
	ln (clothing expenditure)	12.7849	-1.0431	6.1277	29.1374	5.5164	1.1494	.7514	.0142	.3224	5.9566
	p-value	.0616	.5654	.0679	.012*	.4628	.5281	.0975	.9753	.8082	.6442
	quota fill level	.0022	-.0097	.0000	.0227	.0000	-	-	-	-	-
	p-value	.8546	.0073**	.0000	.2579	.0000	-	-	-	-	-
Manmade Fiber	R-square (adjusted)	.6655	.5957	.7803	.6417	.9425	.9585	.7739	.8691	.9406	.3447
	global p-value	.0009**	.0412*	<.0001**	.0014**	<.0001**	<.0001**	<.0001**	.0001**	<.0001**	.4045
	intercept	6.1015	64.7599	-71.4671	-138.1230	-161.8422	3.8781	18.0551	10.3950	15.1399	85.0763
	p-value	.8533	.1296	.1224	.1260	.0045**	.5939	.0024**	.4520	.1572	.1100
	ln (tariff)	-.1697	-20.6494	1.1681	.2501	-.2966	.1313	-.4666	-3.9335	.8656	-2.2505
	p-value	.6810	.0281*	.0313*	.7697	.5235	.8244	.6478	.0761	.0645	.3791
	ln (labor cost)	.0545	-1.2986	2.2785	-.7359	-1.3649	1.8128	1.1702	.4072	-1.2189	-4.6328

	p-value	.9442	.0507	.3240	.6995	.4082	.0556	.3846	.8196	.0126*	.2136
	ln (exchange rate)	2.4018	-41.8498	.0120	-1.6319	-.7155	2.4743	-5.7600	.0189	-1.7453	-4.4290
	p-value	.0671	.0925	.9268	.5826	.0114*	.0394*	.0014**	.8116	.0319*	.2022
	ln (quality)	-1.2590	-.0936	-.1131	-4.3677	-.5703	1.1398	.6761	2.2361	.9143	1.0414
	p-value	.0792	.7990	.9182	.1548	.4667	.0021**	.0576	.0001**	.0003**	.3994
	ln (clothing expenditure)	.0681	.3060	11.1337	20.0871	23.6663	2.4768	1.0884	.1748	3.1663	-10.1194
	p-value	.9882	.8289	.1111	.0996	.0025**	.0804	.2389	.9042	.0039**	.1188
	quota fill level	.0014	-.0005	.0000	-.0091	.0000	-	-	-	-	-
	p-value	.8941	.8233	.0000	.6663	.0000	-	-	-	-	-
Not elsewhere specified	R-square (adjusted)	.9619	.8510	.7889	.7852	.9024	.9372	.8620	.9157	.6761	-
	global p-value	<.0001**	.0016**	.0001**	.0004**	<.0001**	<.0002**	<.0001**	<.0001**	.0067**	-
	intercept	-28.7636	221.0785	-92.6729	-12.1799	-129.2201	-4.7095	-16.6839	3.0944	12.0778	-
	p-value	.0832	.1478	.0146*	.5286	.0209*	.5883	.0127*	.6333	.5046	-
	ln (tariff)	-5.1742	.2515	-3.6559	-1.0736	.3771	.4318	-1.0961	-1.6894	.5923	-
	p-value	.0259*	.8236	.4051	.5350	.3778	.4986	.4239	.1070	.5231	-
	ln (labor cost)	-1.0917	-2.9875	2.1515	-1.1631	.3502	1.0608	1.6680	.8900	-1.7610	-
	p-value	.0329*	.0244*	.2464	.0571	.8250	.2263	.2698	.3181	.0737	-
	ln (exchange rate)	.8392	-100.3628	.1045	-.3634	-.5815	2.1146	3.9794	.0656	-.8546	-
	p-value	.2610	.1546	.4379	.4906	.0421*	.0481*	.0639	.1211	.5195	-
	ln (quality)	1.4965	-1.5164	.9047	2.4312	-1.3874	.7218	.3452	1.2762	.7560	-
	p-value	.0071**	.1033	.1026	.0004**	.1290	.0072**	.2529	<.0001**	.0279*	-
	ln (clothing	5.2306	.0989	12.9433	5.5494	18.8527	3.3649	2.8340	1.4305	2.2570	-

expenditure)											
p-value	.0323*	.9655	.0266*	.0605	.0156*	.0342*	.026*	.0629	.1443	-	
quota fill level	-.0058	.0040	.0000	-.0022	-.0207	-	-	-	-	-	
p-value	.0864	.5068	.0000	.5059	.2546	-	-	-	-	-	

Note. * P<.05. ** P<.01.

Suit

		U.S.					Japan				
		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Wool	R-square (adjusted)	.0372	.0169	.0002	.0012	.2292	-	-.4996	.7362	.0748	-
	global p-value	.4168	.6360	.7819	.6879	.8886	6.0000	.8287	.0165*	.4605	-
	intercept	-1.9234	170.7152	-47.4487	37.3241	107.4487	-	20.0934	16.4168	17.7099	-
	p-value	.9429	.1790	.0134*	.3240	.7361	-	.5096	.001**	.6252	-
	ln (tariff)	-.1833	.0028	-.3381	-.3162	-7.2066	-	-5.2749	1.8539	-1.4726	-
	p-value	.6454	.9946	.2324	.3798	.8418	-	.6416	.0768	.8704	-
	ln (labor cost)	-.2289	-3.7724	1.0271	1.3127	-.5829	-	-2.2503	2.1223	-1.082	-
	p-value	.6591	.0078**	.2121	.0698	.9553	-	.8047	.0027**	.9817	-
	ln (exchange rate)	1.5547	-83.9232	.0237	-1.2982	-2.1379	-	-9.541	.2630	-6.087	-
	p-value	.1723	.2030	.5973	.1623	.2406	-	.8981	.2926	.8872	-
	ln (quality)	.0993	-.4560	.2180	.5280	.0535	-	.9991	-.1946	.8624	-
p-value	.6903	.2162	.2659	.0207*	.9876	-	.4269	.0985	.0899	-	

	ln (clothing expenditure)	1.8800	2.5754	8.1811	-2.0215	-13.8679	-	-2.8625	-1.1810	-2.145	-
	p-value	.6231	.6539	.005**	.6772	.7195	-	.5520	.0321*	.9651	-
	quota fill level	.0000	.0000	.0000	.0000	.0000	-	-	-	-	-
	p-value	.0000	.0000	.0000	.0000	.0000	-	-	-	-	-
Cotton	R-square (adjusted)	.7637	-.1387	.8746	.7268	-	.6737	.4038	-.0026	.2837	-
	global p-value	.0064**	.6180	<.0001**	.0058**	6.0000	.0485*	.1487	.4920	.3641	-
	intercept	-182.2625	558.0387	-12.6917	151.5804	-	16.6543	49.8848	31.9412	-41.7507	-
	p-value	.0885	.2949	.2363	.1014	-	.4720	.0466*	.1105	.5787	-
	ln (tariff)	-27.4216	6.4437	-4.1929	-2.8198	-	-2.1493	10.1144	-.0369	12.4952	-
	p-value	.0554	.8448	.0468*	.7920	-	.1231	.1672	.9947	.4399	-
	ln (labor cost)	-.8822	3.9334	.5165	-.0717	-	1.6065	4.0214	-1.2635	-5.0127	-
	p-value	.6206	.5961	.2624	.9616	-	.7021	.3917	.6425	.6090	-
	ln (exchange rate)	-6.3046	-92.1901	.0087	-6.6702	-	.9156	-5.4921	-.8179	7.6815	-
	p-value	.0604	.7128	.7788	.0497*	-	.7186	.1582	.5800	.4566	-
	ln (quality)	-2.4726	.7776	.6818	.6433	-	.3084	.0734	.6442	.6861	-
	p-value	.0449*	.5531	.0243*	.6202	-	.5169	.8805	.1597	.5125	-
	ln (clothing expenditure)	19.3758	-46.8957	2.7464	-13.2682	-	-1.1738	-.7516	-1.4317	6.7651	-
	p-value	.1427	.1346	.035*	.2354	-	.6396	.7829	.6183	.4725	-
	quota fill level	.0000	.0317	.0000	.0000	-	-	-	-	-	-
	p-value	.0000	.3076	.0000	.0000	-	-	-	-	-	-

Manmade Fiber	R-square (adjusted)	.8252	.4299	.4852	-.1368	.9328	.4466	.2192	.8717	.6784	-
	global p-value	.0001**	.1155	.0193*	.7076	.0133*	.1576	.3566	.0021**	.0287*	-
	intercept	3.5174	-45.4248	34.6682	15.4186	78.9992	67.0854	46.3813	31.1502	24.9900	-
	p-value	.9129	.7318	.1306	.6307	.1974	.1573	.1252	.0002**	.0411*	-
	ln (tariff)	-3.2416	6.9413	-1.9499	-1.5926	.9942	2.1860	5.5295	3.3236	-1.9483	-
	p-value	.1421	.4070	.2785	.3721	.5058	.4127	.4513	.0301*	.4515	-
	ln (labor cost)	1.0618	-3.0063	-.0390	.0929	1.7951	16.0881	4.2464	.9422	2.6898	-
	p-value	.0673	.0275*	.9637	.8633	.3133	.1119	.4727	.1541	.0698	-
	ln (exchange rate)	3.1078	52.7049	-.0707	.3894	-1.5034	5.2629	-5.3626	-1.0634	-2.2196	-
	p-value	.0097**	.3887	.1377	.5783	.0129*	.3489	.2335	.0149*	.8519	-
	ln (quality)	-.1002	-.3425	-.5299	-.1605	-2.5746	.5610	.4205	.0741	-2.2787	-
	p-value	.6678	.3842	.0119*	.3752	.0086**	.3535	.6083	.5554	.2857	-
	ln (clothing expenditure)	.4022	-4.7500	-3.2737	-.6928	-10.0084	-4.4193	-1.9701	-1.3980	-3.1310	-
	p-value	.9243	.4474	.2642	.8675	.2249	.4082	.6460	.0466*	.0549	-
	quota fill level	-.0044	.0123	.0000	.0000	.0000	-	-	-	-	-
p-value	.6265	.3133	.0000	.0000	.0000	-	-	-	-	-	
Not elsewhere specified	R-square (adjusted)	.9558	.8491	.6597	.6730	.9985	-	.4160	.0419	.7297	-
	global p-value	<.0001**	.0017**	.002**	.0032**	.027*	-	.1412	.4486	.0998	-
	intercept	35.2842	-76.0655	-48.3538	44.4462	-53.3796	-	42.1310	15.3304	-49.5338	-
	p-value	.0571	.3299	.0167*	.1572	.1571	-	.0234*	.0175*	.6284	-
	ln (tariff)	5.2714	4.8455	-2.1645	3.0174	.4819	-	1.5140	1.4938	7.2018	-

p-value	.0021**	.1043	.2128	.1359	.2949	-	.7672	.3991	.6255	-
ln (labor cost)	.9564	-1.4035	.6730	1.4568	.2224	-	9.2344	1.5496	-2.2023	-
p-value	.0172*	.3894	.4372	.0196*	.6360	-	.0500	.1078	.8476	-
ln (exchange rate)	6.3498	31.8298	.1417	-1.7391	-.2358	-	-6.7297	-.1555	3.9545	-
p-value	<.0001**	.4234	.0331*	.0997	.2148	-	.0509	.7300	.7381	-
ln (quality)	-.1815	.2208	.2773	.1090	1.8467	-	.7056	-.2948	.0622	-
p-value	.0988	.1635	.2005	.5647	.0578	-	.1324	.1422	.9026	-
ln (clothing expenditure)	-2.5573	4.9536	.784292	-1.7678	10.2797	-	-2.9195	-.5634	8.5497	-
p-value	.2927	.1152	.0088	.6603	.1115	-	.2734	.4987	.4373	-
quota fill level	-.0208	.0087	.0000	-.0028	.0000	-	-	-	-	-
p-value	.0106*	.0918	.0000	.5178	.0000	-	-	-	-	-

Note. * P<.05. ** P<.01.

Dress

		U.S.					Japan				
		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Wool	R-square (adjusted)	.5372	.8226	.6635	.6919	-	-	.7447	.7846	-	-
	global p-value	.018*	.0029**	.0019**	.0024**	-	-	.0501	.0093**	-	-
	intercept	-44.5186	68.9616	-115.4082	-154.4345	-	-	50.1279	-6.1005	-	-
	p-value	.2328	.7008	.0574	.0219*	-	-	.0159*	.3520	-	-

	ln (tariff)	-6.2707	5.5026	-4.2733	3.5415	-	-	-5.4800	-.1254	-	-
	p-value	.0997	.5560	.4698	.2879	-	-	.2833	.9522	-	-
	ln (labor cost)	-1.5139	-1.9721	3.1826	-1.3350	-	-	6.8053	.6852	-	-
	p-value	.0922	.4771	.2704	.2214	-	-	.1798	.5342	-	-
	ln (exchange rate)	2.5947	-29.0156	.0626	.3631	-	-	-2.3125	1.1762	-	-
	p-value	.0542	.7767	.6708	.7760	-	-	.4802	.0662	-	-
	ln (quality)	-.5997	1.1845	-.9848	2.0744	-	-	.2926	-.0978	-	-
	p-value	.6142	.4844	.5351	.2132	-	-	.5560	.6828	-	-
	ln (clothing expenditure)	4.8366	3.2684	14.6992	24.7149	-	-	-8.8482	1.2837	-	-
	p-value	.2934	.4863	.0849	.0094	-	-	.0143*	.2239	-	-
	quota fill level	.0026	-.2759	.0000	.0580	-	-	-	-	-	-
	p-value	.9389	.2821	.0000	.0586	-	-	-	-	-	-
	R-square (adjusted)	.6031	.4398	.6386	.2378	.7408	.8322	.7718	.4832	.5933	-
	global p-value	.0085**	.1098	.0028**	.1717	.0157*	.0045**	.0109*	.1031	.0546	-
	intercept	26.7681	-118.1668	32.6176	-73.2672	-73.0712	-1.6180	36.8748	11.8473	9.6503	-
	p-value	.1863	.2254	.0194*	.2941	.1553	.7791	.0075**	.0344*	.7233	-
	ln (tariff)	-2.8075	6.0900	-1.4273	-8.2933	-.7767	-1.0658	3.4425	1.5805	-3.5782	-
	p-value	.2815	.1734	.4837	.0938	.2433	.0153*	.2643	.2751	.5635	-
	ln (labor cost)	-.5519	1.4946	1.3353	-3.1660	-1.7204	-.7938	2.2993	1.1638	-.6809	-
	p-value	.3333	.3470	.1764	.0457*	.3593	.4771	.3121	.1230	.8188	-
	ln (exchange rate)	1.0947	67.8367	-1.1046	-1.3364	-.0500	-1.4690	-5.9617	.1801	-2.7493	-
	p-value	.1607	.1908	.0416*	.3865	.8348	.0579	.0089**	.6213	.3569	-
Cotton											

Manmade Fiber	ln (quality)	1.4222	-.9867	.1890	.0860	-.0275	-.0008	.2749	-.0291	.4018	-
	p-value	.2852	.3365	.6757	.9596	.9932	.9947	.4690	.8465	.3630	-
	ln (clothing expenditure)	-1.6399	.3612	-3.1383	11.2695	11.7847	1.8944	-.8603	-.1027	2.2087	-
	p-value	.5492	.8848	.1360	.2301	.0963	.0191*	.5215	.8803	.5424	-
	quota fill level	.0067	.0024	.0000	.0241	.0000	-	-	-	-	-
	p-value	.3089	.6384	.0000	.3089	.0000	-	-	-	-	-
	R-square (adjusted)	.8743	.2618	.0959	.8193	.9469	.6608	-.0388	.6841	.1671	-
	global p-value	<.0001**	.2363	.3053	.0001**	<.0001**	.033*	.5275	.0273	.3315	-
	intercept	30.1848	-213.4068	24.4793	-27.4693	-53.0604	30.5532	28.3361	20.1278	-.0744	-
	p-value	.0710	.2160	.4353	.6731	.1421	.0972	.0199*	.021*	.9982	-
	ln (tariff)	-3.0756	31.2788	-4.3562	-10.1617	-.8827	-.5236	1.1146	3.1392	2.5294	-
	p-value	.0822	.3186	.3540	.043*	.0067**	.5657	.7614	.0813	.7264	-
	ln (labor cost)	.9336	1.6230	-2.0479	1.0956	-1.2430	4.0099	3.2657	.9478	-2.4363	-
	p-value	.0114*	.4471	.2872	.3747	.3137	.2090	.2206	.2411	.5065	-
	ln (exchange rate)	.3854	141.5722	-.0876	-1.4572	-.7408	2.8094	-2.0029	-.8597	1.7088	-
	p-value	.7354	.1381	.1874	.3311	.0014**	.1511	.2796	.1043	.6540	-
	ln (quality)	.2723	-1.0923	.8505	1.0291	-.7908	.1165	.0756	.0761	.4848	-
	p-value	.7215	.5597	.3687	.4582	.1066	.7276	.9035	.6944	.1783	-
	ln (clothing expenditure)	-2.2639	-.5050	-1.2614	4.8073	8.6691	-2.6218	-2.0045	.1675	1.9104	-
	p-value	.2639	.8785	.7926	.5916	.0867	.1587	.2276	.8399	.6439	-
quota fill level	-.0032	.0195	.0000	-.0252	.0000	-	-	-	-	-	

	p-value	.4186	.3267	.0000	.8783	.0000	-	-	-	-	-
Not elsewhere specified	R-square (adjusted)	.9446	.8477	.6766	.5438	.8037	.8993	.7865	.7158	.4493	-
	global p-value	<.0001**	.0017**	.0015**	<.0001**	<.0001**	.0004**	<.0001**	.0039**	.0580	-
	intercept	-45.9972	167.4548	-10.2158	1.3477	-49.5487	-4.6524	5.3028	1.4617	-11.4524	-
	p-value	.0325*	.023*	.4484	.9394	.0987	.7398	.3685	.8845	.4586	-
	ln (tariff)	4.2362	1.2772	-2.3509	-2.2253	-1.0009	1.1270	-.6634	-3.3136	-4.806	-
	p-value	.0982	.3633	.2765	.0852	.0008**	.2908	.5866	.0336*	.5799	-
	ln (labor cost)	-.1177	-2.4446	.1495	-.9519	-3.9040	3.7377	3.3303	-.6441	.0581	-
	p-value	.8497	.0832	.8865	.0243*	.0006**	.025*	.0316*	.6623	.9279	-
	ln (exchange rate)	2.8942	-82.3724	-.0140	-.8660	-.4425	2.8633	-2.8598	.0796	.8592	-
	p-value	.0075**	.0335*	.8255	.1014	.01*	.0999	.1394	.2569	.4612	-
	ln (quality)	1.1501	-1.0982	.6009	1.6736	-.4327	.3498	.0223	1.0492	.1419	-
	p-value	.0005**	.1976	.4674	.1467	.4353	.4553	.9543	.0016**	.5493	-
	ln (clothing expenditure)	9.9823	2.6883	3.1036	3.4477	8.5227	3.4518	1.1499	1.7786	2.6802	-
	p-value	.0037**	.3447	.1422	.1712	.0369*	.1406	.2456	.1286	.0788	-
	quota fill level	-.0113	.0086	.0000	.0023	.0130	-	-	-	-	-
	p-value	.1322	.1065	.0000	.3544	.6099	-	-	-	-	-

Note. * P<.05. ** P<.01.

Skirt

	U.S.	Japan
--	------	-------

		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Wool	R-square (adjusted)	.7889	-.1780	.7563	.7069	-	.8112	.0288	.4345	.5148	-
	global p-value	.0003**	.6774	.0003**	.0009**	-	.0134*	.4613	.1301	.0874	-
	intercept	22.4994	-28.1507	-90.3241	-22.0450	-	37.9437	39.9554	13.7152	-30.4936	-
	p-value	.4068	.8809	.1234	.7526	-	.1326	.0660	.2160	.1585	-
	ln (tariff)	1.9164	-.2457	-.0858	5.3950	-	.8174	1.6406	.2025	4.2596	-
	p-value	.4416	.9654	.9870	.2872	-	.5765	.7984	.9495	.4201	-
	ln (labor cost)	-.3474	-1.2987	4.5496	1.8775	-	7.5549	7.8303	-.0659	-5.0606	-
	p-value	.6251	.4881	.1159	.1432	-	.1308	.1426	.9658	.0743	-
	ln (exchange rate)	.0169	11.3390	-.0762	-.2200	-	7.2672	-2.2546	.5965	2.8673	-
	p-value	.9838	.9105	.6049	.9049	-	.0269*	.5364	.4804	.2357	-
	ln (quality)	4.1831	.4700	-.9246	-.6257	-	-.0584	.3659	.5382	.3026	-
	p-value	.0011**	.8329	.4380	.7413	-	.8994	.5967	.041*	.4184	-
	ln (clothing expenditure)	2.0258	3.2601	12.1312	5.7599	-	-.2615	-3.8933	-.1415	6.0788	-
	p-value	.5590	.5011	.1611	.5578	-	.2047	.2183	.9291	.0645	-
	quota fill level	.0043	.0066	.0000	.0000	-	-	-	-	-	-
p-value	.6129	.6315	.0000	.0000	-	-	-	-	-	-	
Cotton	R-square (adjusted)	.4396	.6642	.6829	-.0162	.9010	.7935	.8167	.7416	.6402	-
	global p-value	.0444*	.023*	.0013**	.4867	.001**	.0082**	.0058**	.0156*	.0391*	-
	intercept	8.4780	1.0282	35.8462	-.5054	-24.4643	10.9442	33.2573	11.3406	19.6934	-

	p-value	.7045	.9826	.0253*	.9917	.4608	.3783	.0061**	.2656	.3291	-
	ln (tariff)	.0826	-13.1430	.4602	.4585	-.2369	-1.6659	6.4850	1.4596	3.2845	-
	p-value	.7923	.1039	.0732	.3627	.1989	.0415*	.0249*	.6567	.5044	-
	ln (labor cost)	.3457	.1565	2.0815	-.3197	.0790	1.4780	-1.8883	1.6180	.9480	-
	p-value	.6429	.8421	.0064**	.6943	.9476	.5102	.2951	.3329	.7075	-
	ln (exchange rate)	.6892	-12.0610	-.1995	-.1685	-.0579	-.4685	-2.6482	1.7003	-1.5121	-
	p-value	.4199	.6909	.0058**	.8859	.6931	.7238	.0735**	.0883	.5124	-
	ln (quality)	.1845	-.0430	-.3985	-1.7234	-3.8929	.0443	.5101	.5511	.3066	-
	p-value	.8969	.9612	.4371	.2675	.0034**	.8665	.1919	.0228*	.4980	-
	ln (clothing expenditure)	1.1468	1.0963	-3.4595	1.2955	2.2810	.1429	.9067	-1.4399	2.1180	-
	p-value	.6837	.6087	.1407	.8369	.6381	.9117	.4503	.3648	.4308	-
	quota fill level	.0005	.0004	.0000	.0000	.0000	-	-	-	-	-
	p-value	.9241	.8370	.0000	.0000	.0000	-	-	-	-	-
Manmade Fiber	R-square (adjusted)	.5925	.6835	.2115	.4245	.9253	.7101	-.0488	.7145	.0545	-
	global p-value	.0096**	.019*	.1659	.0348*	<.0001**	.0215*	.5374	.0206*	.4364	-
	intercept	57.2048	5.3430	47.3615	27.5917	-37.0011	38.6341	37.8549	31.0887	13.9519	-
	p-value	.0635	.9340	.0416*	.2767	.3767	.0343*	.1186	.0005**	.4227	-
	ln (tariff)	-1.8568	-.8627	-6.2363	-4.5925	-1.0885	-.3171	-.7486	4.7492	-1.3386	-
	p-value	.4256	.9242	.1162	.0606	.0073**	.7054	.9319	.0156*	.7236	-
	ln (labor cost)	.9426	.1369	-1.5462	.1452	-3.1502	4.7158	7.8440	1.5160	.5307	-
	p-value	.0441	.8691	.2450	.7757	.0464	.1245	.1882	.0770	.7779	-
	ln (exchange rate)	.7568	-10.7487	.0026	-.1656	-1.0715	3.7755	-1.1812	-.3503	-1.6792	-

	p-value	.2878	.7682	.9705	.6945	.0007**	.0541	.7754	.3826	.3566	-
	ln (quality)	1.8055	-1.0251	-.1802	.2478	-5.0596	-.0468	.1399	.1903	-.3507	-
	p-value	.2640	.1615	.7451	.8699	.0005**	.8873	.8655	.2429	.3058	-
	ln (clothing expenditure)	-4.7364	.346167	-5.4216	-2.4532	3.1549	-3.9690	-5.2358	-1.6869	.3769	-
	p-value	.1623	.1391	.1167	.3499	.5896	.0398*	.2235	.0530	.8655	-
	quota fill level	-.0058	.0014	.0000	.0000	.0000	-	-	-	-	-
	p-value	.4246	.7211	.0000	.0000	.0000	-	-	-	-	-
Not elsewhere specified	R-square (adjusted)	.9342	.9416	.6733	.2647	.9064	.7443	.7615	.7440	.4676	-
	global p-value	<.0001**	<.0001**	.0113*	.1479	<.0001**	.0923	.0124*	.0002**	.3380	-
	intercept	-52.7920	65.9994	2.2603	-16.7621	-82.9193	5.8649	50.7997	-3.0142	-104.6430	-
	p-value	.0313*	.4490	.8976	.6151	.0922	.9097	.0213*	.3332	.1621	-
	ln (tariff)	-4.2807	21.0495	-12.0384	-3.2916	.1011	1.0053	-.5612	.7430	20.9758	-
	p-value	.1090	.0301*	.0379*	.2358	.8340	.7662	.9046	.4859	.2017	-
	ln (labor cost)	-.0635	-1.3233	.6218	-.1011	-.6625	.1604	12.5813	.1304	-16.4908	-
	p-value	.8838	.0811	.2003	.8626	.7336	.9893	.0099**	.0484*	.1533	-
	ln (exchange rate)	.9998	-9.3466	-.0217	-.3551	-.6393	8.3043	.1991	1.4917	11.7217	-
	p-value	.3056	.8412	.4415	.5595	.0246*	.2253	.9410	.0013**	.1677	-
	ln (quality)	1.0019	-1.6952	-.6274	-4.0168	-.9348	.1058	.1820	-.0960	1.6214	-
	p-value	.0558	.0620	.2188	.1072	.0404*	.9253	.8220	.4581	.1902	-
	ln (clothing expenditure)	8.8649	.9243	-1.9800	1.3949	12.7761	-.0963	-7.8019	.4796	17.6975	-
	p-value	.0138*	.5047	.1362	.7210	.0623	.9863	.0184*	.3433	.1326	-

quota fill level	-.0087	.0038	.0000	.0086	-.0320	-	-	-	-	-
p-value	.0911	.3318	.0000	.0842	.2218	-	-	-	-	-

Note. * P<.05. ** P<.01.

Blouse

		U.S.					Japan				
		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Cotton	R-square (adjusted)	.8081	.4744	.6913	-.2358	.8460	.8863	.3117	.1543	.3428	-
	global p-value	.0002**	.0911	.0012**	.8718	.2685	.0015**	.2123	.3705	.1896	-
	intercept	-17.8172	128.2808	16.6354	-4.1129	2.7361	-.5417	19.4504	8.3202	18.8880	-
	p-value	.5562	.0407*	.1880	.9114	.9809	.9697	.0391*	.0768	.2171	-
	ln (tariff)	-2.4472	-12.3922	-.2174	-.9851	-3.3740	-1.3851	-2.6089	.7500	-2.2363	-
	p-value	.1929	.0866	.8146	.6176	.3425	.1544	.4945	.7095	.5618	-
	ln (labor cost)	.1679	-.6740	1.1948	-.4085	-2.0903	-.8592	-1.9755	-.0161	-.5669	-
	p-value	.7878	.3335	.1311	.5960	.6160	.7675	.3403	.9786	.6764	-
	ln (exchange rate)	3.2247	-66.5409	-.1266	1.0694	-.0247	1.7150	-.9655	.2439	-.8030	-
	p-value	.019*	.0691	.0004**	.3780	.9466	.3177	.4991	.5702	.5136	-
	ln (quality)	-1.9178	1.2373	-.4672	.1535	2.5270	-.1839	.6922	.0085	.6331	-
	p-value	.1910	.4131	.3585	.8884	.4897	.5384	.0924	.9496	.1439	-
ln (clothing expenditure)	1.7654	.8170	-.7793	1.6146	2.8725	.8218	-1.2371	.5914	-.2657	-	

	p-value	.7117	.5472	.6527	.7470	.8432	.5612	.5366	.3913	.9044	-
	quota fill level	-.0023	.0013	.0000	.0000	.0000	-	-	-	-	-
	p-value	.7425	.5460	.0000	.0000	.0000	-	-	-	-	-
Manmade Fiber	R-square (adjusted)	.7829	.6736	.1253	.6564	.9732	-.2619	.7506	.7136	.6164	-
	global p-value	.0004**	.021*	.2649	.0041**	<.0001**	.7400	.0141*	.0208*	.0466*	-
	intercept	11.7788	-59.7560	4.2770	-17.4317	33.5800	4.6191	46.1077	21.8020	28.1429	-
	p-value	.2870	.2454	.7896	.3685	.1227	.6357	.0007**	.0088**	.0097**	-
	ln (tariff)	-4.5156	6.0468	-3.1809	.4065	-.9121	-.5993	5.6450	2.7198	.6229	-
	p-value	.039*	.1394	.3421	.8657	<.0001**	.3654	.2647	.3782	.7783	-
	ln (labor cost)	-.8772	-.1733	.0461	-.2938	-1.3911	-1.9913	1.2782	-.2627	.9925	-
	p-value	.0547	.7752	.9668	.5795	.0196*	.3477	.5833	.7837	.2428	-
	ln (exchange rate)	1.0414	51.8749	.0605	.9590	-.3432	-.5500	-3.9450	-1.0278	-1.5319	-
	p-value	.0426*	.0822	.3803	.1425	.0058**	.6410	.0347*	.1235	.0584	-
	ln (quality)	.3272	-1.4446	-.0426	3.0829	3.5924	-.0705	1.0473	.4927	-.2605	-
	p-value	.7087	.2237	.9145	.0031**	.0038**	.7050	.0077**	.0421*	.2091	-
	ln (clothing expenditure)	-.3449	-3.4087	.6732	6.3121	.5257	.4579	-.8006	.7667	-.7656	-
	p-value	.8282	.1045	.7789	.0237*	.8201	.6323	.7502	.4468	.5505	-
	quota fill level	.0000	.0006	.0000	-.0021	.0000	-	-	-	-	-
p-value	.9885	.6898	.0000	.8821	.0000	-	-	-	-	-	
elsewhere	R-square (adjusted)	.9034	.8332	.6839	.3547	.6017	.9484	.7638	.9594	.8751	-
	global p-value	<.0001**	.0023**	.0013**	.0842	.0393*	<.0001**	<.0001**	<.0001**	.0001**	-

intercept	-42.4153	-211.2077	12.1506	-63.6992	-174.3687	10.2447	-8.6867	10.0375	2.4178	-
p-value	.0339*	.0987	.2082	.2482	.0819	.0359	.1350	.0105*	.8660	-
ln (tariff)	-8.1444	15.2056	-.6953	6.8199	-.6267	.3676	-.5794	-.5325	1.1099	-
p-value	.0178*	.0404*	.6774	.1235	.4773	.1316	.4663	.2019	.034*	-
ln (labor cost)	-1.3719	.2058	-.4938	-1.1819	-.7309	-.8648	.1188	-.1437	-2.0916	-
p-value	.0289*	.9026	.4676	.3011	.7739	.0721	.9367	.7812	.0027**	-
ln (exchange rate)	1.4786	124.9249	-.0518	-.7595	.9894	1.1867	.1076	.0603	-.6728	-
p-value	.0651	.0721	.1618	.4496	.1675	.0333*	.9522	.0242*	.5141	-
ln (quality)	-.6293	-1.0813	1.7186	.1326	.6567	.9472	.2506	1.2137	.6982	-
p-value	.6196	.4675	.0011**	.9246	.4787	.0002**	.5435	<.0001**	.0119*	-
ln (clothing expenditure)	4.7185	.4125	1.3039	14.0621	25.1346	1.4010	3.3501	1.2174	3.8741	-
p-value	.0611	.8951	.3094	.0776	.0685	.0640	.0037**	.0087**	.0113*	-
quota fill level	.0026	.0066	.0000	-.0097	-.0184	-	-	-	-	-
p-value	.7407	.3771	.0000	.3133	.3321	-	-	-	-	-

Note. * P<.05. ** P<.01.

Trouser

		U.S.					Japan				
		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Wool	R-square (adjusted)	.6284	-.1930	.8204	.7243	.7738	.9012	.3422	.5620	.0297	-
	global p-value	.0061**	.6924	<.0001**	<.0001**	.0007**	.0081**	.2709	.0666	.4930	-

	intercept	21.6833	166.2979	-126.1556	-.9591	-180.6996	15.8105	102.9636	-8.7010	-56.3318	-
	p-value	.3544	.3301	.0013**	.9760	.041*	.5862	.0454*	.2273	.3780	-
	ln (tariff)	-1.1990	-.2865	-1.7348	4.7643	-2.5776	1.9994	14.1070	-.7241	8.0575	-
	p-value	.3281	.8280	.3881	.0077**	.0079**	.2942	.1901	.7448	.5812	-
	ln (labor cost)	-.1245	-.1359	2.8503	2.9469	-11.9067	7.2191	2.4352	-1.8252	-6.7519	-
	p-value	.8428	.9241	.1940	.0004**	.0005**	.2124	.6374	.1457	.3806	-
	ln (exchange rate)	.4327	-72.6129	.0033	.9214	-.8546	9.8671	-3.7833	1.7160	8.4680	-
	p-value	.5022	.3728	.9735	.3730	.0623	.0266*	.3555	.0217*	.2374	-
	ln (quality)	1.0069	-2.3844	-.3755	.0033	-2.4569	-.9191	3.6792	-.0049	.8093	-
	p-value	.2738	.2537	.7075	.9857	.0909	.2221	.0687	.9831	.4929	-
	ln (clothing expenditure)	-.7510	-1.5479	17.4535	1.9884	24.7332	-.7663	-4.6228	1.7480	6.6858	-
	p-value	.7873	.6235	.0028**	.6402	.0353*	.8148	.1708	.1321	.4519	-
	quota fill level	-.0013	-.0025	.0000	.0000	.0000	-	-	-	-	-
	p-value	.8027	.5143	.0000	.0000	.0000	-	-	-	-	-
Cotton	R-square (adjusted)	.9405	.7724	.8977	.6572	.8225	.9651	.7618	.8159	.3808	-
	global p-value	<.0001**	.0065**	<.0001**	.0016**	.0053**	<.0001**	.0123*	.0059**	.1636	-
	intercept	79.8287	130.8326	-29.7256	-66.3693	-136.8023	8.7168	21.0341	-14.2748	-16.9396	-
	p-value	.0647	.0499*	.2507	.5264	.0992	.1368	.0127*	.1854	.6443	-
	ln (tariff)	-2.4505	-4.8587	.9666	6.8755	-1.7229	-.8621	2.9348	2.0257	1.4349	-
	p-value	.3070	.0066**	.0155*	.0045**	.1403	.0259*	.1823	.5322	.8697	-
	ln (labor cost)	2.4018	-.8988	2.1153	.5969	-2.2762	1.0711	-3.0259	2.3235	-.2167	-
p-value	.0451*	.0827	.1108	.7462	.3839	.3067	.0859	.1686	.9603	-	

Manmade Fiber	ln (exchange rate)	2.4327	-61.2069	-.2483	3.2931	-.5237	2.3313	.8916	3.1996	1.7758	-
	p-value	.0633	.0715	.0047**	.0930	.3476	.0066**	.4674	.0075**	.6671	-
	ln (quality)	-6.0507	.2822	-2.1043	.6528	-9.4217	-.3175	.6160	-.4838	-.0038	-
	p-value	.0002**	.7678	.0002**	.7448	.3578	.033*	.0054**	.1646	.9950	-
	ln (clothing expenditure)	-13.8534	.7698	4.7329	10.5345	13.3677	.0028	.6946	-.0776	3.4977	-
	p-value	.0518	.5580	.2251	.4290	.3397	.9960	.5048	.9603	.4770	-
	quota fill level	-.0082	.0026	.0000	.0044	.0000	-	-	-	-	-
	p-value	.4438	.2076	.0000	.7521	.0000	-	-	-	-	-
	R-square (adjusted)	.9675	.9207	.8812	.8447	.8904	.7218	-.2114	-.3582	-.3566	-
	global p-value	<.0001**	.0002**	<.0001**	<.0001**	<.0001**	.1910	.6943	.8204	.8191	-
	intercept	-12.1276	-256.1265	11.3575	-99.7374	-210.0836	22.4149	29.5839	11.3148	.3842	-
	p-value	.4672	.0111*	.6851	.0114*	.0083	.3876	.3475	.4419	.9891	-
	ln (tariff)	.8435	-1.2622	.7968	1.7297	-.6548	-.0488	4.5646	.1530	-2.6374	-
	p-value	.001**	.7097	.0901	.0084**	.1247	.9743	.6197	.9748	.7035	-
	ln (labor cost)	.9956	2.1732	2.3464	-.7498	-2.4971	7.3018	-5.3881	.0531	.0037	-
	p-value	.0108*	.0533	.0998	.3329	.2096	.1807	.4519	.9838	.9992	-
	ln (exchange rate)	1.5115	137.8473	-.1027	2.5853	.1450	7.1099	4.5987	.7887	.4674	-
	p-value	.0251*	.0106*	.1943	.0308*	.6675	.0514	.4533	.5397	.8841	-
ln (quality)	-1.3131	.5037	-2.4299	1.1389	-1.8737	-.9848	1.6511	.4087	.0221	-	
p-value	<.0001**	.7270	<.0001**	.0571	.0174*	.0818	.2182	.4944	.9652	-	
ln (clothing expenditure)	2.9691	-1.6598	-1.3855	14.7520	28.8703	-2.3509	-.2213	-.6106	.3005	-	

	p-value	.2200	.4537	.7475	.0065**	.0067**	.4048	.9614	.7876	.9370	-
	quota fill level	.0021	-.0074	.0000	.0006	.0000	-	-	-	-	-
	p-value	.6702	.0873	.0000	.9552	.0000	-	-	-	-	-
Not elsewhere specified	R-square (adjusted)	.9405	.8413	.7436	.2797	.8777	.8380	.5807	.9366	-	-
	global p-value	<.0001**	.002**	.0004**	.1356	.0001**	.1117	.0858	.0003**	-	-
	intercept	30.4937	33.1398	-22.7391	6.1744	-177.4809	20.3788	-5.9281	-20.0864	-	-
	p-value	.048*	.5567	.1599	.8167	.0316*	.6422	.7313	.0763	-	-
	ln (tariff)	-7.1167	5.7002	-4.0994	-3.0439	-.3203	1.9167	.9522	-2.0572	-	-
	p-value	.0038**	.016*	.0540	.1749	.4587	.5615	.8524	.4490	-	-
	ln (labor cost)	-1.8180	.1305	-.4563	-.4278	-3.7908	8.1358	5.4214	-1.5508	-	-
	p-value	.0023**	.8624	.5936	.5250	.0730	.3524	.2234	.2976	-	-
	ln (exchange rate)	2.3158	.5985	.0770	-.8407	-.4810	11.3246	3.2966	3.5933	-	-
	p-value	.0021**	.9826	.2024	.2183	.1342	.1578	.2893	.0033**	-	-
	ln (quality)	-1.0916	-.9632	1.0986	.7866	-2.7653	-.6960	-1.1301	.4789	-	-
	p-value	.0231*	.0721	.1397	.3576	.0439*	.5349	.1522	.0022**	-	-
	ln (clothing expenditure)	3.2038	-1.3640	4.7855	1.9810	24.1525	-1.5885	.1316	1.1476	-	-
	p-value	.1264	.3425	.0703	.6109	.0238*	.7462	.9588	.4491	-	-
	quota fill level	-.0091	-.0018	.0000	.0007	-.0175	-	-	-	-	-
p-value	.0064	.2696	.0000	.8768	.2657	-	-	-	-	-	

Note. * P<.05. ** P<.01.

Outergarments

		U.S.					Japan				
		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Wool	R-square (adjusted)	.1202	-.198	1843.0000	.1050	.0843	.8523	.6775	.9149	.5506	-
	global p-value	.3016	.6973	.1939	.2925	.3463	.0013**	.0015**	<.0001**	.0259*	-
	intercept	-66.4114	-106.0760	60.7740	-8.3074	-212.7212	6.2193	-4.7877	22.2625	-89.4217	-
	p-value	.2923	.6573	.0321*	.9025	.1029	.5258	.5142	.0126*	.0336*	-
	ln (tariff)	-7.3145	.0091	3.8879	-10.1700	.5241	-.8236	-.5578	2.2607	2.7778	-
	p-value	.3719	.9929	.2702	.0877	.7585	.3143	.6250	.0605	.1942	-
	ln (labor cost)	-1.2845	-.7669	-1.1030	.4543	-2.2891	.8759	2.8934	-.2002	-1.5117	-
	p-value	.4865	.8062	.9159	.6760	.6062	.4386	.1334	.8204	.5124	-
	ln (exchange rate)	2.2781	59.8523	-1.1506	-6.2459	-.0067	1.5786	-4.5223	-.0080	5.3671	-
	p-value	.2911	.6506	.1054	.1061	.9933	.3269	.3558	.8261	.0676	-
	ln (quality)	-.9879	.2446	-.2106	-.5707	-1.2377	.9285	-.1842	1.5076	-1.1414	-
	p-value	.5515	.8033	.6195	.6900	.4965	.0632	.6673	<.0001**	.1042	-
	ln (clothing expenditure)	7.7654	-.0145	-5.2190	3.0676	29.6462	1.1555	2.7615	-.1203	10.8184	-
	p-value	.3133	.9981	.1301	.7284	.0903	.5366	.0664	.8689	.0085**	-
quota fill level	-.0035	.00892	.0000	.0000	.0000	-	-	-	-	-	
p-value	.7900	.5659	.0000	.0000	.0000	-	-	-	-	-	
Cotton	R-square (adjusted)	.6716	.0697	.8995	.4771	.7229	.6342	.8082	.6969	.6673	-

	global p-value	.0008**	.4189	<.0001**	.0147*	.0108*	.0265*	<.0001**	.0051**	.0075**	-
	intercept	-21.8229	.8957	29.2819	-24.3250	-246.8849	6.1501	8.3093	10.6333	4.7988	-
	p-value	.5559	.9915	.0791	.5785	.0023****	.4085	.0289**	.4328	.1487	-
	ln (tariff)	-.8121	-3.1264	1.0246	.9604	.5373	-.1794	-.1035	-1.7326	1.5838	-
	p-value	.1238	.3121	.0027**	.0176*	.5026	.7486	.8703	.3640	.2212	-
	ln (labor cost)	-2.1724	-.0767	2.7351	-.2684	-1.8614	.4448	-1.0923	-.4436	-2.0695	-
	p-value	.0256*	.9075	.0027**	.7545	.5602	.5943	.1975	.8188	.0365*	-
	ln (exchange rate)	2.9942	5.4701	-.1798	.2084	.5892	.2863	-3.1455	.0231	-2.9949	-
	p-value	.0348*	.8943	.0009**	.8600	.1610	.7004	.0034**	.7958	.1306	-
	ln (quality)	-1.7713	.9142	-1.3779	1.0271	.2181	.7878	.5605	1.3583	.4191	-
	p-value	.006**	.2676	.0004**	.0177*	.6824	.0109*	.0125*	.0015**	.0763	-
	ln (clothing expenditure)	2.8146	.1787	-3.2055	6.2846	35.5627	2.1562	2.1425	.6886	.6069	-
	p-value	.5886	.9486	.1859	.2923	.0016**	.1060	.001**	.6323	.8068	-
	quota fill level	.0082	.0014	.0000	.0009	.0000	-	-	-	-	-
	p-value	.4039	.7390	.0000	.8617	.0000	-	-	-	-	-
Manmade Fiber	R-square (adjusted)	.7278	.8425	.6854	.4957	.9539	.8907	.7136	.8616	.9614	-
	global p-value	<.0001**	.0019**	<.0001**	.004**	<.0001**	<.0001**	<.0001**	.0002**	<.0001**	-
	intercept	-11.4318	-128.1702	-73.3163	-97.7868	-23.9623	10.3367	2.2116	22.2025	22.5302	-
	p-value	.8113	.0724	.0674	.0055**	.0765	.2172	.7842	.1187	.0037**	-
	ln (tariff)	-.5257	17.0969	.4788	-.0507	-.3105	-.2693	-1.3756	1.1289	.5392	-
	p-value	.3065	.002**	.3586	.9139	.0033**	.6515	.3154	.5915	.1140	-
	ln (labor cost)	-1.7450	1.6752	1.1645	-2.0120	-1.0160	.5506	2.2136	1.1218	-.7204	-

	p-value	.0885	.0164**	.5530	.0063**	.0174*	.5110	.0952	.5108	.0153*	-
	ln (exchange rate)	3.7268	81.2890	-.0447	.6283	-.3872	2.7526	-5.0584	.0443	-2.1666	-
	p-value	.0403*	.0287*	.6823	.5378	.0009**	.009**	.0261*	.5749	.001**	-
	ln (quality)	.1973	1.4422	-.2571	.8204	-.4849	.9820	.2461	2.3096	.9052	-
	p-value	.5443	.0446*	.5243	.1339	.0241*	.0017**	.5057	<.0001**	<.0001**	-
	ln (clothing expenditure)	2.8303	1.9307	11.4835	15.9478	4.9226	1.0028	2.4074	-.5442	2.2592	-
	p-value	.6795	.2019	.0524	.0013**	.0154*	.4386	.1036	.6947	.0023**	-
	quota fill level	.0103	-.0009	.0000	.0000	.0000	-	-	-	-	-
	p-value	.3979	.4835	.0000	.0000	.0000	-	-	-	-	-
Not elsewhere specified	R-square (adjusted)	.8659	.9637	.7120	.7605	-	.8907	.6940	.8163	.5587	-
	global p-value	<.0001**	<.0001**	.0008**	.0006**	-	.0005**	<.0001**	.0006**	.024*	-
	intercept	8.1298	210.8067	70.1977	1.1444	-	-2.4026	-17.1325	2.3156	-24.4658	-
	p-value	.5981	.0196*	.0052**	.9796	-	.8247	.0539	.8237	.5085	-
	ln (tariff)	-.3880	-.0732	.7245	-1.7161	-	.6882	-1.1258	-1.4660	2.5329	-
	p-value	.1736	.9227	.1693	.0261*	-	.3754	.5050	.3226	.2303	-
	ln (labor cost)	-1.8357	-5.4125	3.3698	-2.8233	-	.6287	-1.0870	-.4399	-2.9351	-
	p-value	.0002**	.0002**	.0438*	.0109*	-	.5442	.5240	.7653	.0754	-
	ln (exchange rate)	2.8239	-101.5390	-.1592	-4.6200	-	1.6393	1.6521	.0878	.7806	-
	p-value	<.0001**	.032*	.0091**	.0005**	-	.1637	.5201	.2036	.7778	-
	ln (quality)	-.4743	.7976	-2.2204	-.1614	-	1.0900	.6671	1.4243	.2759	-
	p-value	.0656	.0753	.0684	.6609	-	.007**	.0932	.0002**	.0597	-
	ln (clothing	- 2703	3 2183	-9 3441	5 6449	-	3 2381	3 9810	1 8342	6 8214	-

expenditure)											
p-value	.8977	.2516	.0057**	.3581	-	.0821	.0095**	.1216	.0746	-	-
quota fill level	.0167	.0013	.0000	.0154	-	-	-	-	-	-	-
p-value	.0006**	.7144	.0000	.0909	-	-	-	-	-	-	-

Note. * P<.05. ** P<.01.

APPENDIX 5
RESULTS OF IMPORT DEMAND MODEL SELECTION

Coat and Jacket

		U.S.					Japan				
		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Wool	R-square (adjusted)	.8811	.5153	.9077	.8923	.8422	.9733	.8468	.8730	.9320	.9907
	global p-value	<.0001**	.0023**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**
	intercept	13.8331	19.2572	-131.8630	38.1333	-299.9524	16.8777	7.5228	19.2665	-17.3588	2.8335
	p-value	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	.1218	<.0001**	.0003**	.0002**
	ln (tariff)	-3.2319	-	.8584	7.5455	-	-	-	-	-1.0935	-
	p-value	.0047**	-	.0182*	<.0001**	-	-	-	-	.0471*	-
	ln (labor cost)	-	-1.6383	-	-	-	-	-	-	-	2.8650
	p-value	-	.0023**	-	-	-	-	-	-	-	.0002**
	ln (exchange rate)	-	-	-	-	-	2.9558	-4.8091	.0271	-	1.9756
	p-value	-	-	-	-	-	.0028**	.0018**	.0094**	-	<.0001**
	ln (quality)	1.0680	-	-	2.2025	-	1.3282	.9188	1.3893	.6669	-
	p-value	<.0001**	-	-	<.0001**	-	.0002**	<.0001**	<.0001**	<.0001**	-
	ln (clothing expenditure)	-	-	20.3162	-	42.4210	-	2.8402	-	4.9400	-
	p-value	-	-	<.0001**	-	<.0001**	-	.0007**	-	<.0001**	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
p-value	-	-	-	-	-	-	-	-	-	-	
Cotton	R-square (adjusted)	.8167	.5684	.8821	.6313	-	.7773	.9129	.9211	.4702	-

	global p-value	<.0001**	.0039**	<.0001**	<.0001**	-	<.0001**	<.0001**	<.0001**	.0029**	-
	intercept	-82.6218	-10.9231	-3.5591	-96.9512	-	21.8962	16.8717	18.6969	32.2835	-
	p-value	.0002**	.3277	.1022	<.0001**	-	<.0001**	<.0001**	<.0001**	<.0001**	-
	ln (tariff)	8.0192	-15.3758	-	-	-	-	-	-	-	-
	p-value	<.0001**	.0084**	-	-	-	-	-	-	-	-
	ln (labor cost)	-	-	5.4109	-	-	-	-	-	-	-
	p-value	-	-	<.0001**	-	-	-	-	-	-	-
	ln (exchange rate)	-	-	-.1783	-	-	-	.7377	-	-2.5333	-
	p-value	-	-	.0049**	-	-	-	<.0001**	-	.0029**	-
	ln (quality)	2.0307	3.0845	-1.6637	-	-	1.1013	.8315	1.3877	-	-
	p-value	.0013**	.0011**	.001**	-	-	<.0001**	.0252*	<.0001**	-	-
	ln (clothing expenditure)	17.4994	-	-	15.1519	-	-	-	-	-	-
	p-value	<.0001**	-	-	<.0001**	-	-	-	-	-	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
Manmade Fiber	R-square (adjusted)	.7331	.4650	.8003	.6781	.9435	.9486	.7645	.8988	.8965	-
	global p-value	<.0001**	.0043**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	-
	intercept	7.9806	14.5337	-99.9471	-109.8061	-182.8053	14.0688	26.2301	14.0907	14.5178	-
	p-value	.0006**	<.0001**	.0002**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	.2683	-
	ln (tariff)	-	-	1.2716	-	-	-	-	-3.2900	-	-
	p-value	-	-	.0124*	-	-	-	-	.0108*	-	-
	ln (labor cost)	-	-	-	-	-	-	-	-	-	-

	p-value	-	-	-	-	-	-	-	-	-	-
	ln (exchange rate)	2.2936	-	-	-	-.5614	4.2714	-4.1513	-	-1.9883	-
	p-value	<.0001**	-	-	-	.0071**	<.0001**	.0035**	-	.0492*	-
	ln (quality)	-1.0610	-.5254	-	-4.4680	-	.9691	1.0744	.2665	.6443	-
	p-value	.0164*	.0043**	-	.005**	-	.0034**	<.0001**	<.0001**	.003**	-
	ln (clothing expenditure)	-	-	15.8895	-	26.8423	-	-	-	2.6844	-
	p-value	-	-	<.0001**	-	<.0001**	-	-	-	.0144*	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
Not elsewhere specified	R-square (adjusted)	.9416	.8381	.7433	.7112	.8692	.9347	.8449	.8946	.5608	-
	global p-value	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	.0008**	-
	intercept	15.9670	19.2579	-141.8258	24.3262	-207.4291	.1049	-15.3927	18.4074	-6.3023	-
	p-value	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	.0985	.0158*	<.0001**	.2036	-
	ln (tariff)	-5.3018	-	-	-	-	-	-	.1045	-	-
	p-value	<.0001**	-	-	-	-	-	-	-	-	-
	ln (labor cost)	-	-1.5300	-	-	-	-	2.8237	-	-	-
	p-value	-	.0101*	-	-	-	-	.0003**	-	-	-
	ln (exchange rate)	-	-	-	-	-	2.9778	-	.1045	-	-
	p-value	-	-	-	-	-	.0019**	-	.0018**	-	-
	ln (quality)	2.3880	-	-	1.7720	-	.7417	-	1.4559	-	-
	p-value	<.0001**	-	-	<.0001**	-	.0038**	-	<.0001**	-	-
	ln (clothing	-	-	21.2814	-	29.9596	2.0732	3.8695	-	3.0799	-

expenditure)										
p-value	-	-	<.0001**	-	<.0001**	.0152	.0008**	-	.0008**	-
quota fill level	-	.0093	-	-	-	-	-	-	-	-
p-value	-	.0119*	-	-	-	-	-	-	-	-

Note. * P<.05. ** P<.01.

Suit

		U.S.					Japan				
		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Wool	R-square (adjusted)	.5379	.6698	.7578	.5947	.9555	-	-	-	.5115	-
	global p-value	.0003**	.0009**	<.0001**	.0001**	<.0001**	-	-	-	.0121*	-
	intercept	11.7624	17.0964	-62.1318	12.2431	15.9879	-	-	-	16.0296	-
	p-value	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	-	-	-	<.0001**	-
	ln (tariff)	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
	ln (labor cost)	-	-3.6971	-	1.2646	-	-	-	-	-	-
	p-value	-	.0014**	-	.0001**	-	-	-	-	-	-
	ln (exchange rate)	1.7883	-	-	-	-1.3677	-	-	-	-	-
	p-value	.0003**	-	-	-	<.0001**	-	-	-	-	-
	ln (quality)	-	-.6522	-	-	-	-	-	-	.8001	-
p-value	-	.0126*	-	-	-	-	-	-	.0121*	-	

	ln (clothing expenditure)	-	-	10.5791	-	-	-	-	-	-	-
	p-value	-	-	<.0001**	-	-	-	-	-	-	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
Cotton	R-square (adjusted)	.6022	11.0000	.8745	.7358	-	.7956	.4139	-	.5916	-
	global p-value	.0011**	-	<.0001**	.0002**	-	.0001**	.0143*	-	.0094**	-
	intercept	-3.7875	-	-12.7785	51.1327	-	3.8381	41.9594	-	9.7226	-
	p-value	.3350	-	.0767	.0023**	-	.007**	.0035**	-	<.0001**	-
	ln (tariff)	-	-	-3.7283	-	-	-2.7227	12.1187	-	-	-
	p-value	-	-	.0082**	-	-	.0001**	.0143*	-	-	-
	ln (labor cost)	-	-	-	-1.7200	-	-	-	-	2.6783	-
	p-value	-	-	-	.0085**	-	-	-	-	.0094**	-
	ln (exchange rate)	-	-	-	-5.6425	-	-	-	-	-	-
	p-value	-	-	-	.0153*	-	-	-	-	-	-
	ln (quality)	-3.2949	-	.8811	-	-	-	-	-	-	-
	p-value	.0011**	-	.0015**	-	-	-	-	-	-	-
	ln (clothing expenditure)	-	-	3.1588	-	-	-	-	-	-	-
	p-value	-	-	.0018**	-	-	-	-	-	-	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
p-value	-	-	-	-	-	-	-	-	-	-	

Manmade Fiber	R-square (adjusted)	.8308	.4572	.4779	-	.5616	.5564	.3872	.7523	-	-
	global p-value	<.0001**	.0047**	.003**	-	.0122*	.0051**	.0323*	.0002**	-	-
	intercept	12.9176	18.3176	7.9545	-	-139.2243	31.0520	16.6571	21.7263	-	-
	p-value	<.0001**	<.0001**	.0006**	-	.0169*	.0005**	.0006**	<.0001**	-	-
	ln (tariff)	-	-	-3.2449	-	-	-	-	6.0583	-	-
	p-value	-	-	.0123*	-	-	-	-	.0002**	-	-
	ln (labor cost)	.9690	-3.0957	-	-	-	13.6424	-	-	-	-
	p-value	.0458*	.0047**	-	-	-	.0051**	-	-	-	-
	ln (exchange rate)	2.5893	-	-	-	-	-	-4.2868	-	-	-
	p-value	.001**	-	-	-	-	-	.0323*	-	-	-
	ln (quality)	-	-	-.5201	-	-	-	-	-	-	-
	p-value	-	-	.0108*	-	-	-	-	-	-	-
	ln (clothing expenditure)	-	-	-	-	20.3537	-	-	-	-	-
	p-value	-	-	-	-	.0122*	-	-	-	-	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
p-value	-	-	-	-	-	-	-	-	-	-	
Not elsewhere specified	R-square (adjusted)	.9490	.7408	.6451	.6786	.9906	.9731	no	-	.8445	-
	global p-value	<.0001**	<.0001**	.0002**	<.0001**	<.0001**	.0134*	-	-	.0003**	-
	intercept	20.3549	25.5482	-59.0714	31.3118	-78.9878	-49.4608	-	-	-28.3249	-
	p-value	<.0001**	<.0001**	.0004**	<.0001**	.0134*	.017*	-	-	.0013**	-
	ln (tariff)	5.8477	5.9457	-	-	-	-	-	-	-	-

p-value	.0006**	<.0001**	-	-	-	-	-	-	-	-	-
ln (labor cost)	.9326	-	-	1.2086	-	-	-	-	-	-	-
p-value	.016*	-	-	<.0001**	-	-	-	-	-	-	-
ln (exchange rate)	4.9772	-	.0973	-2.6032	-	-7.4414	-	-	-	-	-
p-value	<.0001**	-	.0446*	.0009**	-	.0415*	-	-	-	-	-
ln (quality)	-	-	-	-	2.1373	-	-	-	-	-	-
p-value	-	-	-	-	.0021**	-	-	-	-	-	-
ln (clothing expenditure)	-	-	10.0351	-	13.7280	10.5211	-	-	6.0036	-	-
p-value	-	-	<.0001**	-	.0045**	.0149*	-	-	.0003**	-	-
quota fill level	-.1350	-	-	-	-	-	-	-	-	-	-
p-value	.028*	-	-	-	-	-	-	-	-	-	-

Note. * P<.05. ** P<.01.

Dress

		U.S.					Japan				
		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Wool	R-square (adjusted)	.5414	.8368	.6934	.6545	-	-	.7883	.8083	.6381	-
	global p-value	.0003**	<.0001**	<.0001**	<.0001**	-	-	.0018**	.0002**	.0351*	-
	intercept	9.3505	46.4267	-137.6060	-85.7758	-	-	56.9781	1.6155	14.2282	-
	p-value	<.0001**	<.0001**	<.0001**	.0001**	-	-	.0003**	.5101	.0007**	-

	ln (tariff)	-	14.9214	-	-	-	-	-	-	-	-
	p-value	-	<.0001**	-	-	-	-	-	-	-	-
	ln (labor cost)	-	-	-	-	-	6.7897	1.7318	-	-	-
	p-value	-	-	-	-	-	.0085**	.0008**	-	-	-
	ln (exchange rate)	2.2339	-	-	-	-	-	.9674	-	-	-
	p-value	.0003**	-	-	-	-	-	.0238*	-	-	-
	ln (quality)	-	-	-	-	-	-	-	.6653	-	-
	p-value	-	-	-	-	-	-	-	.0351*	-	-
	ln (clothing expenditure)	-	-	20.5299	13.4282	-	-	-8.5021	-	-	-
	p-value	-	-	<.0001**	<.0001**	-	-	.0008**	-	-	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
Cotton	R-square (adjusted)	.5980	.5399	.4801	-	.7850	.8621	.7688	.6033	.6565	-
	global p-value	.0001**	.0017**	.0009**	-	.0004**	.0002**	.0001**	.0018**	.0033**	-
	intercept	13.7978	11.4523	7.1974	-	-57.3385	1.8578	19.2401	10.4732	-19.3109	-
	p-value	<.0001**	<.0001**	.0017**	-	.0242*	.3068	<.0001**	<.0001**	.0163*	-
	ln (tariff)	-	-	-3.4190	-	-.8740	-.8613	-	-	-	-
	p-value	-	-	.0009**	-	.027*	.0004**	-	-	-	-
	ln (labor cost)	-	-	-	-	-	-	-	.8421	-3.0962	-
	p-value	-	-	-	-	-	-	-	.0018**	.0094**	-
	ln (exchange rate)	1.4679	-	-	-	-	-1.0578	-4.7792	-	-	-
p-value	.0001**	-	-	-	-	.0061**	.0001**	-	-	-	

	ln (quality)	-	-1.0373	-	-	-	-	-	-	-	-
	p-value	-	.0017**	-	-	-	-	-	-	-	-
	ln (clothing expenditure)	-	-	-	-	9.5133	1.5530	-	-	5.1500	-
	p-value	-	-	-	-	.0103*	.0008**	-	-	.0011**	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
Manmade Fiber	R-square (adjusted)	.8750	.5274	-	.7747	.8617	.6655	-	.6328	.3976	-
	global p-value	<.0001**	.003**	-	<.0001**	<.0001**	.0004**	-	.0045**	.0165*	-
	intercept	11.5844	-142.5438	-	-17.1300	-200.0484	6.7629	-	17.9975	15.3947	-
	p-value	<.0001**	.0066**	-	.001**	<.0001**	<.0001**	-	<.0001**	<.0001**	-
	ln (tariff)	-3.7294	-	-	-16.4505	-	-1.7369	-	-	-	-
	p-value	.0015**	-	-	<.0001**	-	.0004**	-	-	-	-
	ln (labor cost)	.8895	-	-	-	-	-	-	.9894	-	-
	p-value	.0004**	-	-	-	-	-	-	.0096**	-	-
	ln (exchange rate)	-	77.6701	-	-	-	-	-	-1.2808	-	-
	p-value	-	.0033**	-	-	-	-	-	.0023**	-	-
	ln (quality)	-	-	-	-	-	-	-	-	.4692	-
	p-value	-	-	-	-	-	-	-	-	.0165*	-
	ln (clothing expenditure)	-	-	-	-	29.0657	-	-	-	-	-
	p-value	-	-	-	-	<.0001**	-	-	-	-	-
	quota fill level	-	-	-	-	-	-	-	-	-	-

	p-value	-	-	-	-	-	-	-	-	-	-
Not elsewhere specified	R-square (adjusted)	.9333	.7796	.6999	.5026	.8116	.8432	.7769	.6390	.4803	-
	global p-value	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	.0002**	.0025**	-
	intercept	-39.2650	16.1434	-16.6563	26.8982	-48.8020	2.6524	8.7304	18.5092	-1.5025	-
	p-value	.0691	<.0001**	.1407	<.0001**	.0916	.1282	<.0001**	<.0001**	.7061	-
	ln (tariff)	-	-	-2.4534	-	-1.0819	-	-	-	-	-
	p-value	-	-	.03838*	-	<.0001**	-	-	-	-	-
	ln (labor cost)	-	-	-	-	-3.8382	-	3.2489	-	-	-
	p-value	-	-	-	-	.0003**	-	<.0001**	-	-	-
	ln (exchange rate)	2.0400	-	-	-1.4347	-.4009	6.7250	-	-	-	-
	p-value	.0092**	-	-	.0002**	.0121*	<.0001**	-	-	-	-
	ln (quality)	1.4007	-	-	-	-	-	-	1.1372	-	-
	p-value	<.0001**	-	-	-	-	-	-	.0002**	-	-
	ln (clothing expenditure)	8.1021	-	3.7511	-	8.6809	-	-	-	219131.0000	-
	p-value	.0126*	-	.0403*	-	.0286*	-	-	-	.0025**	-
	quota fill level	-	.0185	-	.0045	-	-	-	-	-	-
p-value	-	<.0001**	-	.0387*	-	-	-	-	-	-	

Note. * P<.05. ** P<.01.

Skirt

	U.S.	Japan
--	------	-------

		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico	
Wool	R-square (adjusted)	.8145	no	.7486	.7035	.7422	.7308	-	.5990	.5286	-	
	global p-value	<.0001**	-	<.0001**	<.0001**	.0172*	.0005**	-	.0019**	.0137*	-	
	intercept	32.7902	-	-153.7008	-132.1904	-188.1505	7.5064	-	16.5464	-12.4753	-	
	p-value	<.0001**	-	<.0001**	<.0001**	.0211**	<.0001**	-	<.0001**	.0807	-	
	ln (tariff)	-	-	-	-	-	-	-	-	-	-	
	p-value	-	-	-	-	-	-	-	-	-	-	
	ln (labor cost)	-	-	-	-	-	-	-	-	-2.1694	-	
	p-value	-	-	-	-	-	-	-	-	.041*	-	
	ln (exchange rate)	-	-	-	-	-	4.1046	-	-	-	-	
	p-value	-	-	-	-	-	.0005**	-	-	-	-	
	ln (quality)	3.8502	-	-	-	-	-	-	.5296	-	-	
	p-value	<.0001**	-	-	-	-	-	-	.0019**	-	-	
	ln (clothing expenditure)	-	-	22.7918	19.8459	27.091	-	-	-	-	3.8548	-
	p-value	-	-	<.0001	<.0001	.0172	-	-	-	-	.0055**	-
	quota fill level	-	-	-	-	-	-	-	-	-	-	-
p-value	-	-	-	-	-	-	-	-	-	-	-	
Cotton	R-square (adjusted)	.5457	.7744	.4060	no	.9083	.8552	.7694	.7875	.7125	-	
	global p-value	.0003**	<.0001**	.0015**	-	<.0001**	<.0001**	.0006**	.0004**	.0015**	-	
	intercept	14.3295	-17.5132	16.2383	-	-52.0893	12.6111	30.3224	2.8457	5.0443	-	

	p-value	<.0001**	.0058**	<.0001**	-	.0021**	<.0001**	.0002**	.5172	.3368	-
	ln (tariff)	-	-	-	-	-	-1.4392	4.8929	-	5.9424	-
	p-value	-	-	-	-	-	.0003**	.0374*	-	.0343*	-
	ln (labor cost)	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
	ln (exchange rate)	-	-	-.1339	-	-	-	-3.0344	1.7805	-	-
	p-value	-	-	.0015**	-	-	-	.0034**	.009**	-	-
	ln (quality)	1.2925	-14.1419	-	-	-3.6146	-	-	.5560	-	-
	p-value	.0003**	<.0001**	-	-	.0002**	-	-	.0035**	-	-
	ln (clothing expenditure)	-	-	-	-	6.3097	-	-	-	3.6994	-
	p-value	-	-	-	-	.0085**	-	-	-	.0005**	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
Manmade Fiber	R-square (adjusted)	.5840	.7722	.2319	.4776	.9299	.5578	-	.5898	-	-
	global p-value	.0001**	.0001**	.0248*	.0009**	<.0001**	.0032**	-	.0021**	-	-
	intercept	17.5059	-14.0028	43.3795	9.4736	-14.9143	7.6859	-	20.0622	-	-
	p-value	<.0001**	.1535	.0014**	<.0001**	.0148*	<.0001**	-	<.0001**	-	-
	ln (tariff)	-	-	-	-3.4340	-1.1642	-1.5774	-	4.5352	-	-
	p-value	-	-	-	.0009**	.0018**	.0032**	-	.0021**	-	-
	ln (labor cost)	1.0423	-	-	-	-3.1001	-	-	-	-	-
	p-value	.0001**	-	-	-	.0409*	-	-	-	-	-
	ln (exchange rate)	-	-	-	-	-1.1722	-	-	-	-	-

	p-value	-	-	-	-	<.0001**	-	-	-	-	-
	ln (quality)	-	-1.1696	-	-	-5.2851	-	-	-	-	-
	p-value	-	.0003**	-	-	.0001**	-	-	-	-	-
	ln (clothing expenditure)	-	3.2523	-3.7563	-	-	-	-	-	-	-
	p-value	-	.0263*	.0248*	-	-	-	-	-	-	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
Not elsewhere specified	R-square (adjusted)	.9099	.9223	.5701	.2229	.9122	.8822	.4130	.9517	-	-
	global p-value	<.0001**	<.0001**	.0011**	.0276*	<.0001**	.0001**	.0144*	<.0001**	-	-
	intercept	-51.6413	4.9367	4.2295	-5.3650	-80.3929	2.1512	-.5970	-.3446	-	-
	p-value	.0209*	<.0001**	.1609	.5641	.037*	.0564	.8739	.7706	-	-
	ln (tariff)	-	10.5188	-5.8927	-	-	-	-	-	-	-
	p-value	-	.0001**	.0011**	-	-	-	-	-	-	-
	ln (labor cost)	-	-1.5756	-	-	-	-	-	1.4986	-	-
	p-value	-	.0018**	-	-	-	-	-	<.0001**	-	-
	ln (exchange rate)	2.6452	-	-	-	-.4948	7.7008	5.8314	1.3491	-	-
	p-value	.0012**	-	-	-	.0129*	.0001**	.0144*	<.0001**	-	-
	ln (quality)	-	-	-	-	-1.0304	-	-	-	-	-
	p-value	-	-	-	-	.0035**	-	-	-	-	-
	ln (clothing expenditure)	8.6912	-	-	2.9806	12.1925	-	-	-	-	-
	p-value	.008**	-	-	.0276*	.0225*	-	-	-	-	-

quota fill level	-	-	-	-	-	-	-	-	-	-	-
p-value	-	-	-	-	-	-	-	-	-	-	-

Note. * P<.05. ** P<.01.

Blouse

		U.S.					Japan				
		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Cotton	R-square (adjusted)	.7813	-	.7275	-	.7792	.9170	-	.4862	.3250	.8954
	global p-value	<.0001**	-	<.0001**	-	.0053**	<.0001**	-	.0103*	.0173*	.0355*
	intercept	10.6594	-	14.5115	-	39.5730	7.5598	-	9.1678	18.0318	-4.4229
	p-value	<.0001**	-	<.0001**	-	.0007**	<.0001**	-	<.0001**	<.0001**	.2087
	ln (tariff)	-	-	-	-	-	-1.1105	-	-	-	-
	p-value	-	-	-	-	-	.0053**	-	-	-	-
	ln (labor cost)	-	-	.7272	-	-	-	-	-	-	-
	p-value	-	-	.0293*	-	-	-	-	-	-	-
	ln (exchange rate)	3.5571	-	-1.1155	-	-	2.3305	-	-	-	3.3488
	p-value	<.0001**	-	<.0001**	-	-	.0004**	-	-	-	.0355*
	ln (quality)	-	-	-	-	4.0364	-	-	-	.6249	-
	p-value	-	-	-	-	.0053**	-	-	-	.0173*	-
ln (clothing expenditure)	-	-	-	-	-	-	-	.4970	-	-	

	p-value	-	-	-	-	-	-	-	.0103*	-	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
Manmade Fiber	R-square (adjusted)	.7373	.6314	.2433	.6609	.9516	-	-	.7762	.5086	-
	global p-value	<.0001**	.0004**	.0217*	.0001**	<.0001**	-	-	.0005**	.0055**	-
	intercept	23.1739	19.5473	11.5080	6.1592	50.7684	-	-	24.3176	10.4407	-
	p-value	<.0001**	<.0001**	<.0001**	.4258	<.0001**	-	-	<.0001**	<.0001**	-
	ln (tariff)	-	-	-2.2542	-	-.9571	-	-	-	-	-
	p-value	-	-	.0217*	-	<.0001**	-	-	-	-	-
	ln (labor cost)	-	-1.1307	-	-	-	-	-	-	-	-
	p-value	-	.0004**	-	-	-	-	-	-	-	-
	ln (exchange rate)	1.1103	-	-	-	-	-	-	-1.5045	-	-
	p-value	<.0001**	-	-	-	-	-	-	.0006**	-	-
	ln (quality)	1.2693	-	-	2.4513	6.1267	-	-	.4922	-.4348	-
	p-value	.0469*	-	-	<.0001**	<.0001**	-	-	.0003**	.0055**	-
	ln (clothing expenditure)	-	-	-	3.3838	-	-	-	-	-	-
	p-value	-	-	-	.0132*	-	-	-	-	-	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
p-value	-	-	-	-	-	-	-	-	-	-	
elsewhere	R-square (adjusted)	.8421	.8611	.7205	.4345	.5419	.9037	.7783	.9597	.6822	-
	global p-value	<.0001**	<.0001**	<.0001**	.0054**	.0016**	<.0001**	<.0001**	<.0001**	<.0001**	-

intercept	-31.8152	-141.6343	22.1469	-9.2336	6.7323	4.6797	-15.7007	12.3916	-16.4260	-
p-value	.0991	.0795	<.0001**	.5460	.0004**	.1616	<.0001**	.0001**	.0094**	-
ln (tariff)	-	12.4013	-	8.1297	-1.7154	-	-	-	-	-
p-value	-	<.0001**	-	.0015**	.0016**	-	-	-	-	-
ln (labor cost)	-	-	-	-	-	-	-	-	-	-
p-value	-	-	-	-	-	-	-	-	-	-
ln (exchange rate)	1.8044	92.1245	-.0759	-	-	-	-	.0493	-	-
p-value	.0105*	.0305*	.00006**	-	-	-	-	.0252*	-	-
ln (quality)	-	-	1.6930	-	-	1.0955	-	1.2460	-	-
p-value	-	-	<.0001**	-	-	<.0001**	-	<.0001**	-	-
ln (clothing expenditure)	6.4233	-	-	6.0217	-	2.6395	4.5598	.9878	4.5308	-
p-value	.0251*	-	-	.0239*	-	.0002**	<.0001**	.0106*	<.0001**	-
quota fill level	-	-	-	-	-	-	-	-	-	-
p-value	-	-	-	-	-	-	-	-	-	-

Note. * P<.05. ** P<.01.

Trouser

		U.S.					Japan				
		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Wool	R-square (adjusted)	.6766	no	.8311	.9332	.6988	.8879	-	.5369	-	-
	global p-value	<.0001**	-	<.0001**	<.0001**	.0005**	<.0001**	-	.0023**	-	-

	intercept	21.7779	-	-159.2900	18.1133	-216.8074	4.2577	-	1.1338	-	-
	p-value	<.0001**	-	<.0001**	<.0001**	.0015**	.0006**	-	.6696	-	-
	ln (tariff)	-	-	-	3.9968	-2.3439	-	-	-	-	-
	p-value	-	-	-	.0003**	.0065**	-	-	-	-	-
	ln (labor cost)	-	-	-	3.1967	-9.9094	-	-	-	-	-
	p-value	-	-	-	<.0001**	.0014**	-	-	-	-	-
	ln (exchange rate)	-	-	-	-	-	7.1061	-	1.4689	-	-
	p-value	-	-	-	-	-	<.0001**	-	.0023**	-	-
	ln (quality)	1.5283	-	-	-	-	-	-	-	-	-
	p-value	<.0001**	-	-	-	-	-	-	-	-	-
	ln (clothing expenditure)	-	-	23.6286	-	30.8957	-	-	-	-	-
	p-value	-	-	<.0001**	-	.0012**	-	-	-	-	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
Cotton	R-square (adjusted)	.9272	.7117	.8941	.6470	.7921	.9410	.7771	.7474	.5644	-
	global p-value	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	.0005**	.0002**	.0029**	-
	intercept	-7.8830	15.3266	1.5846	-106.2960	-192.3754	9.9231	19.2305	-13.4356	-9.4624	-
	p-value	.0016**	<.0001**	.5482	<.0001**	.0001**	<.0001**	<.0001**	.0128*	.1143	-
	ln (tariff)	-	-1.8868	1.0259	6.6341	-	-1.0210	-	-	-	-
	p-value	-	<.0001**	.0111*	.0004**	-	.0005**	-	-	-	-
	ln (labor cost)	2.2951	-	3.4358	-	-	-	-2.3141	-	-	-
p-value	<.0001**	-	.0001**	-	-	-	.0015**	-	-	-	

Manmade Fiber	ln (exchange rate)	-	-	-3.000	3.4218	-	1.7029	-	3.6192	-	-
	p-value	-	-	.0002**	.0362*	-	<.0001**	-	.0002**	-	-
	ln (quality)	-5.1376	-	-2.2327	-	-	-	.6905	-	-	-
	p-value	<.0001**	-	<.0001**	-	-	-	.0002**	-	-	-
	ln (clothing expenditure)	-	-	-	15.4247	28.4768	-	-	-	3.5381	-
	p-value	-	-	-	.0001**	<.0001**	-	-	-	.0029**	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
	R-square (adjusted)	.9678	.8654	.8641	.8052	.8559	.5179	-	-	-	-
	global p-value	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	.005**	-	-	-	-
	intercept	8.7275	-3.9985	-1.7633	-75.3073	-202.7167	4.3454	-	-	-	-
	p-value	<.0001**	.1089	.2663	<.0001**	<.0001**	.0548	-	-	-	-
	ln (tariff)	.8496	-10.3945	-	.9104	-	-2.8543	-	-	-	-
	p-value	.0007**	<.0001**	-	.0415*	-	.005**	-	-	-	-
ln (labor cost)	1.0419	-	2.3589	-	-	-	-	-	-	-	
p-value	.0044**	-	.0046**	-	-	-	-	-	-	-	
ln (exchange rate)	2.1422	-	-	-	-	-	-	-	-	-	
p-value	<.0001**	-	-	-	-	-	-	-	-	-	
ln (quality)	-1.3219	-	-2.6066	-	-2.0502	-	-	-	-	-	
p-value	<.0001**	-	<.0001**	-	.0049**	-	-	-	-	-	
ln (clothing expenditure)	-	-	-	12.6434	27.9193	-	-	-	-	-	

	p-value	-	-	-	<.0001**	<.0001**	-	-	-	-	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
Not elsewhere specified	R-square (adjusted)	.8502	.7724	.6772	.3051	.8631	.8832	.5324	.9434	.8170	-
	global p-value	<.0001**	<.0001**	<.0001**	.0102*	<.0001**	.0003**	.0065**	<.0001**	.0225*	-
	intercept	8.1132	20.4132	6.3233	-5.3149	-245.7500	2.1531	5.9338	-11.8718	-43.4092	-
	p-value	.0016**	<.0001**	.0011**	.4954	<.0001**	.0781	<.0001**	.0077**	.0357*	-
	ln (tariff)	-3.9552	-	-4.8471	-	-	-	-	-	-	-
	p-value	.0207*	-	<.0001**	-	-	-	-	-	-	-
	ln (labor cost)	-	-1.8221	-	-	-	-	5.7020	-	-	-
	p-value	-	<.0001**	-	-	-	-	.0065**	-	-	-
	ln (exchange rate)	1.5126	-	-	-	-	7.5551	-	3.5057	-	-
	p-value	.0286*	-	-	-	-	.0003**	-	<.0001**	-	-
	ln (quality)	-	-	-	-	-3.9013	-	-	.5090	-	-
	p-value	-	-	-	-	.0013**	-	-	<.0001**	-	-
	ln (clothing expenditure)	-	-	-	2.9908	32.1445	-	-	-	8.2515	-
	p-value	-	-	-	.0102*	<.0001**	-	-	-	.0225*	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
p-value	-	-	-	-	-	-	-	-	-	-	

Note. * P<.05. ** P<.01.

Outergarments

		U.S.					Japan				
		China	Hong Kong	Italy	Korea	Mexico	China	Hong Kong	Italy	Korea	Mexico
Wool	R-square (adjusted)	.2917	-	.1198	-	.2427	.8691	.7186	.9344	.4412	-
	global p-value	.0121*	-	.0413*	-	.0303*	<.0001**	<.0001**	<.0001**	.0121*	-
	intercept	-52.9781	-	42.1743	-	-105.2497	13.0158	-6.6058	20.0977	-15.1644	-
	p-value	.038*	-	.0033**	-	.0452*	.0009**	.1838	<.0001**	.1785	-
	ln (tariff)	-	-	-	-	-	-	-	1.8859	-	-
	p-value	-	-	-	-	-	-	-	.003**	-	-
	ln (labor cost)	-	-	-	-	-	-	1.4159	-	-	-
	p-value	-	-	-	-	-	-	.0301*	-	-	-
	ln (exchange rate)	-	-	-	-	-	2.4642	-	-	-	-
	p-value	-	-	-	-	-	.0167*	-	-	-	-
	ln (quality)	-	-	-	-	-	.7916	-	1.4695	-.8594	-
	p-value	-	-	-	-	-	.0435*	-	<.0001**	.0248*	-
	ln (clothing expenditure)	8.9415	-	-3.6631	-	15.5806	-	2.2644	-	3.8125	-
	p-value	.0121*	-	.0413*	-	.0303*	-	.0135*	-	.0346*	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
p-value	-	-	-	-	-	-	-	-	-	-	

Cotton	R-square (adjusted)	.6630	.2320	.8937	.3567	.7746	.6451	.8078	.7666	.5060	-
	global p-value	<.0001**	.0238*	<.0001**	.0006**	.0002**	.0023**	<.0001**	<.0001**	.0018**	-
	intercept	4.7969	21.4977	7.9001	-10.0771	-245.3236	11.5841	6.3383	17.7155	36.6358	-
	p-value	.0503	<.0001**	.0001**	.3612	.0002**	.0169*	.0639	<.0001**	<.0001**	-
	ln (tariff)	-	-	.9980	1.0116	-	-	-	-	-	-
	p-value	-	-	.0005**	.0023**	-	-	-	-	-	-
	ln (labor cost)	-1.4092	-	1.8294	-	-	-	-	-	-	-
	p-value	.0354*	-	.0004**	-	-	-	-	-	-	-
	ln (exchange rate)	2.9974	-	-.1489	-	.7665	-	-3.8236	-	-3.2182	-
	p-value	.0002**	-	.0013**	-	.0106*	-	<.0001**	-	.0018**	-
	ln (quality)	-1.1932	.8897	-1.3441	1.0333	-	.9398	.2904	1.4627	-	-
	p-value	.0075**	.0258*	.0006**	.0021**	-	.0007**	.0014**	<.0001**	-	-
	ln (clothing expenditure)	-	-	-	4.5215	34.7888	1.5365	2.2886	-	-	-
	p-value	-	-	-	.0065**	.0001**	.0362*	<.0001**	-	-	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
p-value	-	-	-	-	-	-	-	-	-	-	
Manmade Fiber	R-square (adjusted)	.7221	.7742	.7072	.3831	.8728	.9616	.6436	.8816	.9368	-
	global p-value	<.0001**	<.0001**	<.0001**	.0031**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	-
	intercept	12.0640	32.6569	-92.9583	-89.4748	-66.7263	16.7910	16.8000	19.2454	30.8177	-
	p-value	<.0001**	<.0001**	<.0001**	.0087**	<.0001**	<.0001**	<.0001**	<.0001**	.0006**	-

	ln (tariff)	-	8.0630	-	-	-	-	-	-	-	-
	p-value	-	<.0001**	-	-	-	-	-	-	-	-
	ln (labor cost)	-	-	-	-1.8356	-	-	-	-	-	-
	p-value	-	-	-	.0134*	-	-	-	-	-	-
	ln (exchange rate)	3.3601	-	-	-	-	3.0473	-	-	-2.9333	-
	p-value	<.0001**	-	-	-	-	.0002**	-	-	<.0001**	-
	ln (quality)	-	-	-	-	-	1.0203	.9169	2.0783	.8901	-
	p-value	-	-	-	-	-	.0001**	<.0001**	<.0001**	<.0001**	-
	ln (clothing expenditure)	-	-	14.5301	14.8703	10.9579	-	-	-	1.3852	-
	p-value	-	-	<.0001**	.0025**	<.0001**	-	-	-	.0214*	-
	quota fill level	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
Not elsewhere specified	R-square (adjusted)	.5963	.9678	.6670	.5907	.0000	.7734	.6868	.8279	.4301	-
	global p-value	.0001**	<.0001**	.0001**	.0001**	-	<.0001**	<.0001**	<.0001**	.0047**	-
	intercept	14.0005	193.7909	88.1724	46.6842	-	22.6688	-26.3655	2.9783	-23.5392	-
	p-value	<.0001**	.0035**	<.0001**	<.0001**	-	<.0001**	<.0001**	.4581	.0486*	-
	ln (tariff)	-	-	-	-	-	-	-	-	-	-
	p-value	-	-	-	-	-	-	-	-	-	-
	ln (labor cost)	-	-4.9511	-	-	-	-	-	-	-	-
	p-value	-	<.0001**	-	-	-	-	-	-	-	-
	ln (exchange	1.6786	-81.5755	-.0913	-4.8295	-	-	-	-	-	-

rate)										
p-value	.0001**	.009**	.0473*	.0001**	-	-	-	-	-	-
ln (quality)	-	.8780	-	-	-	1.7561	-	1.4449	-	-
p-value	-	.0129*	-	-	-	<.0001**	-	<.0001**	-	-
ln (clothing expenditure)	-	-	-9.9574	-	-	-	5.7236	2.0500	5.5413	-
p-value	-	-	<.0001**	-	-	-	<.0001**	.0044**	.0047**	-
quota fill level	-	-	-	-	-	-	-	-	-	-
p-value	-	-	-	-	-	-	-	-	-	-