

US APPAREL IMPORTS FROM CHINA IN THE CONTEXT OF MFA IV

by

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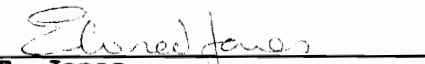
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ABSTRACT

The purpose of this research was to analyze US apparel trade building up to and following the MFA IV renewal in 1986, so as to gain insight into the reasons for US apparel industry support of the new fiber inclusions, and to gauge effects of MFA IV on US apparel imports overall and specifically from the PRC. The study focused on the period 1978 - 1988.

Total imports from all suppliers (World) were examined by country of origin: China (PRC), and rest of world (ROW); fiber content: MFA IV-fiber or all fibers and whether knitted or woven construction. The imports were then examined to determine the impact of economic variables such as the exchange rate, and US personal apparel consumption expenditure (PCE).

Imports were found to have increased from 1978 to 1987 and then to have declined in all categories except one from 1987 to 1988. The MFA IV, implemented in August 1986 was believed to have caused a reduction of import volumes after an initial lag period (expected in international trade). However, other factors were implicated in the trade reduction primarily the fall of the dollar. The dollar was strong through the early 1980s until its peak in 1985, it then declined for the rest of the study.

The one category which continued to increase after the trade restriction was items of MFA IV woven apparel. The reason for this continued increase is not clear but it is believed to be the absence of specific restriction, i.e., pure silk had not been included in bilateral agreements so it is possible that suppliers were switching the product mix to increasing quantities of the less restricted group. Also this would have been the case if the items were coming from new and/or unrestricted suppliers.

In conclusion, it is felt that the apparel import rate or increase was the primary concern and the factor that determined action not the actual volume of imports as the MFA IV-fibers were increasingly used in apparel production.

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TABLE OF CONTENTS

	Page
ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
LIST OF TABLES	vi
LIST OF FIGURES	vii
CHAPTER	
I. INTRODUCTION	1
II. LITERATURE REVIEW	6
History of American Protectionism.	6
Early US Protection.	6
The STA and the LTA.	8
Multifiber Agreement I	11
Multifiber Agreement II.	13
Multifiber Agreement III	14
Multifiber Agreement IV.	18
Imports in the Face of Protection.	20
Cost of Protection	22
Import patterns.	24
Factors behind the Import Surge.	25
The role of the dollar	26
Lags	29
Consumer demand.	30
Summary.	32
III. STATEMENT OF THE RESEARCH PROBLEM	35
Research Problem and Objective.	35
Theoretical Framework	36
Basic Static Framework.	36
Protectionism	40
Shifts in the Demand and Supply Curve	43
Exchange Rates.	47
Research Hypotheses	49
Basis for Hypotheses.	50
Assumptions	54
Limitations	54
IV. PROCEDURE	56
Data.	57
V. FINDINGS AND DISCUSSION	61
Results	61
Objective 1.	61
Objective 2.	65
Aggregate Apparel Imports.	65

	Page
MFA IV Imports from the World.	66
MFA IV Imports as Share of Import Market . . .	68
MFA IV-Fiber Apparel Imports from PRC.	68
PRC's Share of Apparel Imports of MFA IV-Fiber	70
MFA IV-Fiber Apparel from PRC as % of Total Apparel Imports	72
Further Investigation of MFA IV-Fiber.	72
Objective 3.	75
Hypothesis 1	75
Hypothesis 2	75
Hypothesis 3	83
Hypothesis 4	83
Summary and Discussion	86
Aggregate US Apparel Imports, 1978-88.	87
Pre MFA IV, 1987-85.	87
MFA IV, 1986-88.	89
US Apparel Imports from PRC, 1978-88	90
Pre MFA IV, 1978-85.	90
MFA IV, 1986-88.	94
 VI. CONCLUSIONS AND IMPLICATIONS FOR FUTURE RESEARCH.	100
Future Study	105
LITERATURE CITED.	107
APPENDICES.	115
VITA.	117

LIST OF TABLES

Table		Page
2.1	Comparative Cronology.	21
5.1	US Apparel Imports (SITC 84)	63
5.2	US Imports of MFA IV-Fiber Apparel	67
5.3	Summary of US Import Markets, by Value . .	69
5.4	MFA IV-Fiber as a Share of Kitted & Woven Apparel Imports.	74
Appendix		
A	Exchange Rates of Major Industrialized Countries	114
B	The PRC's Exchange Rate	115

LIST OF FIGURES

Figures	Page
3.1 Domestic demand for Imports	37
3.2 Trade between US and PRC in one commodity . .	39
3.3 Effects of Quota Restrictions on US Economy	41
3.4 Shifts in Demand and Supply Curves.	44
3.5 The Effect of the Exchange Rate on US	48
5.1 Time Line-Summary of Trade Agreements	62
5.2a PRC's Share of US Imports of MFA IV-Fibers (value).	71
5.2b PRC's Share of US Imports of MFA IV-Fibers (quantity)	71
5.3 MFA IV-Fiber Apparel as a Share of Total Imports.	76
5.4 Increased MFA IV-Fiber Use in Imported Apparel.	77
5.5a MFA IV-Fiber Imports (value).	79
5.5b MFA IV-Fiber Imports (quantity)	79
5.6 Unit Price of MFA IV-Fiber Apparel.	80
5.7 MFA IV-Fibers as Proportion of Imports (by value).	82
5.8 MFA IV-Fiber Imports from PRC compared to US Personal Apparel Expenditures.	84
5.9 MFA IV-Fiber Imports from PRC compared to Value of the Dollar.. . . .	85
5.10 Apparel Trade between US and ROW, 1978-85.	88
5.11 Apparel Trade between US and ROW, 1986-88.	91
5.12 MFA IV-Fiber Trade between US and PRC, 1978-85.	95
5.13 MFA IV-Fiber Trade between US and PRC, 1986-88.	97

CHAPTER 1

INTRODUCTION

The ability of the United States (US) to compete in the world economy, especially in the manufacturing sector, declined in the last 15 years. The challenge to the US economy has come about through a complex of factors, including industrial development in many other nations and the slow adjustment of American industries to the new realities of the global economy. In addition, US fiscal and monetary policies contributed to the "overvalued" dollar of the 1980s and fostered consumption patterns conducive to increased import levels and reduced exports. Heightened competition for the US textile industry and others has come particularly from the Asian newly industrialized countries (NICs) (Ghadar, Davidson, & Feigenoff, 1987).

The emergence of the NICs as US competitors in textiles and apparel developed because of two major factors: increasing industrialization of these countries and their adaptability in the face of increased trade restrictions. The growth experiences of Japan, Korea and Taiwan have been characterized by initial growth surges with rapid gains in textile exports. Increasing trade restrictions induced shifts into uncontrolled textile export categories and then a relative decline in textile exports and progressive movement of production to other lower-wage, less restricted countries (Yoffie, 1986; Whalley, 1990). Of the NICs the current dominant US supplier is the People's Republic of China (PRC) (Major Shippers, 1988; US International Trade Commission [USITC], 1989).

The US textile industry, comprising both textile mills and apparel manufacturers, plays a significant and complex role in the US economy, due to its diversity, geographic dispersion, large size, and high labor intensity especially in the apparel sector.) These characteristics, along with heavy geographic concentration in certain states, have enabled the textile industry to amass enormous political leverage with respect to international trade matters (Martin & Pelzman, 1983). The US textile lobby was one of the earliest, dating back to 1816 when it successfully petitioned Congress for protection against cotton and wool imports. Over time this lobby has become very strong and most effective.

Textiles and apparel have received more comprehensive and persistent protection than almost any other industry. Both domestic and international factors influence a government's decision to introduce and sustain trade protection. "Special" textile industry protection was initiated over 25 years ago to provide temporary relief in order to allow the domestic industry time to become more competitive. Hughes (1987) has said,

"it is unfortunate how 'temporary' takes on new meaning in the context of protection for the textile industry. More than thirty years of quotas and 200 years of tariff protection have not been enough to satisfy the US textile and apparel industry" (p. 257).

Despite imposed trade restrictions the industry has experienced considerable and increasing competitive pressure as imports continue to grow (Ghadar et al., 1987). During the past six years, the cumulative textile trade deficit has been \$80 billion, or some 13.5% of the total US trade deficit. In 1986, US textile imports of \$24.7 billion exceeded exports by \$21.2 billion. The 1988 deficit of \$24.4 billion accounted for 17.8% of the total US trade deficit (Law, 1989). Shipments for 1989 were 17% above 1988 figures, and 11% greater than 1987 figures; apparel imports for the first quarter of 1990 were up 6.9% from the same period in 1989 (Textile Hi.Lights, 1990).

Since 1974 international trade has operated under the Multifiber Arrangement (MFA), officially called the Arrangement Regarding International Trade in Textiles. Other formal multilateral arrangements existed before this agreement, in the form of the Short-Term and Long-Term Cotton Agreements (STA and LTA). The basic principles of the STA and the LTA were carried forward and extended to cover manmade fibers and wool in the MFA. Like the STA and LTA, the MFA established a mechanism by which nations could limit the quantity of textile imports from abroad (Anson & Simpson, 1988).

The MFA is a "protocol," an umbrella agreement, negotiated under the auspices of the General Agreement on Tariffs and Trade (GATT). The MFA is a legal agreement signed by participating countries to restrict textile and apparel trade through bilateral agreements between exporting and importing countries. Quotas are then agreed upon, limiting the quantity of goods to be exported. The quotas are considered "voluntary" because they are administered and applied by the exporter (Choi, Chung, & Marian, 1985).

The MFA represents a compromise between the interests of the exporting and importing countries. The primary stated objectives are "the expansion and progressive liberalization of trade in textiles, while avoiding disruption of individual markets and individual lines of production in both importing and exporting countries" (Anson & Simpson, 1988, p. 111). It originally sought to "...secure for developing countries a substantial increase in their export earnings and a greater share of the world's trade in textile products" (Anson & Simpson, 1988, p. 111).

In practice the MFA has applied mostly to imports into developed countries and exports from developing countries. With each successive renewal, the importing countries have sought to close loopholes and to tighten and lower the growth rates of quotas.

The MFA was renewed for the third time in August 1986. This latest renewal, the 1986 Protocol of Extension (MFA IV), will be in effect until 1991. It contains several important provisions which are the focus of this research. [The key operative provisions extend the product coverage of the MFA and expand the rights of the importing countries to restrict imports. Product coverage was extended to include articles manufactured from silk blends and vegetable fibers other than cotton, henceforth called MFA IV-fibers (Jacobs, 1987).] This broadened coverage was of considerable significance to the US industry. Imports of MFA IV-fibers such as ramie, linen, and silk had grown from 3% of total US apparel imports in 1983 to over 10% by June 1986 (Jacobs, 1987).

In an effort to investigate the role of the MFA in US trade with other countries, [this research looked specifically at the PRC for several reasons: the unique trade position it holds with the US, and its place as a major producer of the latest MFA fiber inclusions. US trade with the PRC has developed rapidly from relatively recent beginnings in 1978. The US officially recognized the PRC in January 1979 and granted "Most Favored Nation" (MFN) status (MacDougall, 1980). By 1987 the PRC had become the major textile supplier to the US in terms of quantity [1,738 million square yard equivalents (SYE)] (USITC, 1989). Presently, it is the world's leading producer of silk and the natural cellulosic fibers newly covered by the MFA. It is the United States' largest supplier of silk, linen, and ramie textiles. China enjoyed "new entrant" status until December 1987 when the third and most recent Sino-US bilateral agreement was signed under the auspices of MFA IV. The current bilateral, in effect until 1991, covers over 75% of US textile imports from China and limits import growth to an average 3% per year.

The research can be justified by the strong position held by the textile sector within international trade policy and the GATT negotiations. The textile sector comprises almost one-tenth of the

volume of world trade (Cline, 1990). The US textile industry has sufficient political leverage to cause the introduction of two textile bills leading up to the introduction of the MFA IV in 1986.

US trade with the PRC is now pertinent due to the new fiber inclusions of MFA IV. Little research as yet has been published in this area. Therefore, in light of the imminent, 1991, renegotiations of both MFA and the GATT. The purpose of this research was to investigate US apparel trade building up to and following the MFA IV renewal in 1986, so as to gain insight into the reasons for US industry support of the new fiber inclusions, and to gauge effects of MFA IV on US apparel imports overall and specifically from the PRC. The analysis focused on the period 1978-88 in order to compare trade before the agreement with changes seen after its enactment. In addition, the year 1978 is significant as little trade relevant to this study occurred between the US and the PRC prior to that date.

CHAPTER II

REVIEW OF LITERATURE

[This chapter gives an historical overview of textile trade policies and their ramifications.] A further section discusses import patterns in the face of trade restrictions, costs incurred when imports are restricted, and economic factors which have impacted import patterns.

Historical Survey of American Protectionism

The United States textile industry has established a special position within the realms of international trade. Trade restrictions have built up progressively over the years, mainly through the imposition of tariffs and quotas. Tariffs have been levied throughout US history. Since the mid-1900s, quotas have come to be the dominant form of protection for textiles and apparel, primarily under the aegis of the STA, the LTA, and the MFA.

Early US Protection

The United States has a history of high tariffs back to the birth of the nation. Varying tariffs have existed over the years. For example, during the Civil War a 60% import duty was levied on silk which was later relaxed. Tariffs were substantially increased to peak again,

at over 60% with the Fordney-McCumber tariff of 1922 and the Smoot-Hawley tariff of 1930. The US Tariff Acts of 1922 and 1930 established unusually high protection for the textile industry under the "prevailing view that it was of special importance and could not survive without protection" (Cline, 1987, p. 145).

Since 1934, the year of enactment of the Reciprocal Trade Agreements Act, general tariff levels have gradually fallen to an average 3.7% in 1986 (USITC, 1986). Notable exceptions to this picture of progressive trade liberalization are the special protection secured by such industries as automotive, agriculture, and textiles. Special protection is intended to slow the pace of adjustment to changing realities in the international trading system. Hufbauer, Berliner and Elliott (1986) cited 31 cases of special industry protection involving trade volumes in excess of \$100 million. By 1987, the US had 37 bilateral textile agreements in effect and over 1,300 quotas enforced on individual textile products (Major Shippers, 1987). Textile products were subject to the highest ad valorem US tariff rates of up to 22% in 1986 (Crane, 1987). This high tariff rate was composed of only 15% for textiles compared to 27% on apparel (Anson & Simpson, 1988).

International trading systems since World War II have, at least in principle, been guided by the rules and procedures agreed upon by the signatories to the General Agreement on Tariffs and Trade (GATT) of 1948. GATT's initial purpose was to encourage international trade by the elimination of quantitative trade barriers, specifically unilateral quotas, and by the gradual reduction of tariffs, while protecting domestic workers from serious import injury.

A majority of GATT member countries are in the early stages of economic development. Textile and apparel producers are a major world employer providing 25 million factory jobs (Dickerson, 1988). These two factors help explain why tariff reduction exceptions have been made for textiles and why GATT has tolerated voluntary export restraints (VERs)

and other restraints which technically comply, but are not in the spirit of GATT.

In 1955 Japan became a member of GATT. By 1956 the US textile industry was experiencing import pressure from Japan and from other exporters. The Agricultural Act of 1956 allowed restrictions on US imports, while the Reciprocal Trade Act of 1957 permitted tariff concessions on certain products provided that US market disruption or injury did not occur (Ghadar et al., 1987). Under the authority of these two acts, the US entered agreements with Italy and later Japan who voluntarily reduced their exports for five years. The problems of the US textile industry continued nevertheless, exacerbated by US price supports for cotton and by the ready export capabilities of other nations.

The US price support system maintained the domestic price of raw cotton fiber above the world price, placing the US textile industry at a competitive disadvantage (Keesing & Wolf, 1980). Also, the NICs, in particular Hong Kong, quickly diverted their textile exports to the US, filling the demand created by the US restrictions on Japan and Italy. By 1960 Hong Kong had replaced Japan as the largest single exporter to the US, increasing its share of the US textile import market from 13.8% to 27.5% in two years. In contrast, the Japanese share fell from 62.7% to 25.9% (Giesse & Lewin, 1987).

The STA and the LTA

The Kennedy administration, under pressure from the industry to step up protection, created a special textile cabinet committee, which led, in July 1961, to the Short-Term Arrangement Regarding International Trade in Cotton Textiles (STA) as a temporary one-year measure. The STA was a compromise centered around both the prevention of "market disruption" in importing countries and the encouragement of production

in exporting or developing countries. The STA, as the first international textile trade agreement, provided a model for all subsequent negotiations.

The STA covered 64 categories of cotton products which could be limited by negotiated quotas. It legitimized special protection for the textile industry since VERs were "voluntary" and did not technically violate the GATT (Yoffie, 1986).

Market disruption was defined from the importers' perspective as "instances of sharp import increases associated with low import prices not attributable to dumping or foreign subsidies" (Cline, 1987, p. 147). The concept of market disruption provided the basis for going beyond the existing GATT Article XIX safeguard, or escape, clause since it sanctioned restrictions against countries responsible for import surges when no actual injury had occurred, thereby going against the most-favored-nation (MFN) principle (Cline, 1990).

The US domestic industry, with the political power of 2 1/2 million workers, successfully mobilized sufficient support in Washington to ensure that the STA was replaced by the Long-Term Arrangement Regarding International Trade in Cotton Textiles (LTA) in October 1962. The LTA would be the umbrella under which the US controlled its textile imports for over 10 years.

The LTA provided the importing countries a further opportunity to restructure their industries (Yoffie, 1986). It was an attempt to maintain a position of balanced interest, allowing developing countries access to industrial countries' markets while controlling disruption in these markets (Choi et al., 1985). Access was provided by a "regular and predictable import growth rate" of 5% per annum when restraints continued for more than a year (Anson & Simpson, 1988, p. 109).

Market disruption was redefined as "a combination of rapid import growth, prices substantially below those prevailing for similar goods on the same market, and serious damage or threat thereof to domestic

producers" (Anson & Simpson, 1988, p. 102). Once market disruption was established, the exporting country had a consultation period of 30 days in which to "voluntarily" limit exports to a base level. The base level was the quantity supplied in the period July 1960 to June 1961. If voluntary action was not undertaken the importing country could impose unilateral restrictions to prevent disruption.

The LTA was intended to provide legitimacy to the increasing number of bilateral agreements as these country-by-country agreements countered the principles of the non-discrimination and "escape clause" provisions of GATT (Anson & Simpson, 1988). The non-discrimination provision required an importer to give all GATT exporting countries the same trade concessions. The most notable exception to this provision was the escape clause, by which temporary unilateral quotas could be imposed when import quantities from a particular nation were demonstrated to threaten or to cause "serious injury" to domestic producers (Jacobs, 1987; World Development Report [WDR], 1987).

Under the LTA, the US provided new suppliers with generous quotas which enabled developing countries to gain progressively larger market shares, while major suppliers, such as the main four NICs (Japan, Hong Kong, Korea and Taiwan) were more heavily restricted (WDR, 1987). By 1966 more than one-half of the US textile industry was subject to LTA provisions (Brandis, 1982).

The restriction of cotton products encouraged developing nations, especially the NICs, to switch production to uncontrolled textile products. In 1969, the US proposed the broadening of fiber coverage to wool and manmades via an international agreement, but met opposition from Europe and major US importers.

By 1970 US imports of manmade fiber textiles had grown from 31 million pounds in 1966 to 329 million pounds (Ghadar et al., 1987). Increased foreign production and exports of unrestricted synthetic fibers resulted in tremendous US political pressure to expand the LTA

coverage. In 1971 the US invoked the Trading with the Enemy Act to force broader fiber coverage upon its four major suppliers in their bilateral agreements (Mintz, 1973). The expansion of these bilaterals to wool and manmade fibers was outside the auspices of either the GATT or the LTA.

The LTA renewal protocol early in 1973 sustained the cotton-only coverage, but instigated two changes. It extended the consultation period from 30 to 60 days, and it redefined the base level to imports in the 12-month period ending three months before the request for restraint (Brandis, 1982).

On December 20, 1973 accord was reached to replace the LTA with the more comprehensive Arrangement Regarding International Trade in Textiles which legitimized the additional fiber inclusions already negotiated in some bilateral agreements. The new arrangement became known as the Multifiber Arrangement or MFA (United Nations [UN], 1987).

Multifiber Arrangement I, January 1, 1974 to December 31, 1977

The Multifiber Arrangement (MFA I) was negotiated and signed by 50 countries. It has been renewed three times, and the latest renewal is in force through July 1991. The objectives of the MFA are similar to the previous STA and LTA in that a balance of interests for developing and developed countries is maintained. Article 1, paragraph (2) of the arrangement speaks to the balance:

"To achieve the expansion of trade, the reduction of barriers to such trade and the progressive liberalization of world trade in textile products, while at the same time ensuring the orderly and equitable development of this trade and avoidance of disruptive effects in individual markets and on individual lines of production in both importing or exporting countries" (cited in Jacobs, 1987, p. 182).

The MFA was conceived to serve as an umbrella for the negotiation of bilateral agreements. In order to implement the agreements and to ensure the maintenance of balance, a system of thousands of individual

quotas broken down by product, source and destination was developed. Limits were specified by physical quantity, e.g., in square yard equivalents (SYE) or sometimes in units (dozens or pounds).

Exporting countries were permitted a degree of flexibility under Article 4 of the MFA in return for the expanded fiber coverage. The "flexibility" provision accorded the right to transfer quotas between product categories and years, enabling exporters to respond quickly to changing patterns of consumer demand in the importing countries. Exporters could exceed their allotted quotas in a product category within specific limits through the following procedures: 1) "swing", transferring unused quota rights from one product category to a category with a filled quota, 2) "carry forward", borrowing quota rights from a succeeding year, or 3) "carry over", carrying forward unused quota rights from a prior year (Jacobs, 1987).

Article 3 allowed "emergency action" through "unilateral temporary restraint measures" when imports caused serious market disruption giving rise to "damage difficult to repair ..." (Anson & Simpson, 1988). The concept of "market disruption" was refined by specifying disruptive conditions as follows:

1. a sharp and substantial increase or ... 'imminent' increase of imports of particular products from particular sources;
2. the offering of these products at prices substantially below those prevailing for similar goods of comparable quality in the market of the importing country;
3. serious damage to domestic producers or threat thereof; and
4. price differentials ... not arising from domestic government intervention in the fixing or forming of prices from dumping" (Anson & Simpson, 1988, p.112).

The four cases above were not an exhaustive definition of market disruption and, therefore, did not exclude other cases.

The LTA 60-day consultation period was maintained, while squarely placing the onus to reach agreement on the exporting country "or else suffer the consequences" (Anson & Simpson, 1988). The base period used to evaluate disruption was retained except that the 12-month period now

ended two, rather than three, months before the consultation call, and the growth rate was set at a more liberal 6% annually. The US conceded to 6% on the presumption of a similar domestic consumption growth rate (Pelzman, 1986). The US industry claimed that a more modest growth rate of 1.5% actually existed. For this reason the 6% provision led to continual friction between MFA signatories until the partial resolution of this problem in 1978 when the "reasonable departures" clause was introduced in the MFA renewal.

In 1977 the US textile lobby launched a drive to renew the MFA, having received a pledge from the 1976 presidential candidate, Jimmy Carter. Economic recession contributed to slow domestic growth and high unemployment causing the industry to apply pressure to reduce import growth. At this time Europe was experiencing an even deeper recession, which encouraged their support for a more restrictive MFA.

Multifiber Arrangement II, January 1, 1978 to December 31, 1981

In adopting MFA II, the major importing countries, i.e., the US and those of the European Economic Community (EEC), reaffirmed their original MFA pledges of 1973 ("Protocol," 1981). The renewal protocol, however, introduced certain changes. Global ceilings were permitted on "sensitive" or expected-to-become sensitive products, and an administrative monitoring mechanism was formulated to regulate previously uncontrolled countries when an import threshold percentage (20% of domestic production or 30% import rise over the previous year) was exceeded (Anson & Simpson, 1988; Choi et al., 1985). A new provision allowed jointly agreed upon, temporary "reasonable departures" from the 6% import growth rate in order to match the growth of imports and domestic markets. This provision paved the way for the negotiation of tougher bilaterals, which soon followed (Choi et al., 1985).

A dissatisfied US textile industry sought legislation to enforce countervailing duties on importers ("Staff," 1979). In February 1979 Carter vetoed this legislation, but he promised to reduce the aggregate import growth and volume, to monitor imports on a global basis, to reduce flexibility provisions in existing bilaterals, to relate import growth in import-sensitive product categories to the growth of US domestic consumption, and to expand measures to control import surges causing market disruption (Giesse & Lewin, 1987).

The Carter action provided the impetus to compel the Big Three (Hong Kong, Korea and Taiwan) to reopen their existing agreements to accommodate the tightened controls, particularly the reduction of flexibility (Choi et al., 1985). After the successful conclusion of these three bilaterals, the US administration turned pressure upon the PRC to negotiate its first bilateral agreement. The Chinese agreement, however, proved difficult. Particularly, since the PRC was importing from the US three times the amount it was exporting to it (Cheng, 1982; Lee & Vazari, 1986). After a year of negotiations and the US imposition of unilateral quotas on seven apparel categories, the first Sino-US bilateral agreement was reached in December 1980.

The textile industry, fearing the loss of its protectionist power with the end of the Carter era, secured a campaign promise from the Republican candidate, Ronald Reagan. This action was a direct attempt to continue the protectionist environment ("Will," 1986).

Multifiber Arrangement III, January 1, 1982 to July 31, 1986

The MFA III protocol was signed December 22, 1981 in the midst of a continuing world recession, which alone was sufficient to ensure the maintenance of the restrictions of earlier arrangements and encouraged further constraints on large exporters through the elimination of flexibility and the imposition of roll backs (WDR, 1987). MFA III

introduced a "surge mechanism" to replace the reasonable departures clause. Departures could now be made when importers faced "sharp and substantial increases" in imports of a sensitive nature (Anson & Simpson, 1988). The issue of circumvention was raised, and a "call" system was instituted to restrict exports not covered by any specific agreement. Calls are requests for consultations to establish restraint levels. Such discussions would be automatically triggered whenever import thresholds were reached (Cline, 1990). Finally, the industrialized countries agreed to begin phasing out quantitative restraints on certain product lines, particularly from smaller, less developed countries.

At odds with the agreement to phase out restrictions, the US subsequently enforced import restraints even more vigorously, especially with the already heavily restricted Big Three. The new US bilateral with Hong Kong demonstrated the increased vigor; average annual growth rates of 0.5-2.0% were placed on 26 product categories which accounted for 60% of US trade with Hong Kong. Trade levels of 1981 were used to establish the base levels.

After successfully concluding new bilaterals with the Big Three, the Reagan administration sought a similarly restrictive new arrangement with the PRC since its first bilateral was due to expire at the end of 1982. A protracted acrimonious battle ensued in which the US implemented unilateral quotas on 33 categories after filing a subsidy complaint under the Trade Expansion Act of 1962, on the grounds of "national security" ("Dept.," 1983). The Chinese retaliated by cancelling US grain contracts, which reportedly cost American farmers over \$500 million (Hufbauer et al., 1986). Finally in August 1983, a second accord was signed for five years.

Although this second Sino-US agreement was less restrictive than those negotiated with the Big Three, it severely limited the PRC. By

1984, when China became an MFA signatory, approximately 75% of its textile exports to the US were subject to this bilateral (UN, 1987).

The US domestic industry, still dissatisfied with the protection offered, pressed for and obtained new US criteria for market disruption (Giesse & Lewin, 1987). Now, no real or "measurable" disruption needed to occur; only an "undetermined allegation" or the mere possibility could trigger the presumption of market disruption.

The new ruling on market disruption raised a storm of objections from US textile trading partners and produced a special GATT Textile Committee meeting. At the meeting the US representative avoided a definitive judgment by stating that "if market disruption or the threat thereof is not demonstrated, quotas will not be imposed" (cited in Jacobs, 1987, p. 126). The new market disruption criteria were imposed nevertheless, establishing a more restrictive US environment and signifying intensified action in the form of increasing calls.

In the next two years 200 calls were made and subsequent quotas were imposed. The majority of calls were aimed at small suppliers and new entrants such as Egypt, Turkey, Peru, Yugoslavia, Barbados, and Mauritius. These quotas directly violated the "special consideration" for small suppliers mandated by Article 6 of the MFA (Giesse & Lewin, 1987).

By 1984 the new bilateral agreements had succeeded in placing under quota control approximately 95%, 92%, and 90% of US textile imports from Hong Kong, Korea, and Taiwan, respectively ("Federal," 1985). Ironically, the increasingly restrictive environment caused US importers and retailers to accelerate their overseas purchasing in fear of embargoes. This panic buying, coupled with an overvalued dollar, attracted abnormally high volumes of imports into the US market during 1983-84.

In May 1984 the US administration, alarmed by the dramatic import growth and the industry concern over increasing circumvention,

instigated a new country-of-origin rule only on MFA producers. The new rule went into effect immediately without advance notice. This action caused serious trade disruption and drew objection from within the US and abroad. The most significant change was that final assembly would no longer confer country-of-origin status (Giesse & Lewin, 1987). The change affected a large volume of trade between the PRC and Hong Kong, as knitted shaped panels were being made in China and joined into garments in Hong Kong. Formerly, under the "substantial transformation rule", Hong Kong had been classified the country of origin as it carried out the final assembly. Under the new per se rule, China was judged to be the country of origin.

Disruption was caused because the PRC had half the quota size of Hong Kong. The new US rule reportedly cost China over \$100 million and Hong Kong over \$280 million in lost sweater sales (Giesse & Lewin, 1987). The US import and retail community challenged the validity of the ruling in the US Court of International Trade (CIT), but to no avail (Mast v Reagan, 1984). A legal challenge brought by Hong Kong before the Textile Surveillance Body (TSB), the MFA policing body, had more success. The US country-of-origin rule was pronounced in violation of the MFA on two counts. The new ruling upset the balance of rights and obligations under the existing Hong Kong - US bilateral agreement ("The Impact," 1987), and the U.S had not consulted any other country before imposing the new regulation.

The final, revised country-of-origin rule went into effect on April 4, 1985, incorporating a differentiation between the assembly of cut apparel as opposed to knit-to-shape items. The revision permitted the Hong Kong-PRC status quo to remain, thus identifying Hong Kong as the country of origin on knit-to-shape items assembled there.

Trade restrictions which had been building up under MFA I, II, and III caused exporting countries to upgrade and diversify into nonrestricted product areas, as had occurred under the LTA. Increasing

use of such fibers as ramie, linen, and silk was seen in apparel products to avoid quota applications. A common example was ramie blend sweaters, e.g., blends of cotton and ramie, in which ramie constituted just over 50% of the weight of the sweater and therefore preempted application of existing quotas. Imports of these items entered the US market as substitutes for restricted articles. Renewed consumer interest in natural fibers and a desire for products of such fibers as silk and linen not produced in the US provided market openings (Lawson, 1987).

In 1985, the Big Three became the "Big Four" as China joined the ranks of major textile exporters to the US. The Big Four accounted for 45.2% of all US textile imports (Major Shippers, 1986). The influx of imports caused the US textile industry to lobby for comprehensive global quotas, claiming circumvention of quotas with fibers not subject to the MFA (Anson & Simpson, 1988). Protectionist sentiment was high, particularly in the major textile producing states, under the threat of extensive manufacturing closures and resulting job losses. This culminated in the introduction of the Textile and Apparel Trade Enforcement Act of 1985. The bill was vetoed by President Reagan on December 17, 1985, but it provided the necessary impetus, or the "club to hold over foreign exporters", to ensure a far more restrictive MFA renewal (Giesse & Lewin, 1987). During 1986 significant bilaterals were negotiated between the US and the Big Three; all contained coverage provisions for the soon-to-be restricted fibers.

Multifiber Arrangement IV, August 1, 1986 to July 31, 1991

The fourth and most recent MFA, negotiated among 42 countries and the EEC, became effective for an additional five years. The 1986 MFA Protocol of Extension added several new and important provisions. Product coverage was expanded to encompass:

"textiles made of vegetable fibres, blends of vegetable fibres... and blends including silk, which are directly competitive with textile products manufactured from cotton, wool, or man-made fibres as specified in Article 12... in which any or all of those fibres in combination represent either the chief value of the fibres or 50% or more by weight of the products, which cause market disruption" (Jacobs, 1987, p. 40).

Regarding the fiber inclusions, the TSB was specifically instructed to:

"pay particular attention to evidence demonstrating that these products are directly competitive with products of cotton, wool and man-made fibres manufactured in the importing country concerned" (Jacobs, 1987, p. 40).

MFA IV provided the authority to unilaterally control imports for a further 12-month period, effectively maintaining quotas levels for two consecutive years instead of just one. The renewal protocol also allowed import growth to be fixed at any positive rate, while strictly prohibiting negative rates. It defined "circumvention" to include both trans-shipments and false declarations which affected the true country of origin and established procedures which increased cooperation in order to establish circumvention (Jacobs, 1987).

Pressure by manufacturers and unions for continued and increased protection has persisted, as exemplified by the introduction of recent textile bills, such as the proposed Textile and Apparel Trade Act of 1987. This bill sought to impose global quotas on all textiles and textile products to limit import growth to 1%. The bill was passed by Congress and twice vetoed by President Reagan. The 1988 and 1990 versions suffered the same fate, the last one receiving President Bush's veto.

In December 1987 the PRC and the US reached agreement on a third bilateral agreement which took effect on January 1, 1988 for four years. Accord was reached after only 10 months of negotiations without the ceremony of the previous agreements. Annual growth of Chinese textile exports was limited to an average 3% in more than 100 categories, including ramie, linen and silk products ("US and China," 1988).

To facilitate the reader a comparative chronology (Table 2.1) is provided as a summary of the historical survey of protectionism.

Imports in the Face of Protection

The MFA is a restrictive instrument which violates the original stated objective of GATT, the progressive liberalization of world trade in order to promote economic growth and development and the welfare of the world's peoples (UN, 1987). It has contributed to a more restrictive trade environment for developing country exports, while the exports of developed market economies, such as Europe and Canada, have remained much less restricted. Dickerson (1988) predicted that the 1986 MFA renewal would restrict trade to 1985 levels. Even so, she defended its restrictiveness, saying it guaranteed market access for certain established exporting countries, i.e., those holding significant quotas.

These established producers and exporters have supported the continuation of the MFA as the guaranteed access through the use of bilateral agreements has given them the advantage of earning "quota rents" which otherwise could be siphoned off by the importing countries implementing tariffs or quota auctions (Keesing & Wolf, 1980). Keesing and Wolf went on to argue that the ability to earn "quota rents" was negated in the long-run as latecomers, usually poor developing countries, were penalized by limited market access. Some weaker exporters have also favored the continuation of the MFA as, paradoxically, it was seen as an instrument that prevented the NICs from obtaining an even larger share of the world market (Curzon, de la Torre, Donges, MacBean, Waelbroeck, & Wolf, 1981).

Table 2.1
COMPARATIVE CHRONOLOGY

INTERNATIONAL TEXTILE TRADE AGREEMENTS

- 1948 GATT
Set out trade policy objectives to encourage international trade by:
- Gradual reduction of tariffs
- Protecting domestic industry workers.
- 1961 STA
Cotton imports limited to temporarily protect domestic industry from undue disruption.
- 1962 LTA
Protection extended.
- 1974 MFA
Expanded fiber coverage to:
- synthetics;
- wool; and blends thereof
- 1978 MFA II
- Global ceiling on sensitive products
- Monitoring categories
- "Reasonable departures"
- 1982 MFA III
Reduced flexibility
- Monitoring expanded to "call" system.
- Reasonable departures became "surge mechanism".
- Unilateral control for year.
- 1986 MFA IV
Expanded fiber coverage to include:
- Silk;
- Ramie and other bast fibers
Reasonable departures (anything except negative).
Unilateral control extended to two years.

AGREEMENTS WITH CHINA

- 1981 1st Sino-US Bilateral (2 years)
- Specific limits on 7 categories
- Granted Most Favored Nation Status
- 1983 2nd Sino-US Bilateral (5 years)
- Expanded limits to 33 categories
- growth ~10%
- 1984 MFA Signatory
Applied to GATT
- 1988 3rd Sino-US Bilateral (4 years)
- Expanded coverage
- 10 MFA IV-fiber
- 83 other clothing categories.
- Reduced growth ~ 3%
- Calls on 11 other MFA IV-fiber categories.

Bergsten, Elliott, Schott, and Takacs, (1987) contends that both the US and foreign exporters view the allocation of quota rents as compensation for reduced export values. However, the MFA impedes the normal shift of supply to countries with emerging comparative advantage; and it encourages noncompetitive practices among firms in supplying countries and results in inefficiency.

Cost of Protection

According to Keesing and Wolf (1980), quotas have discouraged export investment and resulted in production displacement, based on observed instances of quota under-utilization in some countries. They claimed that further distortion and geographical misallocation resulted from the MFA practice of exempting industrial country suppliers (with the exception of Japan) from restraints while imposing them on developing ones. Wolf (1985) concluded that the MFA was, from an economic viewpoint, an "extraordinarily inefficient protectionist arrangement" (p. 236).

The MFA has been structured to limit physical quantities of imports. This mechanism has resulted in a development known as product upgrading, i.e., increases in unit value or in divergences over time between physical volume and real value. Upgrading can involve increased value that accompanies improvements in product quality, or it can occur through quota auctions which bid up the price without actually changing the quality of the imported item. "Improved" quality can take the form of higher quality fabric, or even an extra row of stitching, a button or trim on a garment.

Evidence suggests that the MFA, through the imposition of quotas, has encouraged the NICs in particular to upgrade their products to obtain the highest value per physical unit of quota (Cline, 1987; Hickok, 1985; Suphachalasai, 1989). Hickok concluded that up to 65% of

the relative price increase was attributable to quality upgrading. Cline noted that the low-volume and high-value levels associated with product upgrading helped moderate the restrictive effect of the quotas. Cline (1990) concluded that during the first two MFAs, product upgrading contributed as much as 44% to the real increase in apparel import value.

As a result of the production shift into higher-valued merchandise many low-cost items have been lost. Thus, instead of continuing to supply lower-priced clothing commanding a low per-unit profit, foreign manufacturers seeking to maximize profits upgrade their manufacturing operations into the production of more expensive garments (Hickok, 1985).

The textile industry is subject to tariff protection in addition to the entrenched presence of quota protection. Economic theory suggests that tariffs are less damaging to the economy than quotas because they cause less distortion of resources (Kreinin, 1987).

Various studies have estimated that the annual cost to US consumers from higher textile prices brought about by restrictions ranges from \$8.5 billion to \$57 billion (Hughes, 1987; Pelzman, 1983; "The Heritage," 1986). One study concluded that US consumers, in essence, subsidize the US textile industry by paying \$50,000 to preserve each textile-mill job worth approximately \$16,025 and an additional \$39,000 to save each apparel job valued at approximately \$13,700 ("Current," 1985). In a similar study, the US Federal Trade Commission concluded that quantitative restraints imposed on 13 apparel categories from Hong Kong had the effect of preserving only 900 textile and apparel jobs, however, each saved job cost the American consumer approximately \$34,500 annually ("Import quotas," 1985).

The tariff equivalents of quota protection under the LTA and the MFA, over the period 1971-84, have been estimated at 20% to 50% (Hickok, 1985; Pelzman, 1988). Cline (1987) calculated tariff equivalents based on estimates for Hong Kong by Hamilton (1983), Morkre (1984), and Tarr

and Morkre (1987). He estimated that the LTA had resulted in a 5% tariff equivalent and MFA I a 15% level, while each subsequent renewal of the MFA produced an additional 5%. Cline (1990) concluded that overall levels of protection for the apparel industry had risen with increased quota restrictions; he estimated the "impact of both tariff and quota protection had risen to 56% today for apparel" (p. 167).

Import Patterns

The United States imports far more apparel than textiles. Debate exists on the exact levels of apparel importation. Proponents of trade restrictions report import penetration rates ranging from 30% to 50% for 1984 (Schmidt, 1985). Others, such as Cline (1990), claim import growth rates have been low except for a surge evident between 1984 and 1986. However, for the period 1981-86, annual import growth averaged 12-17% depending on the measure used, and was as high as 22% when measured by SYEs. The controversy centers around the measurement of imports. Imports can be measured by growth rate or import penetration and these can be calculated by various measures of volume or value. Each measure produces a specific, but different figure, yet has a place depending on the purpose of the information gathered.

A principal problem associated with volume measures stems from the diverse nature of the items being aggregated, as countries use different measures when recording official statistics, such as metric tons, square yard equivalents, square yards or meters, or even linear meters. Volume measures are most useful for tracking trends in individual countries. Value measures are more amenable to intercountry comparisons and the study of world trends, though problems still arise when converting local currencies to common real dollar values (Anson & Simpson, 1988).

Cline (1987) examined imports since 1972 by both volume and value. When measured by volume, growth rates were found to be below the MFA

annual target of 6%; even when the import surge years, 1983-86, were included the annual import growth rate increased to only 7.1%. The American Textile Manufacturers Institute also indicated that US import growth was below 6% until 1981; imports had grown at an average annual rate of 1% under MFA I (1974-77) and at 4.8% per year under MFA II (1978-81) when measured by SYE (Textile Hi.Lights, 1987). When Cline (1987) examined import growth by value, he used two different deflators to correct for inflation: the index for domestic industry product shipments, and the wholesale price index (WPI). The WPI deflator yielded a 5.7% average annual increase in the real value of imports, and the domestic output deflator gave the higher rate of 9.7% over the period 1972-86. When import growth was measured annually for the years 1984-86, the value increased substantially to levels of 27%, 30%, and 31%. These higher figures were closer to the World Bank (1986) estimate in 1986 of 22% and Greenwald and Hoing's (1987) estimate of an average annual rate of 15% for the MFA III period, by SYEs. Cline (1987) maintained that deflated value measurements provided the most accurate guide to import growth particularly when trade patterns over time were investigated and that the years 1983-86 demonstrated higher import growth.

Factors Behind the Import Surge of 1983-86

Researchers argue that a liberal element in the mechanism of the MFA permitted the import surge of 1983-86. Under the MFA there has been an absence of quotas on some countries and on certain product categories, and less than complete utilization of some existing quotas, all of which enable the flexibility to increase shipments in the presence of favorable market conditions (Cline, 1989; Greenwald & Hoing, 1987; Pelzman, 1987). Cline (1990) described the MFA as a "wire screen mesh rather than a solid door, which permitted responsiveness" to such

prevailing economic conditions as the overvalued dollar and increased US domestic demand, which had enabled exporting countries to take advantage of MFA flexibility.

Other causes of the surge have been suggested: American management complacency; excessive emphasis on achieving short-term results which detract from high-quality products and innovative manufacturing processes; and the promotion of growth through domestic demand, i.e., government spending and personal consumption, in contrast to the promotion of growth through external demand as by investment and development (Abernathy & Hayes, 1987). Representative Jenkins (1987) went so far as to blame the Reagan administration and its "strong predisposition toward free trade". The role of the dollar and domestic demand are two variables worthy of closer examination.

The role of the dollar

Economic theory indicates that exchange rates can impact upon trade. When the exchange rate of the US dollar increases relative to a foreign currency, foreign goods entering the US decline in price since a unit of foreign money costs a smaller expenditure of dollars. The price differential (i.e., cheaper foreign goods compared to domestic) stimulates increased US imports. The lower price of the imports creates competitive pressure on domestic producers.

The first half of the 1980s was a period of rapid import growth for the entire US economy; from 1980 to 1986 US non-oil imports rose between 80% to 94%, depending on whether real or nominal values are used (Cline, 1987; Ghadar et al., 1987). The strength of the dollar in the first half of the 1980s has been identified as a prime contributor to the rapid import growth (Cline, 1987; Sanford, 1988a).

Since the currencies of many major Far Eastern textile producers are linked to the US dollar, changes in the dollar's value will have a broad influence on the flow of world textile trade. During the time

frame considered in this study the value of the dollar against major foreign currencies underwent substantial change. From 1978 to 1980 the dollar was particularly weak. However, it emerged from a 1979 low and started to gain strength with respect to other major currencies (such as of Japan) during the early 1980s. This was a period of deep recession with high inflation and high interest rates pushing 20%. The economy then emerged from recession as the dollar climbed to a 1985 peak against several major currencies (Sanford & Skinner, 1988). Attempts to realign the dollar were made, but not until 1986 did the value of the dollar start to fall. The dollar has shown a few minor ups and downs but steadily fell throughout 1986-87, until by 1988 the value was close to its 1978-80 average (Sanford, 1988a). This decline has provided a more favorable value to the US for trading purposes, which has been maintained through 1989.

Several previous studies have analyzed the relevance of the dollar's overvaluation by examining the exchange rates of major textile and apparel trading countries, including several of East Asia. Chmura (1987) and Sanford and Skinner (1988) observed a significant correlation between import levels and real exchange rates (deflated by WPI).

Cline (1987) disaggregated US import trade into two supplier areas, the Organization for Economic Cooperation and Development (OECD) and the developing countries, and examined real effective exchange rates (weighted by US textile imports from the relevant countries) between 1973 and 1985. He found that between 1978 and 1980 the dollar value was fairly constant or fell slightly; then between 1980 and 1985 it appreciated 38% against currencies of OECD apparel suppliers and only 21% against those of developing-country suppliers. He reported that the dollar rose (in real terms) against the currencies of six major suppliers: by 22% for Taiwan, 11% Hong Kong, 90% China, 24% Mexico, 27% India, and 19% Bangladesh. The only two developing-country

currencies examined against which there was no rise were those of Singapore and the Philippines, both pegged to the dollar.

Cline (1987) took the further step of setting up a model to simulate imports, consumption, employment, and exports from 1970 to 1986. The influence of various macroeconomic factors on sectors of the textile industry was investigated. He found four factors equally responsible for the increase in US apparel imports from developing countries: the rising exchange rate, the declining real price in the foreign countries, growth of US income, and the secular (long-term) outward shift in supply sourcing. For OECD country suppliers, two main factors were found to be responsible; dollar appreciation played by far the largest role in increasing US apparel imports, closely followed by other price effects.

Cline (1990) found a positive correlation between the import growth of the US from industrial countries and the strength of the dollar. In 1981-84 when the dollar was strong US imports of apparel rose 104% in dollar value while Japan's imports declined 24% and Europe's fell by 12%. But when the dollar was weak in 1978-80, US apparel imports rose only 19%, far less than the 74% increase in Japan and the 58% increase in Europe.

Cline (1987) cited a 1986 study by Economic Consulting Services (ECS) which, in contrast, showed that the strong dollar had little effect on US imports of textiles and apparel from low-wage countries. The study surveyed imports from the 25 largest supplier countries and found that imports from developing countries whose currencies depreciated relative to the dollar rose more slowly than imports from a group of six countries with exchange rates fixed to the dollar. The ECS concluded that lower costs in relation to the US producers, not the overvalued dollar, were responsible for the import surge from developing countries. However, the study did attribute rapid growth of imports from industrial countries to the dollar's strength.

Ghadar et al., (1986) and Anson and Simpson (1988) supported the view that trade diversion was brought about by lower costs. (Trade diversion is the direction of imports brought about by the change in value of the dollar.) Anson and Simpson (1988) have demonstrated the occurrence of trade diversion, both when the dollar value was high in 1983-85 and when the dollar depreciated against the currencies of other major countries in 1986-87 which shifted market emphasis from other OECD countries to the US market (Cline, 1990). The high dollar of the earlier period caused import surges in the US as West European and Japanese textiles became more competitive in the US market. The import penetration by these countries was "aggravated by the distorted value of the dollar" which encouraged a shift in trade away from (OECD) nations toward the US (Anson & Simpson, 1988).

Lags. Lags are important when import growth is considered. Empirical results suggest that import volumes respond to changes in import prices in the previous year (Sandford, 1988a). This occurs partially because of the time required for new orders to be placed and shipped. The lag may also reflect the delay between exchange rate movement and concomitant import price changes. When the dollar is rising, for example, foreign suppliers may enjoy temporarily bloated profit margins that require time to induce new entrants as investors wait to see whether the changes are permanent. As markets equilibrate the increased competition from new entrants drives down prices and profit margins. Morawetz (1980) in his Colombian study found two to three years were required to change patterns of trade due to changes in the exchange rate.

In 1981 US exports of apparel abruptly dropped by 24% and in 1982 fell by 25% (Cline, 1987). Sanford (1988a) noted that import values increased and export values fell in 1982 when the dollar rapidly appreciated. He observed a lag of a few months to one year for the

effect of the appreciated dollar on US textile exports to be felt; in the import market there were longer lag periods of one to three years. Sanford, therefore, concluded that US textile exports were more sensitive to exchange rate fluctuations than were imports. Ghadar et al., (1987) reported a lag of 18 months to two years before imports rose after the 1981 rise of the dollar. According to Anson and Simpson (1988), the US textile export recovery (up by over 8%) which occurred in 1986 was a direct result of the falling dollar.

Cline (1987) claimed that the lag was the reason that import relief was not generally evident in 1986. The average real exchange rate of OECD apparel sources showed a 23% depreciation of the dollar from 1985 to 1986, yet imports of apparel from the OECD rose by 10.8% in real terms. The 1986 import rise, he explained, was a response to 1985 import prices, not the higher 1986 prices. Therefore, a turnaround in real imports based on the 1986 exchange rate was not expected until 1987, and would take until 1988 to be completed on the basis of these lags.

The overvalued dollar appears to have been a major reason for the US import surge of 1983-86, but, as Anson and Simpson (1988) indicated, strong consumer demand must also have been present to suck in the imports.

Consumer demand

The market demand for a commodity is the result of individuals' collective demand for that commodity. Expenditures for a specific commodity depend upon the total amount consumers are willing to spend, the price of that commodity relative to the prices of all other commodities, and consumer preferences.

Winakor (1989) looked at the trend in per capita expenditures for clothing and shoes in both current and constant dollars, and argued that current dollars were the more important measure to those whose incomes

depend upon production and distribution of apparel and related products. She observed that total expenditures for clothing and shoes had increased 76% between 1970 and 1986 despite the 39% relative price fall.

However, the share of personal consumption expenditure in current dollars declined from 10-14% in 1929-52 to 6-7% in 1976-86 over all income levels.

Cline (1987) also found similar trends to those indicated by Winakor. He used apparel consumption data from the Department of Commerce deflated by the consumer price index (CPI) to estimate apparel consumption growth. He found that the annual growth of real consumption for apparel decelerated from 3.6% to 2.7% over the periods 1961-62 to 1972-73 and 1973-74 to 1985-86.

US apparel consumption growth had been low, on average 2.5% per annum, from the MFA inception in the early 1970s to 1986; consumption growth had been even slower at constant prices since it was associated with declining relative prices (Cline, 1987).

Cline (1987), using an alternative data source (Data Resources, Inc.) utilized by the Bureau of Labor Statistics (BLS), found a more rapid growth in apparel consumption between 1972-73 and 1984-85 of 4.7%. Cline (1987) explained that the higher rates were because the data were recorded at the household level (for the category apparel less footwear), and figures were deflated by the corresponding component of the CPI for the period 1972-73 to 1984-85.

Declining clothing expenditures were also suggested by Dardis, Derrick, and Lehfeld (1981) who speculated that they would result with the increased average age of the population. The number of persons over age 65 has increased dramatically and is expected to continue rising. The maturing of the baby boomers will further impact consumer demand for textiles and apparel as the 35-54 year-old group is estimated to increase to 28% of the total population by 1995. The clothing needs of the over-65s markedly differ from those of the maturing baby boomers who

are expected to have more money and be prepared to spend more on fewer items. The maturing baby boomers are also more inclined to be in the paid work force.

Sanford (1988b) estimated that a 10% increase in real consumer expenditure would result in a 17.8% increase in total fiber consumption. Mack (1948), using pre-World War II data, found that clothing expenditures responded more to yearly income changes than did other commodity groups.

Lawson (1987) credited the popularity of active sportswear with the increased demand for wool and other natural fibers in the mid-1980s. The strong consumer demand for knitwear in the mid-1980s increased domestic production of knits by an average annual 12% despite large sweater imports between 1980-86. Glade and Lawler (1987) went so far as to suggest that the strong US consumer preference for natural fibers was responsible for the increased consumption of foreign apparel. A post-recessionary boom in consumer demand was in part responsible for the 1983-86 US import surge (Anson & Simpson, 1988; Cline, 1990).

Summary

The textile industry has managed to acquire special status permitting the MFA to regulate trade and effectively exempting textile trade from GATT rules and regulations. The MFA, however, provides built-in "flexibility" or, as Hester and Yuen (1989) describe, "an Achilles' heel" which permits exporting countries the opportunity to exploit existing quota agreements by circumvention. Patterns of production and upgrading occur which often redirect production to less developed, low wage countries. This relocation of production has helped provide China with the opportunity to become a major US importer, supplying the majority of MFA IV-fiber imports.

Other factors within the world economy besides the MFA flexibility have provided the opportunity for the textile import buildup experienced

by the US in the mid-1980s. The MFA flexibility permitted advantage to be taken of prevailing economic conditions; the main two suggested have been the overvalued dollar and high consumer demand. Currency movements have impacted industry performance. The strong US dollar in the first half of the 1980s hit the textile industry especially hard since it exacerbated the effect of the difference between the wage scales in the US and developing countries, hence accelerating changes which were already underway.

Consumer demand is a reflection of the health of the economy. Increases in disposable personal income (DPI) are reflected in apparel spending. Consumer demographics have changed. The average consumer is now older, and more likely to be in the paid work force (Dardis et al., 1981). Consumer interest in casual wear and natural fibers has increased. All of these factors could lead to increased consumer demand and specifically for natural fibers which could stimulate the importation of such items.

Whatever the reason for the surge in imports, it is most likely a combination of factors. The overvalued dollar of the first half of the 1980s stimulated imports and depressed exports of apparel as they were priced out of foreign markets. The recession of the early 1980s resulted in slow domestic growth which acted to further limit production and employment by retarding consumption growth. Ghadar et al., (1987) point out that "no industry can be expected to remain unaffected by an 80% increase in the value of the dollar, let alone one as beleaguered as the textile industry" (p. 8). The rise in the value of the dollar during the early 1980s accelerated changes in the world market and created changes in the manufacturing sectors of both industrialized countries and developing countries (Ghadar et al., 1987).

A slowdown in the volume of import growth has been predicted by Kurt Salmon Associates and others (Cline, 1987; Dickerson, 1988). This slowdown could be attributed to the decline in the value of the dollar,

and hence the resultant price differentials, to the reduced consumer demand, or to the impact of the increased trade restrictions. Therefore, this study looks more closely at these factors.

CHAPTER III

STATEMENT OF THE RESEARCH PROBLEM

Research Problem and Objectives

The purpose of this research was to analyze US apparel trade prior to and following the MFA IV renewal in 1986, so as to gain insight into the reasons for US apparel industry support of the new fiber inclusions, and to gauge effects of MFA IV on US apparel imports overall and specifically from the PRC. The study focused on the period 1978 - 1988 in order to compare trade before the agreement with changes seen after its enactment.

The objectives developed to address the research problem and guide the research were to:

1. describe overall US apparel import patterns during the years 1978 to 1988;
2. describe apparel exports from the PRC to the US, relative to other exporters, to determine the changes in quantity, value, growth rates, and fiber contents of the imports during the period 1978 to 1988; and
3. analyze key variables in order to (a) provide reasons why MFA IV was deemed necessary, and (b) draw conclusions as to the impact of this trade agreement, specifically with respect to the PRC and the new fiber inclusions.

The remainder of this chapter presents the theoretical framework for the study, the research hypotheses, and the assumptions and limitations. The theoretical framework explains the basis for trade among nations and describes trade patterns through demand and supply. Various policy devices used to restrict trade and their economic consequences are discussed. A three-part graphical economic model is introduced to facilitate an overview of trade patterns in light of MFA policies.

Theoretical Framework

The theoretical framework put forward here is standard trade theory using the basic economic principles of supply and demand. A basic tenet is that, in the absence of trade restrictions, import demand will increase whenever the domestic price exceeds the price of goods on the world market. Standard trade and development theory suggests that a poor country opening up to international trade will tend to specialize in the export of primary products. Since apparel production tends to be labor intensive, they would be among the items initially exported by a newly industrializing, densely populated country ("Speaking," 1978).

The Basic Static Framework

This section sets out the framework for analyzing domestic demand and supply to determine the price and quantity of imported textiles. The classical representation of demand and supply is shown in Figure 3.1(a). P_1 is the equilibrium autarkic price in the domestic market. If the world price is also P_1 , this country will not trade in this

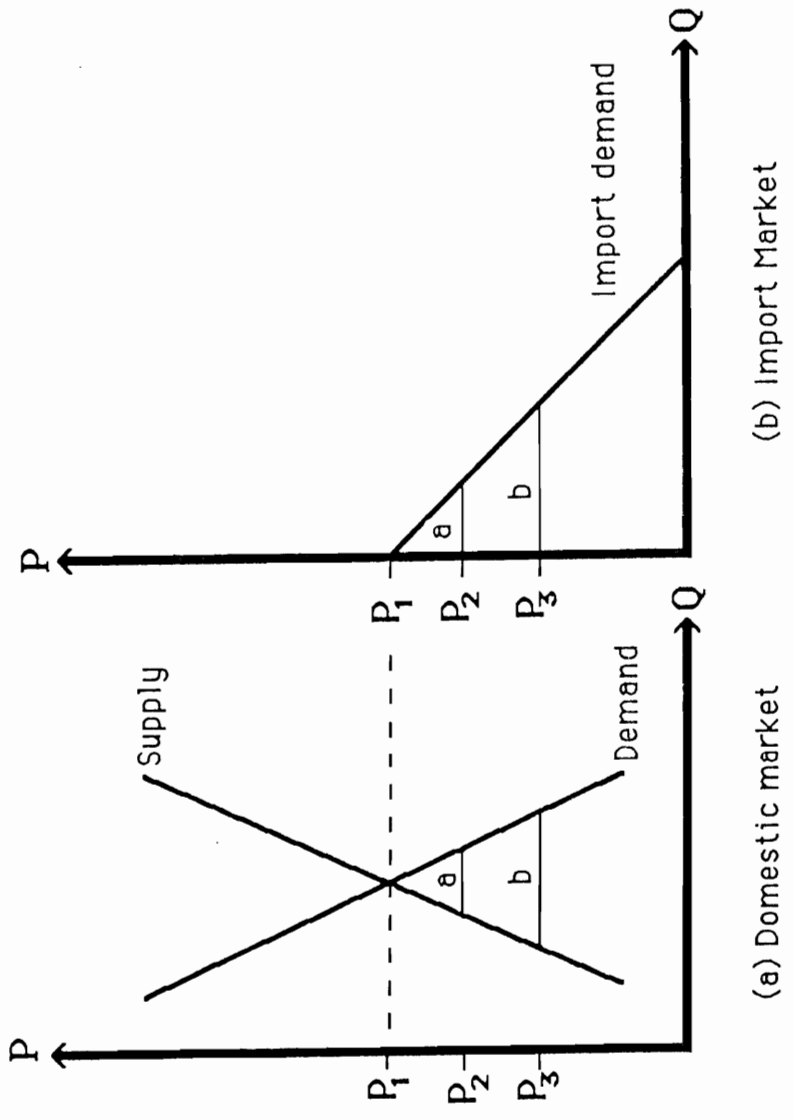


Figure 3.1: Domestic Demand for Imports

commodity, but, at any price below P_1 , the import quantity demanded will be greater than zero (Kreinin, 1987).

Figure 3.1(b) also describes the country's demand for imports. As the price declines from P_1 to P_2 , the quantity demanded rises above zero, and the quantity supplied domestically declines as shown in Figure 3.1(a). The divergence between the domestic quantities demanded and supplied at P_2 (distance a) is the import quantity demanded at that price. Likewise when the price drops to P_3 , the quantity demanded increases and the quantity supplied domestically declines further, so the amount imported increases to b. In all cases, except when domestic demand is of zero elasticity (quantity unchanged), import demand is more elastic than domestic demand since its slope equals the combined slopes of the domestic demand and supply. (Elasticity refers to the responsiveness of quantity to price changes). Thus, both demand and supply in the importing country affect the shape of the excess-demand curve.

A similar situation exists for the exporting country. The export supply represents excess supply at a given price, again equal to the divergence between the domestic demand and supply curves at each price (Kreinin, 1987).

Figure 3.2 illustrates trade in one commodity between the US and the PRC, assuming a two-country world. In this illustration, the PRC has a lower domestic equilibrium price than the US. This provides incentive for the PRC to export to the US. The excess-demand curve (ED) is derived from the importing country and the excess-supply curve (ES) from the exporting country (Kreinin, 1987).

In the absence of artificial barriers trade will occur, resulting in a single equilibrium, or world, price at P_3 (Figure 3.2). The price in the US falls from P_1 to P_3 , and the price in the PRC rises from P_2 to P_3 . At this world trade price the PRC decreases the quantity demanded domestically to Q_2 and increases the total quantity supplied to Q_3 . The

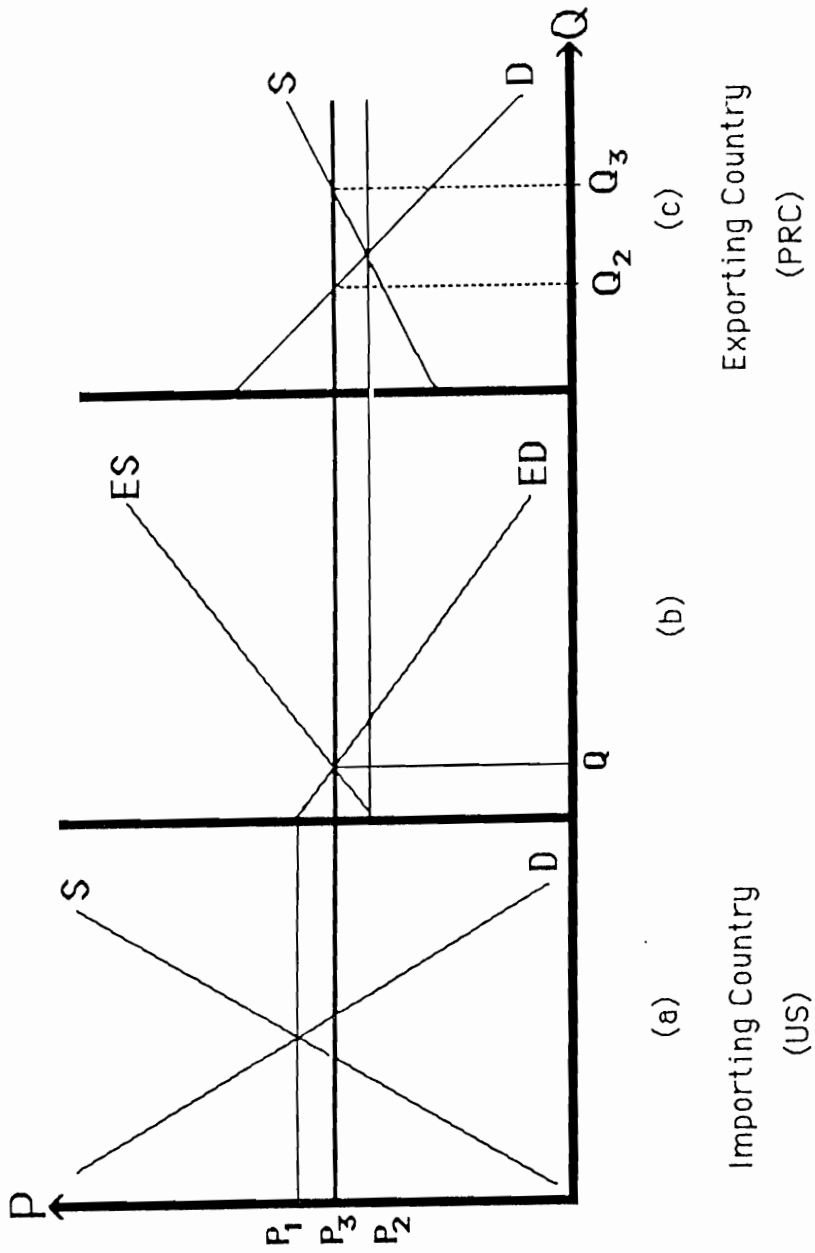


Figure 3.2: Trade between US and PRC in one Commodity

US would increase the quantity demanded and decrease quantity supplied (Figure 3.2(a)). Thus, production expands in the exporting country and contracts in the importing country ("Speaking," 1978).

Protectionism

In spite of strong economic arguments which can be made for free trade, protection does occur. The primary reason is the hardship generated by foreign competition for some industries and individuals, especially in the short run as adjustments are made to alter trade regimes. Both the American agricultural and textile industries believe they have experienced hardship.

Protection through trade restrictions is intended to reduce imports of foreign goods, and most commonly takes the form of tariffs and/or quotas. Tariffs are taxes on imported goods and have the effect of raising the price of imports, thereby reducing the effective price incentive for exporters. Tariffs can be either a fixed charge per unit or a fixed percentage of the value of each shipment, and are called specific and ad valorem tariffs respectively. Tariffs exist on textile imports but since the MFA operates under a quota system, emphasis in this study is placed on the economic effects of import quotas.

Import quotas specify the quantities of products that can be imported. US quotas reduce the supply of foreign products on the domestic market and hence result in higher domestic prices. Trade restrictions in any form result in raised domestic prices which make it easier for domestic manufacturers to survive (Grubel, 1977).

Many economists argue that quotas are far more harmful than tariffs, as the price rise is less controlled since it depends upon the demand for the item (Kreinin, 1987; Rodriguez, 1979). The raised domestic price of the imported commodity caused by quota restrictions is depicted in Figure 3.3. The effect of a restriction upon the importing

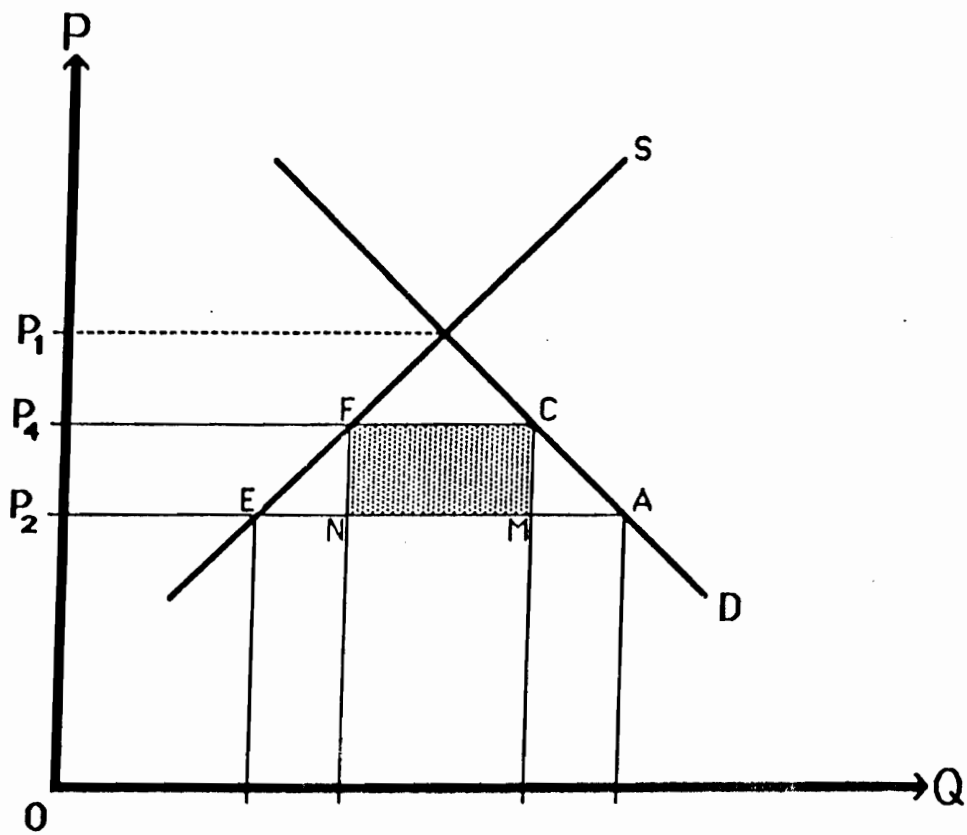


Figure 3.3: Effect of Quota Restriction on US Economy

country's internal supply and demand can be examined. A quota fixes the volume of imports at FC, a quantity less than the free trade quantity EA. Under free trade the domestic price was P_2 . Since the import quantity is limited, the demand will induce a price adjustment. The domestic (US) price consequently rises to P_4 , which provides the incentive to increase domestic production, increasing supply from E to N. Domestic consumption adjusts as consumers switch to substitutes. The domestic production of substitutes expand to accommodate increased consumer demand, and resources are drawn from other often more efficient industries. This adjustment will result in a transfer of income from consumers to domestic producers (area P_4FEP_2 in Figure 3.3) and a net welfare loss to the US (the area FCMN).

The domestic effects of protection are comparable to those of a combined tax on consumers and a subsidy to the producers. Trade restrictions act as a regressive tax, that is the burden falls most heavily on the low-income group. As Mintz (1973) explains, in the absence of quotas many textile imports would consist of the cheaper goods bought by low-income consumers. These goods are eliminated primarily because exporters shift into more expensive product lines to take advantage of the limitations set on quantity under the quota system. The original low-cost imports are now either more expensive or not available under restrictions, since the unit prices of the goods have increased (Falvey, 1979).

The consequences of protection are diverse, and include the direct costs of higher domestic prices and also the indirect costs resulting from the impairment of competition and the consequent decline in efficiency and technological progress (Mintz, 1973). Protection reduces the competitive pressure on domestic producers of import substitutes and delays resource adjustment. It results in effectively taxing consumers and reducing the supply market, also providing an indirect subsidy to the protected industry. More people and resources may be employed in

the protected industry or at least remain there longer than may otherwise be the case.

Shifts in the Demand and Supply Curves

The framework in Figure 3.4 can be used to examine changes in demand and supply occurring in the countries under study and their effects upon consumers and producers. The magnitude of price sensitivity is usually indicated by the price elasticity of demand (where elasticity is defined as the percentage change in the quantity demanded divided by the percentage change in input factor prices).

The major determinant of price elasticity of demand is the closeness and number of substitutes. For example, the price elasticity of ramie is likely to be larger than for silk; since a ramie garment has a number of close substitutes, such as cotton, synthetic fibers or blends. The silk fiber or garment has few close substitutes, however, a particular rayon or synthetic may be considered. In fact, as the definition of the product becomes more specific its demand becomes more price elastic. Thus, the demand for a particular sweater with a specific fiber content is likely to be more price elastic than the demand for apparel in general since sweaters, blouses, etc., could be substituted. The demand curve for a specific sweater will be less in magnitude and greater in elasticity than the curve for sweaters in general. Therefore, the response is dependent upon the price elasticity of demand and supply and can result in the rotation of the curves in addition to a shift.

The demand and supply curves can both change and/or shift in response to certain factors. Demand curves shift in response to changes in the prices of other goods, income, and tastes. Price changes in the US market may shift the demand curve as shown in Figure 3.4(a). For example, if ramie blend sweaters are substituted for cotton sweaters,

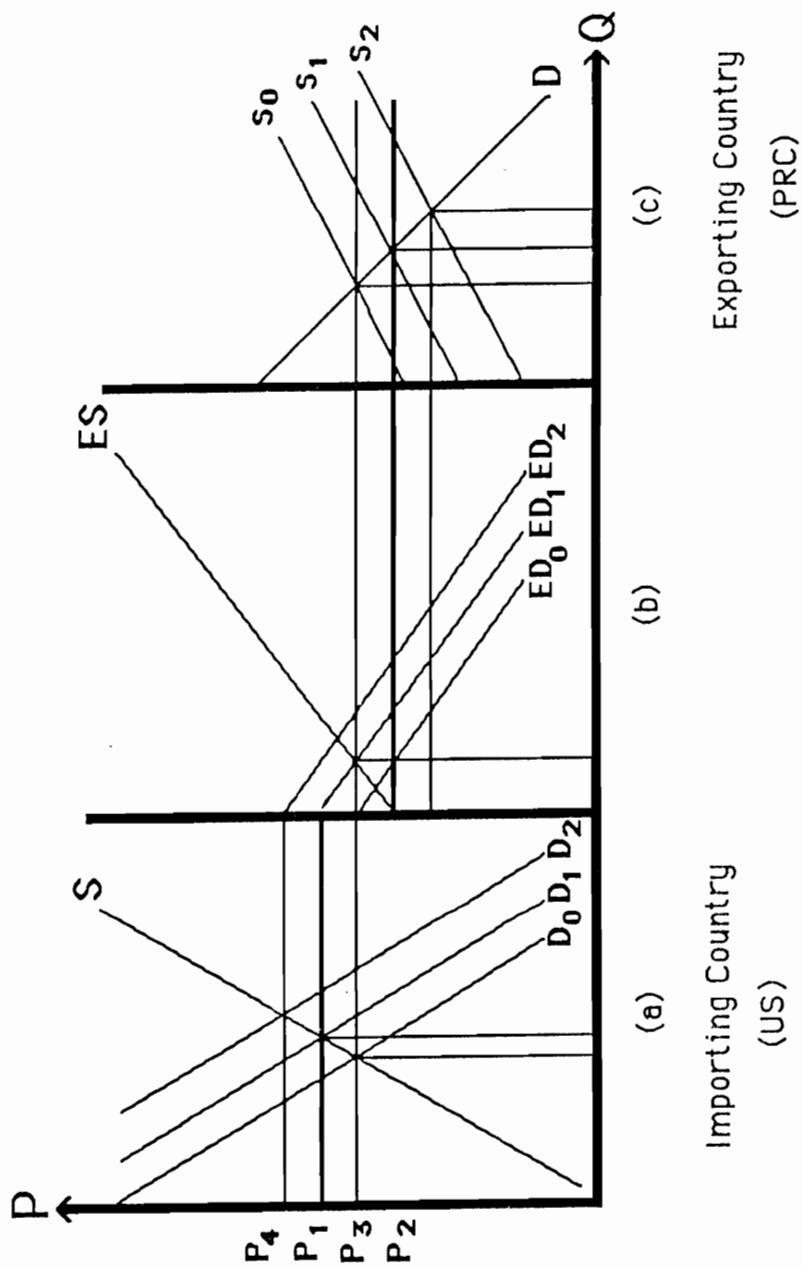


Figure 3.4: Shifts in Demand and Supply Curves

the quantity of sweaters demanded would change in the same direction as the price of cotton sweaters. Thus, an increase in the price of cotton sweaters will shift the US market demand curve for ramie blend sweaters outward from, D_1 to D_2 . Equivalently decreases in the price of cotton sweaters would shift the demand curve for ramie sweaters inward, from D_1 to D_0 .

An increase in consumer income (holding prices constant) acts to increase the quantity demanded for most goods, the amount depending on the size of the increased income, shifting D_1 to D_2 in Figure 3.4(a). In order to measure the responsiveness of consumers to changes in income, income elasticity should be considered. Income elasticity measures the responsiveness of consumers to changes in income as the demand curve shifts. For example, in the US increased income would result in increased demand and could increase the demand for linen and silk products. In the PRC the process of industrialization with its associated consumer income increase would also result in increased clothing demand. Conversely a decreased income would have an opposite impact upon demand, depicted by the shift from D_1 to D_0 .

Increases or decreases in population overall or in certain market segments can also result in increased or decreased total demand as currently seen in the US with the maturing of the post-World War II "baby boomers". Suppose these maturing consumers prefer natural fibers as suggested by Lawson, 1987, and Glade and Lawler, 1987, causing the demand curve for the entire market of natural-fiber sweaters to shift to the right from D_1 to D_2 , as illustrated in Figure 3.4(a). This can produce a short run shortage of apparel made of natural fibers, leading to a price increase from P_1 to P_4 , as the quantity demanded exceeds the quantity supplied at that price, consequently suppliers raise the prices.

Shifts in the supply curve result from the producers' altered willingness to place products on the market at each price or the

elasticity of supply. Producers are willing to produce larger amounts when they expect higher prices, therefore, the elasticity of supply measures the responsiveness of producers to a price change. There are four main factors that affect price and result in quantity changes available in the market and can cause the entire supply curve to shift.

Changes in the prices of production inputs or of other competing products can cause producers to alter their production levels. For instance, when the price of cotton fiber increases, the cost to produce cotton sweaters may increase and the quantity supplied will decrease if producers move from the production of cotton sweaters into substitutes such as ramie. If the US producers do not have this opportunity as they do not produce ramie, producers in the PRC could reduce the production of cotton sweaters, shifting the supply curve to the left, as from S_1 to S_0 (Figure 3.4(c)), producing less cotton sweaters and substituting with increased amounts of, say ramie blend sweaters. Producer expectations may also influence supply or demand. If the price of output is expected to rise producers may hold back on production hoping to benefit from higher prices at a later time, reducing the short-run supply which will ultimately cause the price to rise. The opposite could occur if producers expected a future price decline.

Other factors that effectively change the supply are the number of suppliers and technological changes. An increased number of producers in a market could effectively shift the supply curve outward, as from S_1 to S_2 in Figure 3.4(c); this may have occurred with the Chinese government's various incentives to encourage textile production and exportation. As the number of suppliers increase, the price may decline and quantity may increase. A change in technology often increases production which acts to reduce production costs hence reducing the output cost per unit (Peterson, 1983). If, however, the quality is increased the price may not drop. For example, the Chinese government has invested heavily in new technology to increase production. The

improved product quality and production efficiency could result in higher exports thus, the supply curve shifts, as from S_1 to S_2 in Figure 3.4(c).

Exchange Rates

Since the theory relating to exchange rates was presented in the previous chapter it will not be repeated. Exchange rate changes can shift the demand and supply of internationally traded commodities due to relative price changes and consequently alter the effective prices paid by consumers or received by producers. Any economic change in a country, such as costs, prices, incomes, and all government policies influencing these could in turn influence exchange rates. Consequently policy changes in the US or the PRC can impact their supply and demand or (exports and imports). Thus, we can trace the interdependence of the two countries through the "world market" as represented in Figure 3.5(b) the addition of a fourth panel (Figure 3.5(c)) depicts the effect of exchange rate changes on price in the US and world market. Line AB represents the exchange rate of the dollar against, say one of the US major trading partners i.e., an industrialized country with an assumed 1:1 exchange rate. If the value of the dollar falls, as occurred between 1985-88 the line AB rotates to a new position as seen in Figure 3.5(c), which feeds back into the world price and hence a reduced quantity demanded by the US (Figure 3.5(b)).

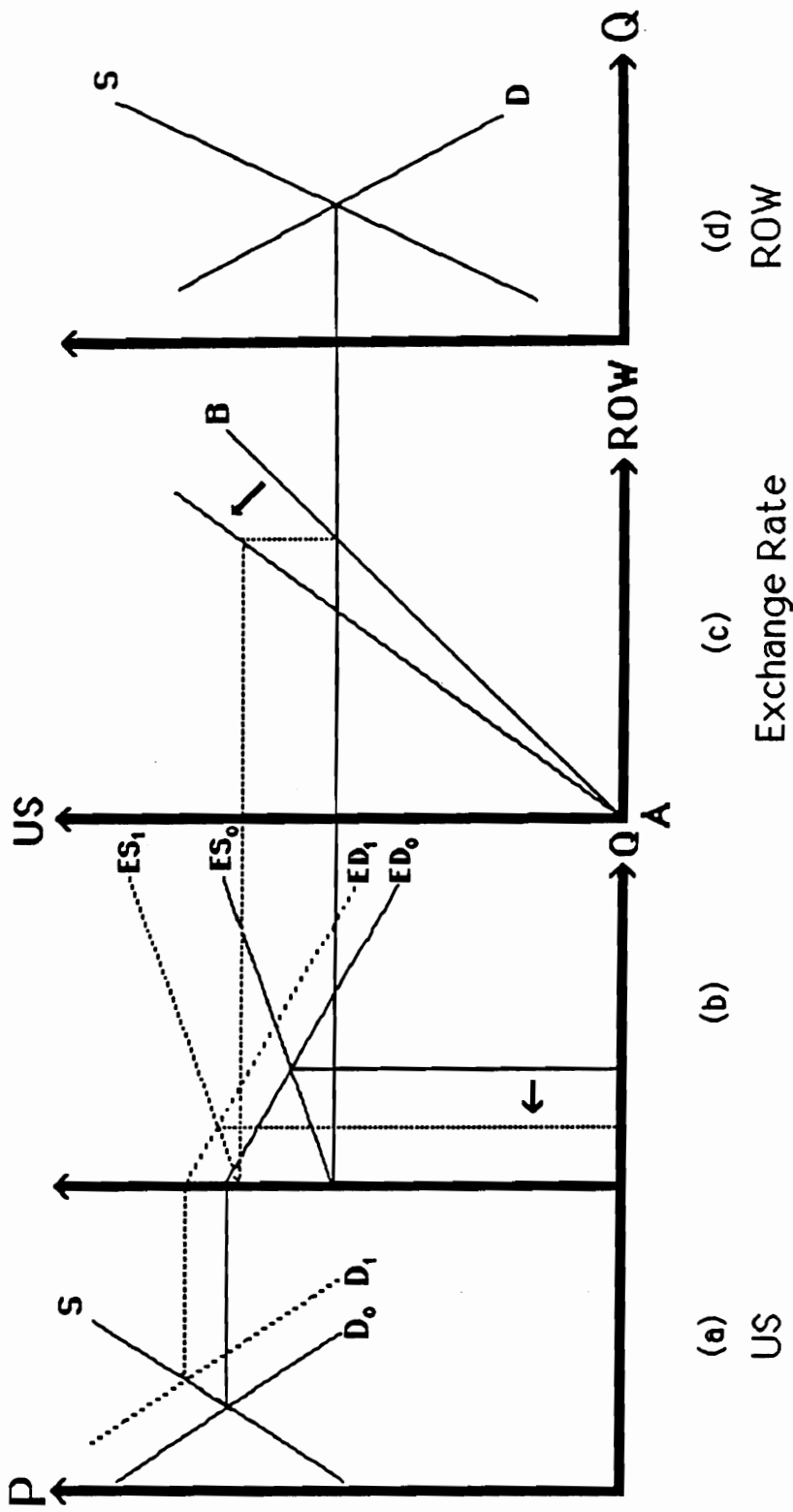


Figure 3.5: The Effect of the Exchange Rate on US (When the Value of the Dollar Falls)

Research Hypotheses

Objectives 1 and 2 are descriptive, therefore no hypotheses were developed specifically in relation to them. The following hypotheses were developed in relation to Objective 3:

1. Key variables in the US industry support of new fiber inclusions in MFA IV were (a) the increased proportion of apparel imports using MFA IV-fiber; and (b) the high rate of increase in apparel imports using these fibers relative to the rate for other fibers, in the interim between MFA III and IV (1982-86).
2. US apparel imports of MFA IV-fiber from the PRC, relative to other countries, following MFA IV (a) declined proportionally less in total real value and in quantity; (b) rose by less in unit price; and (c) decreased less as a proportion of its overall apparel imports in terms of real value.
3. US apparel imports of MFA IV-fiber from the PRC, before and after MFA IV, followed the trend in US personal consumption expenditures for apparel.
4. US apparel imports of MFA IV-fiber from the PRC declined in quantity after 1985, when the value of the dollar began to depreciate against the currencies of the major industrialized countries.

Basis for Hypotheses

Hypothesis 1 addresses Objective 3a involving reasons for the support of MFA IV. The US does not produce the newly restricted fibers (Joseph, 1986), nor apparently much apparel, or other products, made of these fibers (Hester & Yuen, 1989) which raises a question as to why the industry was so supportive of the new MFA IV-fiber coverage.

Examination of the literature suggests that the new fiber inclusions were promoted by the US for two main reasons which are embodied in the two parts of this hypothesis: the increased appearance of MFA IV-fibers in imported apparel, a much more sensitive category than other textile products due to the more strongly import-competing nature of apparel in general; and the relatively rapid import growth in apparel made of these previously uncontrolled fibers, especially at a time (1982-86) when economic conditions favored a rapid rising US trade deficit and concomitant protectionist sentiment.

Importantly, neither reason include values or the absolute volume of MFA IV-fiber apparel trade. Available evidence indicates that such apparel was, and still is, overshadowed in prominence by apparel trade involving the fibers covered by the MFA since its inception in 1974 (Jacobs, 1987).

Secondly, the increasingly rapid rate of importation of textile products not covered by the MFA. The rate of increase has continually been a point of contention between exporters and the domestic industry since the introduction of the MFA. In 1974 an annual 6% growth had been reluctantly permitted by the US. This growth rate has been gradually reduced over the years through the various MFA renewals. Specifically, the temporary reasonable departures clause of 1978, then later the introduction of a surge mechanism and a call system in 1982 each aimed at reducing the import rate and departure from the original 6%.

Having progressively restricted apparel imports, the increasing rate was found to be from fibers and fiber products previously not restricted by the MFAs as explained by Ambassador Carlisle (1986) imports of these apparel products increased "precisely because they were not covered by the MFA". Jacobs (1987) commented on how these new fibers were believed to be directly competitive with US products. Pure silk was excluded since it was "more expensive and was less likely to compete directly with cotton, wool and man-made fiber products" (Jacobs, 1987, p.41). This suggests the two main US industry concerns and therefore, motives for their support of MFA IV were the transfer of production from traditional non-apparel uses to apparel use, and the rapidly increasing rate of these imports as apposed to the actual volume of the new fiber apparel.

The other three hypotheses address Objective 3b, on the impact of the new fiber inclusions, specifically looking at imports from the PRC. The basis lies in the timing and severity of bilateral agreements, evidence from past trade patterns, and economic theory. Hypothesis 2 has three separate parts. Hypothesis 2(a) suggests a decline in PRC imports of MFA IV-fiber apparel, but relatively less than those from other countries, after the imposition of the MFA IV. Since restrictions were placed on the Big Three prior to the MFA IV it was expected that imports from these countries would be reduced before imports from the PRC. The importation of MFA IV-fibers from the PRC did not become restricted until after its third Sino-US bilateral agreement i.e., January 1988, and then not so heavily as the Big Three, with 3% average annual growth permitted compared with a maximum of 1% for the other three suppliers.

Hypothesis 2(b) predicts the PRC's unit price for new-MFA imports would not rise as much as imports from other suppliers, after the imposition of MFA IV in 1986. Under free trade the unit price of goods are expected to decrease over time as the quantity imported increases.

Trade restraints cause the unit price of imported goods to rise (Falvey, 1979). The unit price of MFA IV imports from the PRC was expected initially to be lower than from the rest of the world and then to fall as unrestricted trade increased; this was primarily because of the PRC's stage of development and its large supply of cheap labor. The unit price for new MFA IV-fiber imports from the PRC were expected to rise after 1988 when the third Sino-US bilateral agreement imposed restrictions on these fibers. However, imports of these same fibers from the Big Three had been restricted since 1986 and it was, therefore, expected that the unit price of these goods would increase and hence be higher than imports of the same goods from the PRC.

Hypothesis 2(c) predicted that MFA IV imports from the PRC decreased less as a proportion of their overall apparel exports than did those from other suppliers after the imposition of MFA IV. It was expected that apparel containing MFA IV-fibers would retain a more stable proportion of the PRC's exports than of other suppliers. The main reasons for this were the PRC was the major supplier and it had more time to increase the export base level due to the timing of its latest bilateral agreement.

The final two hypotheses shift the focus from the MFA toward factors within the economy. Evidence exists that, for example in the import surge in 1983-84, the flexible structure of the MFA allowed imports to be affected by general economic conditions even with the restrictive trade regime in place (Cline, 1990). The review of literature suggested two economic factors that had impacted imports, namely: the exchange rate of the dollar and US consumer demand. Hypotheses 3 and 4 were developed to address these factors in relation to import patterns.

Hypothesis 3 relates imports to US personal consumption expenditures for apparel. If US expenditures on apparel increased, it was hypothesized that there would be a concomitant increase in apparel

imports and hence an increase in apparel imports of MFA IV-fibers. This of course, will be dependent upon the price elasticity of demand. If for example, the demand is price elastic, a price increase leads to a reduction in the amount of money spent on the commodity as the consumer looks for cheaper substitutes. This logic assumes all consumers are at a similar standard of living which of course is not totally the case (Mansfield, 1982). Therefore, it was reasoned that since the PRC was the major producer, exports from it would reflect the general trend in US apparel consumption expenditures over the study period.

Hypothesis 4 suggests a fall in US MFA IV-fiber apparel imports as the dollar depreciated against other major currencies. A qualifier is that a lag of at least a year was anticipated, and possibly even two, before import quantities declined. Major currencies were investigated so that changes in trade patterns could be more readily identified and comparison made with the value of the dollar.

The real effective exchange rate index (reu) was used in making comparisons of changing dollar values (Appendix A). The year 1985 was used as the base year. Appendix A shows the dollar peaked in 1985 (100), since then the value of the dollar has depreciated against the currencies of all of the major industrial countries examined, namely Japan, Canada, West Germany, and the United Kingdom (UK).

Having established that the dollar has in fact depreciated against major currencies a comparison can be made between the dollar and the Chinese currency. The currency of the PRC is the renminbi and its unit is the yuan. The index used for the Chinese renminbi was not the 'reu' used for the other major currencies as the 'reu' index is not calculated for PRC, hence the 'rf' series (a trade weighted exchange rate) was used. Therefore, the renminbi is not listed in Appendix A with the other currencies but separately in Appendix B. The renminbi exchange rate was, until November 12, 1986, fixed to a basket of currencies of China's own choice, which accounted for 80% of their trade. The Chinese

currency agreement of 1986 changed the currency to a more flexible system, or "managed float" (IFS, 1986). The value of the Chinese renminbi against the dollar increased by a total of 27% between 1985 and 1988 (Appendix B). Since the dollar depreciated by some 34% over this time, it was therefore, decided that the US imports would be more affected by the currencies of the other major industrialized countries than the Chinese currency and hence imports were expected to fall as the dollar depreciated against the currencies of the major industrialized countries.

Assumptions

The classification of "other fibers" in the import data used in the analysis was assumed to consist of the new fiber inclusions in MFA IV, such as linen, silk, ramie, or other fibers of interest in this study, as distinct from the cotton, wool, and manmade fibers.

US domestic production and thus supply of the MFA IV-fibers themselves is assumed to be zero based on available information (Hester & Yuen, 1989). The domestic production of apparel of these imported fibers is also assumed to be zero (Joseph, 1986).

Limitations

The secondary nature of the data used in this research and all the consequent restrictions were recognized as potential limitations for this study: the standard international trade categories (SITC) used and some missing import quantities are cases in point. However, this was not perceived as a great problem, in part because SITC categories are frequently used in trade research. Missing data did not seem to detract

from identifying import patterns. Missing import quantity data, as opposed to value data, did influence the decision to examine the trade patterns by tabular graphical techniques and prevented the use of quantitative analysis.

Trans-shipment was ignored for the purposes of this study. Trans-shipment is a known problem for some countries, i.e., from Japan to Korea, but little is documented for China.

CHAPTER IV

PROCEDURE

The research objectives and related hypotheses were addressed by examining US apparel import data as well as data on other pertinent variables. Imports from the US were investigated by quantity, where possible, and by value in order to appreciate apparel trade patterns. The import data were separated by fiber content and also into woven and knitted garments to obtain a better understanding of the composition of the imports. Imports from the PRC were isolated for comparison with imports in the same categories from the rest of the world. Since it was suspected that unit apparel price, US consumer demand, and exchange rates would prove to be significant in this study, these factors were examined in relation to import levels. Patterns of trade in general and specifically from the PRC were described to determine the effects of trade restrictions.

A graphical analysis, based on the theory described in the last chapter, was used to facilitate a summary of import data and economic variables. An econometric analysis was not possible due chiefly to data limitations on the number of import observations. The study period was analyzed in three intervals: 1978-81, 1982-85, 1986-88. These periods coincide with the MFAs.

The Data

Data were obtained from the Department of International Economic and Social Affairs Statistical Office of the United Nations (UN Statistics, 1989). These data, compiled from information supplied by individual nations' governments, consist of annual US apparel import figures between 1978 and 1988, inclusive. Import figures for the PRC were listed separately, and all other countries' imports were aggregated.

The received UN data use the Standard International Trade Classification (SITC) system, revision 2, and contain the division 84 articles of apparel and clothing accessories. Quantity was recorded in metric tonnes, and value in thousand US dollars. In the latter case, data in any one year were recorded only if the value in that year was greater than or equal to 0.3 percent of the total value of trade for the year. The reported dollar values had been calculated from the prices paid by the importer; the prices included value of the goods plus the cost of transportation and insurance to the US (c.i.f. values). National currencies were converted into US dollars by official exchange rates. Currencies subject to fluctuation were converted using weighted average exchange rates. The weighted average exchange rate is the International Monetary Fund (IMF) component monthly factor, weighted by the value of trade in each month where the monthly factor is the average exchange rate in effect during that month.

The import data contain five subgroups of SITC division 84: subgroup 842 consists of outer garments for men and boys, including such items as overcoats, suits, trousers, and jackets. Subgroup 843 consists of outer garments for women, girls and infants including such items as coats, jackets, suits, dresses, skirts and blouses. Subgroup 844 consists of undergarments of textile fabrics other than knitted or crocheted goods. Subgroup 845 consists of knitted or crocheted garments

such as jerseys, dresses, suits and skirts, but excludes undergarments. Subgroup 846 consists of undergarments, knitted or crocheted. Each subgroup was divided by fiber content into wool, cotton, manmade, and other fibers.

For the purposes of this study, items across subgroups were classified into woven or knitted and by the fiber content. The gender of the wearer was ignored since subgroups 845 and 846 were not recorded as gender-specific. Subgroups 842, 843, and 844 were combined to represent the woven group; subgroups 845 and 846 comprise the knitted category.

Data on group aggregate import volumes in metric tonnes were not available for subgroups 842 and 843, nor for division 84 as a whole. This was due to the variety of units (metric tonnes, square yards, item numbers, and square yard equivalents) used in the data supplied to the UN. When physical quantity data in the standard unit of metric tonnes were available across some subgroups and other smaller categories of imports, these were analyzed.

The clothing records were classified by fiber type: cotton, wool, manmade, and other fibers. The fiber classification of fiber blends of textiles were determined by the fiber of chief value, or more than 50% of the weight of the product (Jacobs, 1987). Given the focus of this research on MFA IV, particular attention was given to the "other fibers" category. It was assumed that this category consisted of the fibers of interest, linen, silk, ramie, and others covered by the new fiber inclusions in MFA IV, henceforth referred to as the "MFA IV-fibers". Once the imports were separated by fiber content they were then sorted into woven and knitted garments so as to compare the composition of PRC's imports to other US trading partners. The SITC groups 842, 843, and 844 were classified as apparel of fabrics other than knitted or crocheted construction and were, therefore, denoted as "woven apparel".

Groups 845 and 846 were garments of knitted or crocheted construction, denoted as "knitted apparel" for this study.

Quantity data for groups 842 and 843 were not available, so the import quantity of woven apparel could not be investigated. The category of "MFA IV-fibers" was developed from an aggregation of items. The figures for both quantity and value for woven garments of MFA IV-fibers is the sum of the following SITC subgroups: 842.19, 842.29, 842.39, 842.49, 842.99, 843.19, 843.29, 843.39, 843.49, 843.59, 843.99, 844.19, 844.29, 844.39. The figures for both quantity and value of knitted garments of MFA IV fibers is the sum of subgroups 845.19 845.29, 845.99 and 846.49.

The disaggregated form of the Consumer Price Index (CPI) apparel minus shoes was used to deflate values in order to investigate real value changes (Bureau of Labor Statistics [BLS], 1988, 1989). Since the CPI has different base periods, 1982-84 was used. The CPI was used in preference to the Producer Price Index which was designed to measure only changes in prices received for the output of domestic industries and did not include imports. Unit prices for the import categories used were calculated for available data by dividing the total real dollar value of imports by the quantity imported.

The personal consumption expenditures (PCE) data for clothing minus shoes were obtained from the Survey of Current Business (1984; 1986; 1988; 1989) in constant 1982 dollars. The expenditures were calculated by subtracting line 28 (shoes) from line 27 (clothing and shoes).

Exchange rates and exchange rate indices were obtained from the International Financial Statistics (IFS 1986; 1989) yearbooks produced by the International Monetary Fund. The real effective exchange rate index (reu) was sought but could only be obtained for 17 industrial countries, not including the PRC. The reu is the nominal effective exchange rate (reu) adjusted for relative changes in consumer prices.

CHAPTER V

FINDINGS AND DISCUSSION

The findings of this research are discussed under two headings: results, and summary and discussion. The results section addresses the objectives. The summary and discussion use the three-part graphical economic model to explain trade patterns in light of the MFA policies and economic events.

A time line has been provided (Figure 5.1) to remind the reader of the textile trade agreements that are pertinent to the following discussion.

Results

Objective 1: describe overall US apparel import patterns during the years 1978 to 1988.

Total US apparel imports were examined only in terms of value since quantity data were not available at this level of aggregation. Table 5.1 shows the value of US apparel (SITC 84) imports from the world as well as the shares of the total from the PRC and other sources. The world import figures are pertinent to Objective 1; the remaining data will be used to address other objectives.

Table 5.1 indicates that the nominal value of US apparel imports

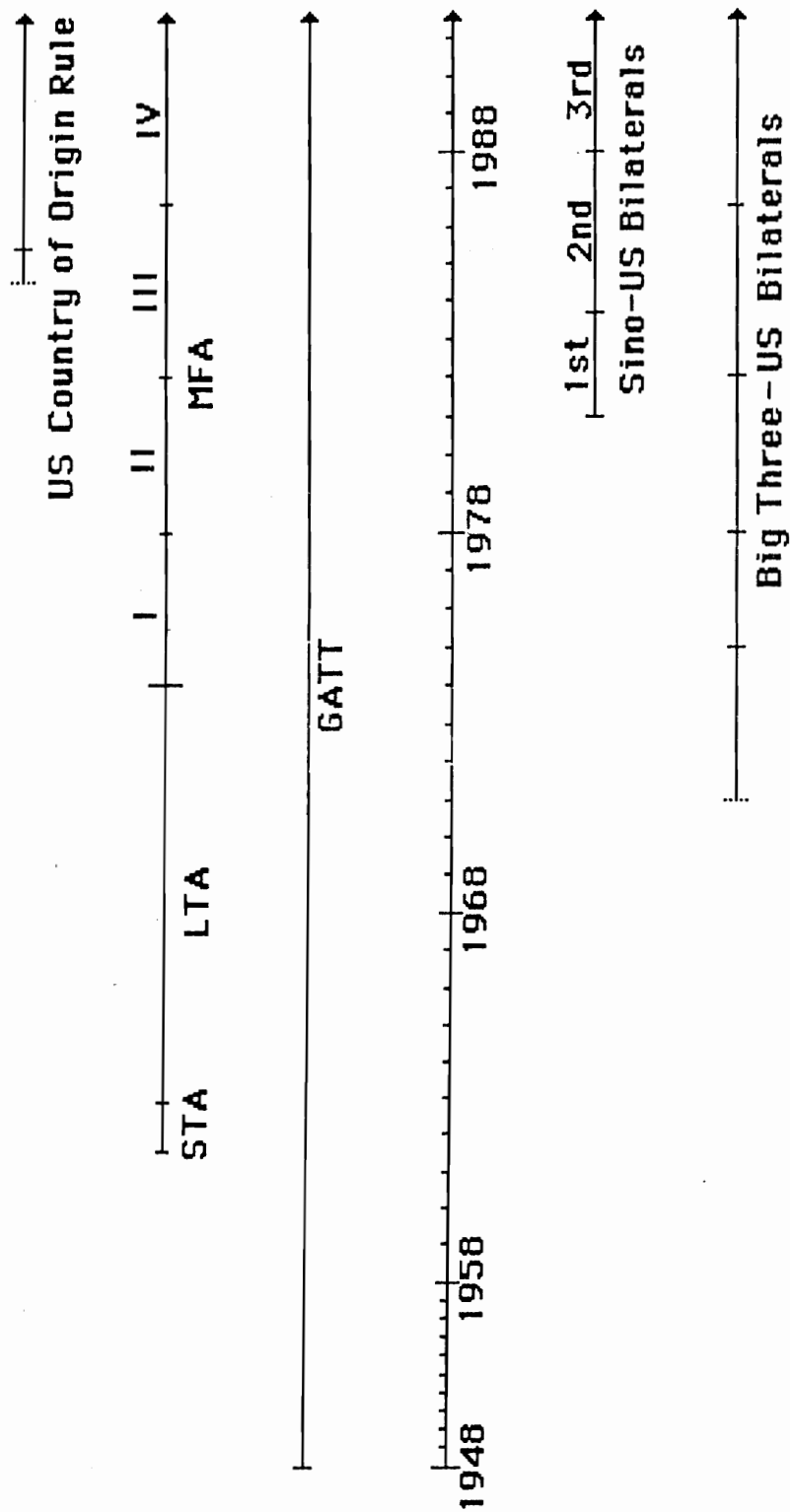


Figure 5.1: TIME LINE-TRADE AGREEMENTS and POLICIES

Table 5.1

US Apparel Imports (SITC 84)
(million dollars, annual percentage change in parenthesis)

Year	World		Rest of World		PRC		PRC % of import change	imports
	Nominal		Real Dollars*					
1978	6,124 (n/a)	7,171 (n/a)	7,089 (n/a)	82 (n/a)	n/a	1		
1979	6,354 (4)	7,270 (1)	7,078 (0)	192 (134)	111	2		
1980	6,943 (9)	7,474 (3)	7,175 (1)	299 (56)	52	4		
1981	8,118 (17)	8,430 (13)	7,955 (11)	475 (59)	18	6		
1982	8,791 (9)	8,970 (6)	8,275 (4)	695 (46)	41	8		
1983	10,419 (19)	10,408 (16)	9,568 (16)	840 (21)	10	8		
1984	14,589 (40)	14,397 (38)	13,411 (40)	986 (17)	4	7		
1985	16,202 (11)	15,549 (8)	14,540 (8)	1,009 (2)	2	6		
1986	18,692 (15)	17,887 (15)	16,093 (11)	1,794 (78)	35	10		
1987	22,116 (18)	20,253 (13)	18,246 (13)	2,007 (12)	9	10		
1988	21,692 (-2)	19,061 (-6)	17,271 (-5)	1,790 (-11)	18	9		
Annual average	(14%)	(11%)	(10%)	(41%)	30%	6.5%		

* 1982-84 = 100; n/a = not available
Source: Compiled from UN Statistics, 1989.

from the world in 1988 was \$ 21.7 billion, more than 3.5 times the 1978 figure of \$6.1 billion. The average rate of increase over the period was 14% per annum, agreeing closely with the 15% average annual growth rate reported by Greenwald and Hoing (1987) for the years 1982-86 when measured by SYEs. Yet, it is evident in Table 5.1 that the annual percent change varied considerably over the period 1978-88. Imports increased annually through 1987, but actually fell from 1987 to 1988. The smallest increase, 4%, occurred from 1978 to 1979, the year following the effective date of MFA II (January 1978). Imports built up at increasingly higher rates in the next two years. The growth rate then dipped back to 9% from 1981 to 1982, but showed another, much greater two-year rise while MFA III was in effect (from January 1982). This two-year rise, over 1982-84, coincides with the years commonly called the import-surge years of the 1980s. Following a substantial post-surge deceleration, import growth resumed a steady acceleration which spanned the transition from MFA III to MFA IV in August 1986. In the second year of MFA IV, however, imports took a 2% drop after reaching the peak of over \$22 billion in 1987.

The real value (1982-84 = 100) of world imports into the US in Table 5.1 show a pattern similar to that for nominal values, though of course the dollar amounts and annual changes differ because of inflation adjustment. In constant dollars, imports in 1988 were approximately 2.7 times greater than in 1978. The 1988 value was 6% lower than the period high of \$20.3 billion in 1987. The irregular cyclicity of annual percent changes seen with nominal import values was also evident with real values. With real values, however, the year-to-year changes were slightly smaller percentages; the major exception was the larger decrease from 1987 to 1988 in real import values than in the nominal. Henceforth, the analysis of import values is in constant dollars, rather than nominal, because they provide a more accurate indication of import changes over time.

Objective 2. describe apparel exports from the PRC to the US, relative to other exporters, to determine the changes in quantity, value, growth rates, and fiber contents of the imports during the period 1978 to 1988.

Aggregate Apparel Imports

Apparel imports from the PRC cannot be examined at an aggregate level by quantity due to the absence of data. On a real value basis (Table 5.1), Chinese imports in 1978 were \$82 million and increased to a peak of over \$2.0 billion in 1987; this is a total increase of an astounding 2,348%, much larger than the 157% increase in imports from the rest of the world (ROW). Whereas the ROW annual import changes closely mirror those for the world, as could be expected, Chinese imports form a distinctly different pattern. For China, import growth averaged 41% per annum over the study period. The early years showed the highest growth until 1984-85 when only a 2% increase was recorded. There was then a burst of 78% from 1985 to 1986, followed by a slowdown to 12% growth in the next year. This burst and subsequent deceleration occurred two years after the import surge for the ROW. In line with the overall drop in apparel imports from 1987 to 1988, China's imports also fell but by over twice the percentage seen for ROW suppliers. Note that PRC has net decline 1986-88 whereas ROW has net increase.

It can be seen in Table 5.1 that in the early years, 1978-79 in particular, US import growth was essentially from China with imports from the ROW showing no increase, in fact actually diminishing. The PRC's share of import growth declined from 111% in 1978-79 to 18% in 1980-81 when the first Sino-US bilateral became effective, (see Figure 5.1). The following year the PRC's share of import growth increased to 41%, but then plummeted to 2% in 1984-85 after the second Sino-US bilateral had been signed. Within a year, however, China's share of import growth rebounded to over one-third, evidently due to the diversion of exports to the US when heavy restriction on major exporters

left unfilled demand (Dardis, Gu, & Zhang, 1988; Hester & Yuen, 1989). The Chinese share of import growth dipped to 9% in the following year, and China absorbed 18% of the import decline from 1987-88.

PRC imports increased much more than ROW imports during the study period, but they constitute a small percentage of the yearly US total apparel imports, on average 6.5% (Table 5.1). The PRC's percentage of the import market increased from a 1978 low of 1% to a high of 10% in 1986 and 1987. However, it dropped to 9% in 1988, the year in which the most recent Sino-US bilateral became effective.

MFA IV Imports from the World

Imports of MFA IV-fiber apparel generally increased over the study period (Table 5.2) in line with total apparel imports, but at a faster rate. The 1978 total value (all sources) of MFA IV-fiber imports started at a low of \$633 million and grew at an average rate of 21% per annum until a high of \$3.4 billion was reached in 1987. The 10% decline in value to \$3.1 billion from 1987 to 1988 coincided with, but exceeded in proportion, the decline in total apparel imports (Table 5.1); this drop occurred in the second year after MFA IV took effect.

The quantity of imports increased at an annual average rate of 20% from 31,742 thousand metric tonnes (TMT) in 1978 to a 1987 high of 160,198 TMT. Yet, in one interim year, 1979-80, a 23% drop in quantity occurred along with a 4% value increase although the value increase was noticeably smaller than in the years before or after. The next recorded decline in import quantity was by 4% in 1987-88, which was proportionately smaller than the decline in value during that year. The comparatively larger decline in the value of the MFA IV-fiber category from 1987 to 1988 may support the notion that products might have been downgraded as Hester and Yuen (1989) suggested.

From 1983 to 1984 record growth rates of MFA IV-fiber apparel imports were measured (74%) in value and 57% in quantity. This growth

Table 5.2

U.S. Imports of MFA IV-Fiber Apparel
(annual percentage change in parenthesis)

Year	World			PRC			Rest of World		
	Real Value* \$ mill	Quantity TMT	(%)	Real Value* \$ mill	Quantity TMT	(%)	Real Value* \$ mill	Quantity TMT	(%)
1978	633 (n/a)	31,742 (n/a)		23 (n/a)	1,257 (n/a)		610 (n/a)	30,485 (n/a)	
1979	722 (14)	31,823 (3)	(83)	43 (83)	2,437 (94)	(8)	679 (11)	29,386 (-4)	(11)
1980	752 (4)	24,639 (-23)	(8)	46 (8)	2,338 (-4)	(65)	706 (4)	22,301 (-24)	(4)
1981	959 (28)	36,976 (50)	(19)	76 (65)	3,587 (53)	(16)	883 (25)	33,389 (50)	(25)
1982	1,076 (12)	44,155 (19)	(23)	136 (79)	6,628 (85)	(16)	940 (6)	37,527 (12)	(22)
1983	1,301 (21)	54,503 (23)	(57)	158 (16)	8,917 (35)	(29)	1,143 (22)	45,586 (22)	(77)
1984	2,261 (74)	85,714 (57)	(29)	241 (53)	11,688 (31)	(28)	2,020 (77)	74,026 (62)	(12)
1985	2,567 (14)	110,760 (29)	(28)	310 (29)	14,948 (28)	(45)	2,258 (12)	95,812 (29)	(8)
1986	2,949 (15)	141,917 (28)	(13)	515 (66)	28,505 (91)	(45)	2,464 (8)	113,412 (18)	(9)
1987	3,380 (15)	160,198 (13)	(-4)	749 (45)	40,203 (41)	(-10)	2,631 (9)	119,995 (6)	(-10)
1988	3,059 (-10)	153,179 (-4)	(20%)	678 (-10)	38,235 (-5)	(43%)	2,381 (-10)	114,944 (-4)	(16%)
Annual average	(19%)	(20%)	(43%)	(45%)	(17%)				

* 1982-84 = 100.

Source: Compiled from UN Statistics, 1989.

out-paced that in overall apparel imports (Table 5.1), suggesting that existing economic conditions encouraged import growth from any uncontrolled market. Also the record import growth period 1983-84 coincided with the delayed introduction of the country of origin ruling see Figure 5.1. Hughes, 1987 suggested pending trade restrictions trigger responses within the arenas of both importing and exporting countries. The delayed country of origin ruling could have provided sufficient incentive for US importers and retailers to increase orders.

MFA IV Imports as share of Import Market

While the data in Table 5.2 indicate dramatic increases in imports of MFA IV-fiber apparel, these imports need to be compared to the total apparel imports in order to place the increased growth into perspective. MFA IV-fiber apparel imports have represented a small percentage of US apparel imports (W4/W, Table 5.3); ranging from a 1978 low of 9% to a high of 17%. The 1985 import share of 17% was maintained for three consecutive years until 1987. The slight decline to 16% of the import market in 1988 suggests that imports were beginning to be affected by the MFA IV restriction, not just absolutely but also as a share of US imports.

MFA IV-Fiber Apparel Imports from PRC

When the PRC's MFA IV-fiber imports were examined, an increase was observed in both quantity and value although the percentage increase in quantity was slightly greater (Table 5.2). The value in 1978 started from a low of \$23 million and rose by 29 fold over the study period to \$678 million, with 1987-88 exhibiting a decline from the prior year. The data indicate an average annual increase of some 43% by value for the PRC's imports of apparel made of MFA IV-fiber. The quantity of imports increased over the study period by a slightly larger average annual percentage (45%), as it rose from 1,257 TMT to 38,235 TMT.

Table 5.3
 Summary of US Apparel Import Markets, by Real Value*

Year	W	C	W4	C4	$\frac{W4}{W}$	$\frac{C4}{W4}$	$\frac{C4}{W}$	$\frac{C4}{C}$
1978	7,171	82	633	23	9	4	0.3	28
1979	7,270	192	722	43	10	6	0.6	22
1980	7,474	299	752	46	10	6	0.6	15
1981	8,430	475	959	76	11	8	0.9	16
1982	8,970	695	1,076	135	12	13	1.5	20
1983	10,408	840	1,301	158	13	12	1.5	19
1984	14,397	986	2,260	241	16	11	1.7	24
1985	15,540	1,009	2,567	310	17	12	2.0	31
1986	17,887	1,794	2,949	515	17	18	2.8	29
1987	20,253	2,007	3,380	749	17	22	3.7	37
1988	19,061	1,790	3,059	678	16	22	3.5	38
Average annual change	11%	41%	19%	43%	14%	12%	2%	25%

* 1982-84 = 100; world = W; PRC = C; MFA IV-fibers from world = W4;
 MFA IV fibers from PRC = C4.
 Source: Compiled from UN Statistics, 1989.

From 1979 to 1980 MFA IV-fiber apparel from the PRC rose 8% in value, the smallest increase recorded over the study period; whereas the quantity of these imports decreased by 4% (Table 5.2). These findings coincide with the US imposition of unilateral quotas on Chinese imports issued to encourage compliance to a second bilateral agreement. Upgrading could be offered as an explanation of the differences between quantity and value observed in 1979-80. Upgrading could also have occurred in 1983-84 when the value increased by 53% and the quantity increased by only 31%.

Three other year-to-year changes in the PRC's MFA IV-fiber imports stand out as particularly large. The year 1978-79 showed record growth of 83% in value and 94% in quantity. The year 1981-82 showed high import growth rates of 79% value and 85% in quantity. Also worthy of note was 1985-86, with a 66% value increase compared to a 91% quantity increase. Unlike the situation in 1979-80 where there was apparently upgrading, the larger increases in quantity than in value may indicate downgrading. Or there may have been a change in product mix, for instance replacing silk exports with ramie items as referred to by Hester and Yuen (1989), or substituting ramie for cotton ("Dynamic," 1980). In 1985-86, the PRC may have actively increased the base level at the expense of total value in anticipation of MFA IV in August 1986.

PRC's share of Apparel Imports of MFA IV-Fiber

The PRC's value share of MFA IV-fiber apparel imports to the US (C4/W4, Table 5.3) increased by an average of 12% annually over the study period, rising from 4% to 22%. The numbers in this column rise appearing to form a pattern, four years appeared to be relatively flat, followed by a jump. This pattern occurred in 1978, 1982, and then again in 1986, the years of the MFA implementations (Figure 5.1). Figure 5.2(a) depicts the PRC's share of US apparel imports of MFA IV-fiber recorded by value. When the PRC's share of MFA IV-fiber apparel imports

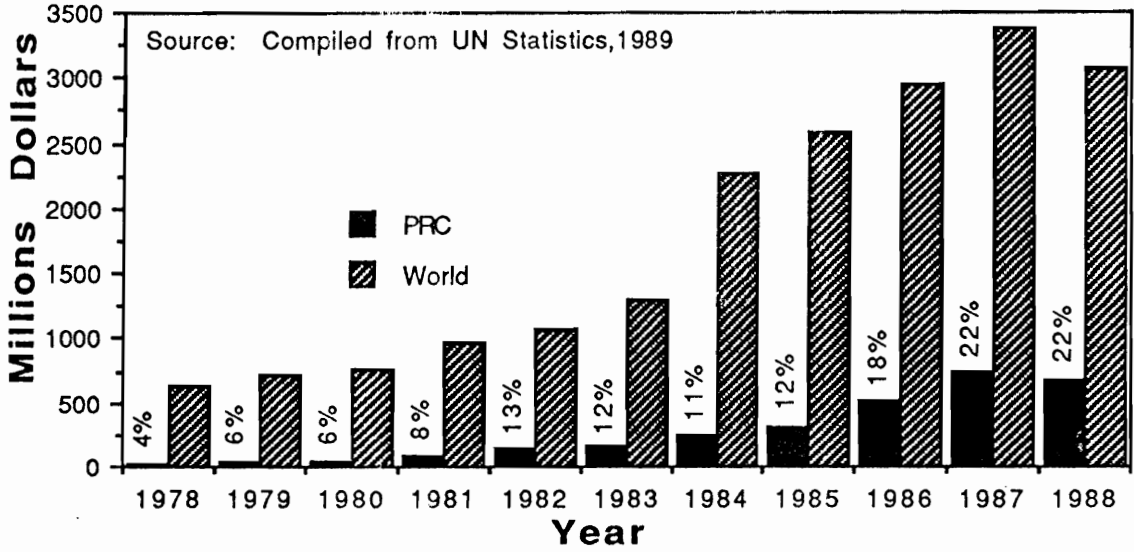


Figure 5.2a: PRC Share of US Apparel Imports of MFA IV-Fiber (1982-84 value)

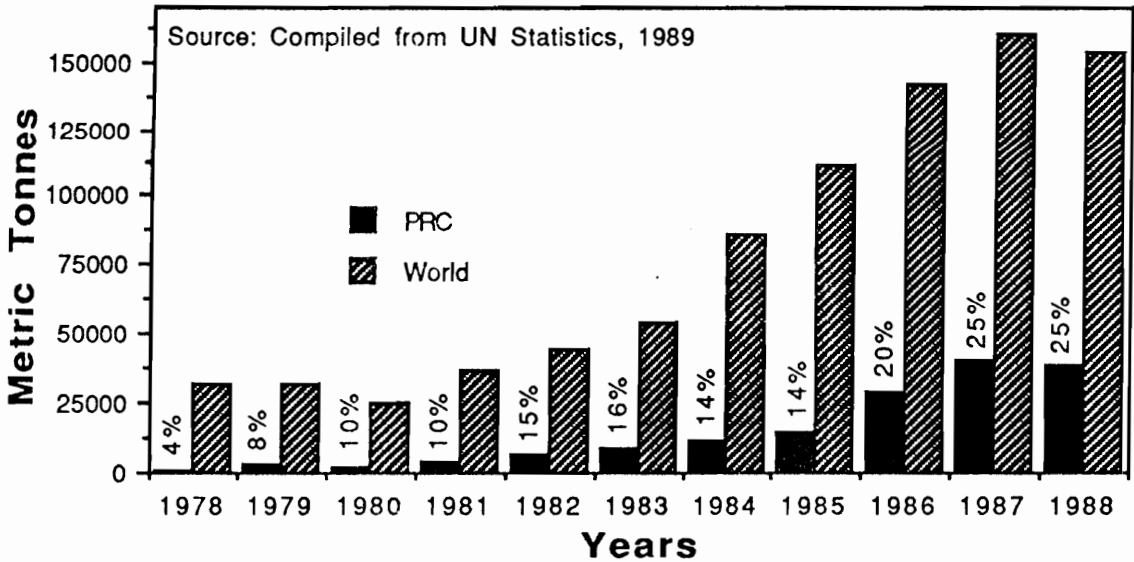


Figure 5.2b: PRC Share of US Apparel Imports of MFA IV-Fiber (quantity)

was measured by quantity (Figure 5.2(b)), the share increased from 4% to 25% between 1978 and 1988 at an average annual increase of 15%. Comparing Figures 5.2(a) and (b), the data indicate that the PRC increased the quantity of its MFA IV apparel exports by a slightly greater proportion than the value of these exports. However, it is interesting to note that the 1987-88 decline in the PRC's imports coincided with declining world imports of MFA IV-fibers, leaving the PRC's share of the MFA IV-fiber apparel market in the US unchanged by both value and quantity.

MFA IV-Fiber Apparel from PRC as % of Total Apparel Import

When the PRC's MFA IV-fiber apparel imports were compared to the total US imports (C4/W, Table 5.3), they were a very small percentage averaging some 2% annually by value. However, for the PRC these imports have represented a much larger share (an average annual 25%) of its total US imports. Table 5.3 (C4/C) shows that PRC imports over the study period were comprised increasingly of MFA IV-fiber apparel. In 1978 MFA IV-fibers were 28% of the PRC's apparel shipments to the US; though the percentage declined by 1988 it had risen to 38%.

Further Investigation of MFA IV-Fiber

In order to further describe the composition of the MFA IV-fiber apparel coming from the PRC the imports were separated into two subgroups, knitted and woven by fiber content: MFA IV-fiber and all others or non-MFA IV-fibers, since it was suspected that knitted items were more likely to be made of MFA IV-fiber.

The composition of the PRC's imports revealed that the total woven market was slightly larger than the knit apparel market for the study period. When the MFA IV-fiber market was examined (Table 5.4), the PRC's woven MFA IV-fiber share of the apparel market was largest. In contrast, the MFA IV-fiber imports from the ROW were composed

predominantly of knitted items. Imports of woven MFA IV-fiber apparel from the ROW increased until restricted by MFA III and bilaterals imposed prior to MFA IV, 1986. When the growth rates of the knit and woven items were compared the knitted apparel imports were found to have increased at a much faster rate than the woven goods, suggesting that imports of MFA IV-fiber were increasingly made up of knitted products. Imports of MFA IV-fiber from the PRC increased at a faster rate than imports from the ROW, with imports of knitted MFA IV-fiber apparel increasing by the fastest rate of all (average 59%).

Imports of knitted goods and especially those composed of MFA IV-fiber increased at such a dramatic rate that restrictions were placed on them early in 1986 and extended in 1988 with the third Sino-US bilateral (Figure 5.1). These trade restrictions have effectively reduced import levels in all MFA IV-fiber categories reducing knit imports most dramatically (approximately 25%) while permitting reduced growth (6-7%) in the woven categories.

The woven MFA IV-fiber apparel goods were the only categories to continue to rise after the implementation of MFA IV. Therefore, the data support the suggestion made by Pelzman (1987) and others who claim that 30% was a quota trigger level. It should also be pointed out that the data were in value terms and it would seem more appropriate to use quantity growth as a trigger considering the quota structure of the MFAs.

From the date it can also be seen that the PRC experienced more liberal treatment than other countries since its high import growth was allowed to continue for 2-3 years after imports were restricted from other suppliers. In fact, the US actively sought increased Chinese imports by the assignment of the MFN status.

Table 5.4

MFA IV-Fiber as a Share of Knitted and Woven Apparel Imports*
(annual percentage change in parenthesis)

Year	Woven		Knitted	
	ROW	PRC	ROW	PRC
1978	320 (n/a)	18 (n/a)	290 (n/a)	5 (n/a)
1979	375 (17)	31 (74)	305 (5)	11 (116)
1980	429 (14)	36 (16)	279 (-9)	10 (-15)
1981	562 (31)	59 (63)	321 (15)	17 (72)
1982	575 (2)	101 (72)	365 (14)	35 (108)
1983	646 (12)	117 (16)	497 (36)	41 (17)
1984	973 (51)	182 (56)	1,047 (111)	58 (44)
1985	1,057 (9)	201 (10)	1,298 (24)	109 (86)
1986	1,020 (-4)	239 (19)	1,414 (9)	276 (154)
1987	1,040 (2)	377 (59)	1,590 (12)	372 (35)
1988	1,114 (7)	401 (6)	1,268 (-25)	276 (-26)
Av annual change	(14%)	(39%)	(19%)	(59%)

* Real million dollars, 1982-84 = 100.
Source: Compiled from UN Statistics, 1989.

Objective 3: analyze key variables in order to (a) provide reasons why MFA IV was deemed necessary, and (b) draw conclusions as to the impact of this trade agreement specifically with respect to the PRC and the new fiber inclusions.

This objective was addressed through four hypotheses. The first hypothesis involves reasons for US industry support for MFA IV. The other three hypotheses assess the effects of MFA IV as well as other economic factors not specifically related to the trade restrictions.

Hypothesis 1: Key variables in the US industry support of new fiber inclusions in MFA IV were
(a) the increased proportion of apparel imports using MFA IV-fiber; and
(b) the high rate of increase in apparel imports using these fibers relative to the rate for other fibers, in the interim between MFA III and IV (1982-86).

Support for hypothesis 1a was provided by Figure 5.3. MFA IV-fiber apparel as a share of total imports increased in the years between MFA III and IV, 1982-86. MFA IV-fiber was increasingly used in apparel imports rising from 12% to 17% at an average annual 15% over the study period. Support was also provided for hypothesis 1b, the high rate of increased use of MFA IV-fiber relative to non-MFA IV-fiber in apparel (Figure 5.4). The real dollar value of MFA IV-fiber apparel imports increased by an annual average of 27% in comparison to non-MFA IV-fiber imports which increased by a lower 15% average during the period 1982-86. Therefore Hypothesis 1 was supported by the data. The MFA IV fibers increased at a faster rate and became an increasingly larger proportion of imports during the buildup to MFA IV (1982-86).

Hypothesis 2: US apparel imports of the MFA IV-fiber from the PRC, relative to other countries, following MFA IV:
(a) declined proportionately less in total real value and quantity;
(b) rose by less in unit price; and
(c) decreased less as a proportion of its overall apparel imports in terms of real value.

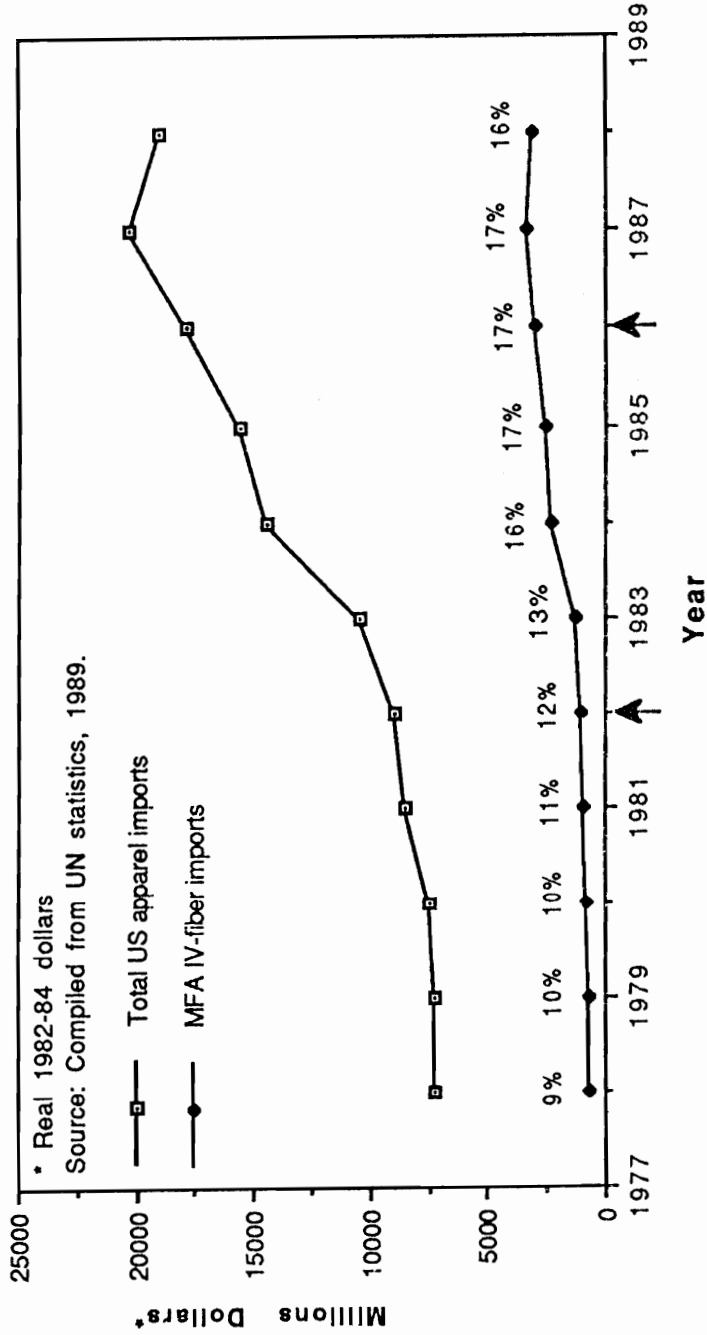


Figure 5.3: MFA IV-Fiber Apparel as a Share of Total Imports

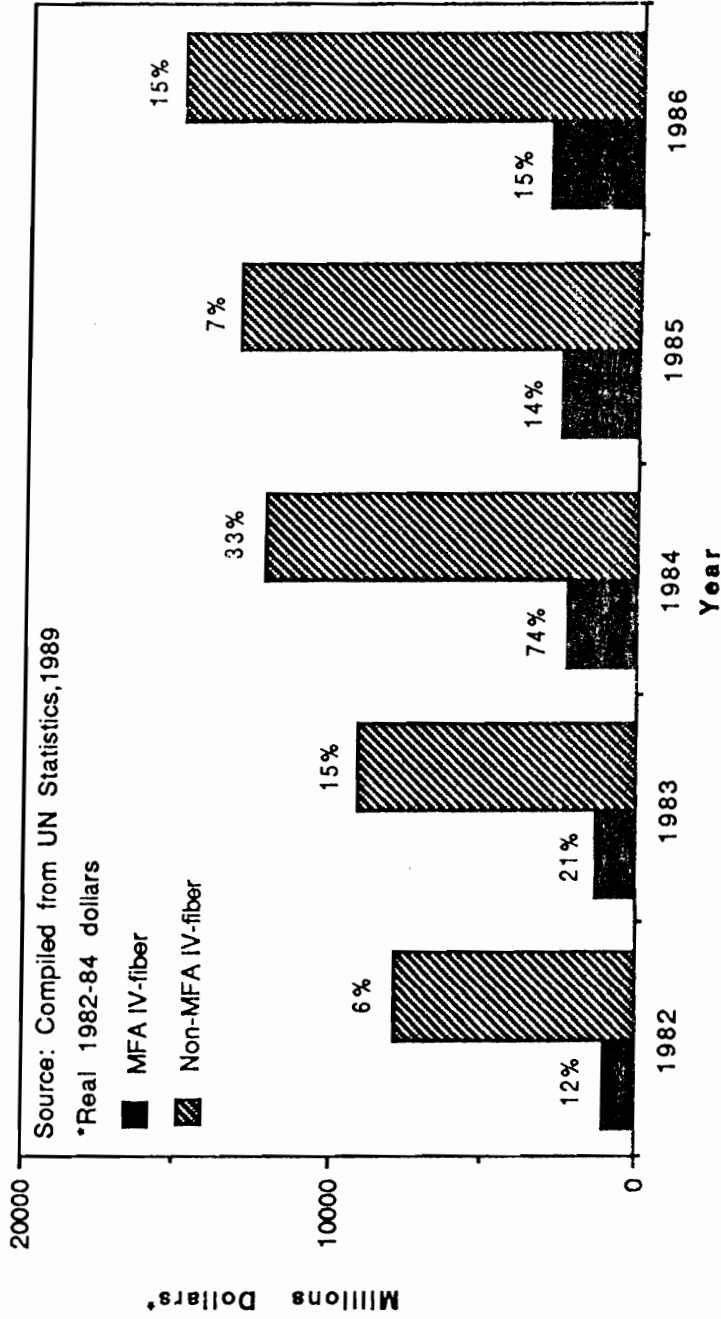


Figure 5.4: Increased MFA IV-Fiber Use in Imported Apparel

Hypothesis 2 is not totally supported by the data. Parts a and c were supported, while part b was not. The relevant time period for this discussion is following MFA IV, or after August 1986.

Hypothesis 2a was supported by the data in Figure 5.5(a) and (b) obtained from Table 5.2. Imports of MFA IV-fiber apparel from the PRC and the ROW, by both value and quantity, were compared by total percentage change for the period 1986 to 1988 and the average percent change. Figure 5.5 shows that MFA IV-fiber apparel imports increased from 1986 to 1987 for both the PRC and ROW, but there was an across-the-board decline from 1987 to 1988. MFA IV-fiber apparel imports from the PRC increased by a total of 32% and 34% respectively by value and quantity over this time, whereas the MFA IV-fiber apparel imports from the ROW declined a total of 3% by value while increasing 14% over the same period. Hence the MFA IV-fiber apparel imports from the PRC declined less by both value and quantity than those from the ROW supporting hypothesis 2a.

It should be mentioned that imports did not decline until 1988 some 16 or more months after implementation of the MFA IV, supporting the existence of a trade lag (Cline, 1987; Sanford, 1988a). Also the smaller annual changes observed for the ROW could result from the inclusion of MFA IV-fiber in bilaterals negotiated with the Big Three early in 1986. The bilateral which included these newly restricted fibers did not affect China until January 1988 and could in part explain their higher annual growth. The data, therefore, suggest that MFA IV-fiber apparel imports from the PRC declined less than imports of these fibers from other suppliers in the period 1986-88, i.e., since MFA IV.

In contrast, hypothesis 2b was not supported by the data as illustrated in Figure 5.6. The unit price of MFA IV-fiber imports from the PRC remained the same after the imposition of the MFA IV. However, the unit price of MFA IV-fiber apparel from other suppliers actually decreased in value by 5%. Therefore, the price change was not as

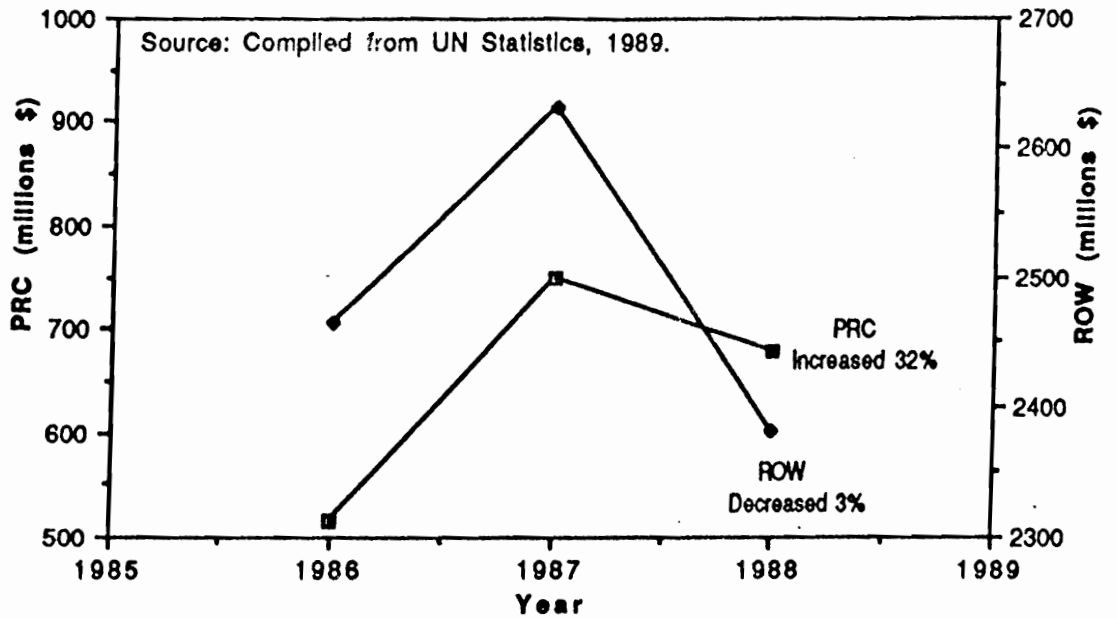


Figure 5.5a: MFA IV-Fiber Imports (1982-84 value)

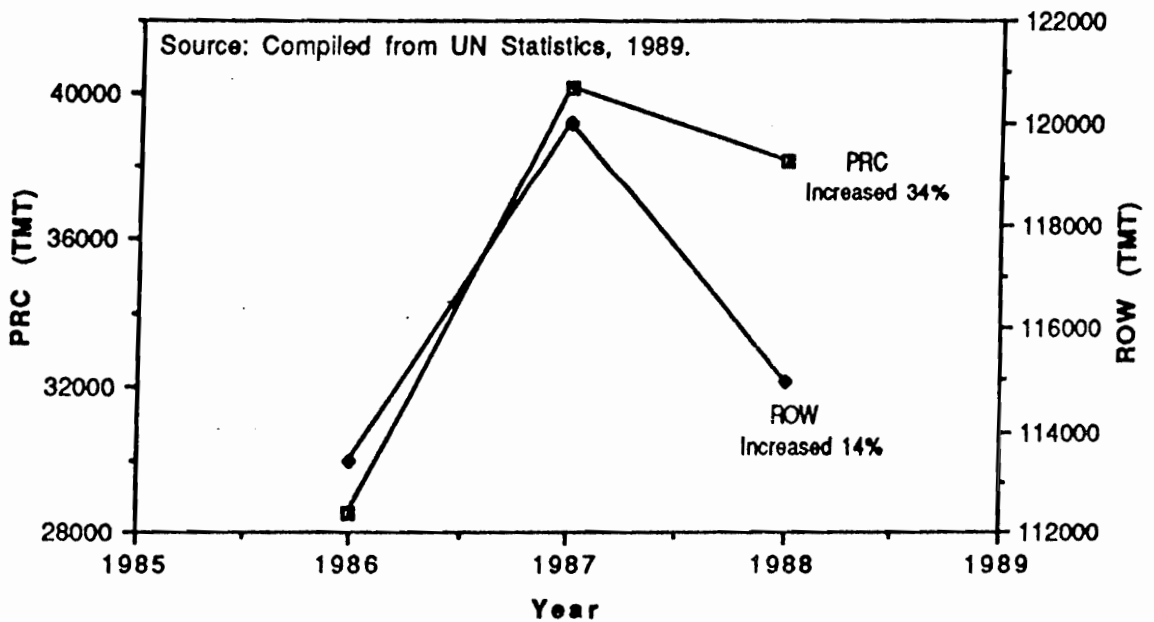


Figure 5.5b: MFA IV-Fiber Imports (quantity)

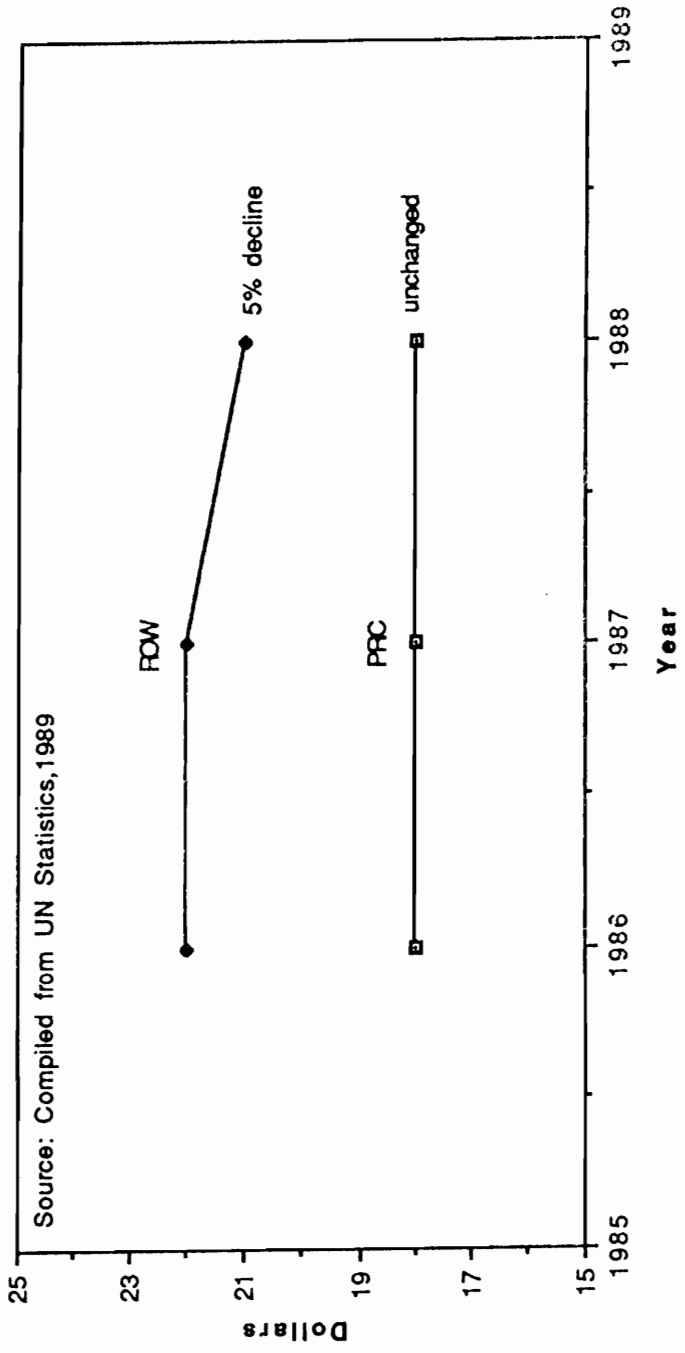


Figure 5.6: Unit Price of MFA IV-Fiber Imports

expected a priori. The PRC price of MFA IV-fiber apparel was not expected to change during the study period since items were not restricted until January, 1988. However, the price of MFA IV-fiber from other suppliers was expected to rise, not fall, after the imposition of MFA IV. It was assumed that the 1986 imposition of severe bilateral agreements upon the Big Three, major suppliers of the MFA IV-fiber would reduce the overall supply and hence cause prices to rise. Instead of a price rise occurring an actual decline in price was observed. Possible explanations for this price drop could be the source of the MFA IV-fiber apparel, perhaps it was coming from unrestricted suppliers. For instance, if the suppliers were new and therefore, unrestricted the items would be expected to become less expensive as imports were increased. A further explanation could be related to the fall of the dollar against the major industrial countries and many others, although not China. In summary, the unit price of MFA IV-fiber goods from the PRC remained unchanged whereas, the unit price of MFA IV-fiber apparel imports from the rest of the world declined, more than those from China, therefore, this hypothesis was not supported.

Hypothesis 2c was supported by data depicted in Figure 5.7. The imports of MFA IV-fiber apparel from the PRC as a proportion of their overall US apparel imports did not decline after the imposition of MFA IV in 1986. In fact, the PRC's import share actually increased by 32% while the import share of MFA IV-fiber apparel from other suppliers (ROW) declined by 10% over the same period.

Imports of MFA IV-fiber apparel from the PRC rose 45% the first year 1986-87, whereas imports from ROW increased by a much lower 9% when measured by value Figure 5.7. In the final year 1987-88 MFA IV-fiber apparel imports declined by 10% from both the PRC and the ROW. These findings are a reflection of the later restriction of MFA IV-fiber from the PRC than from the main suppliers. Therefore, MFA IV-fiber imports from the PRC decreased less as a proportion of imports relative to those

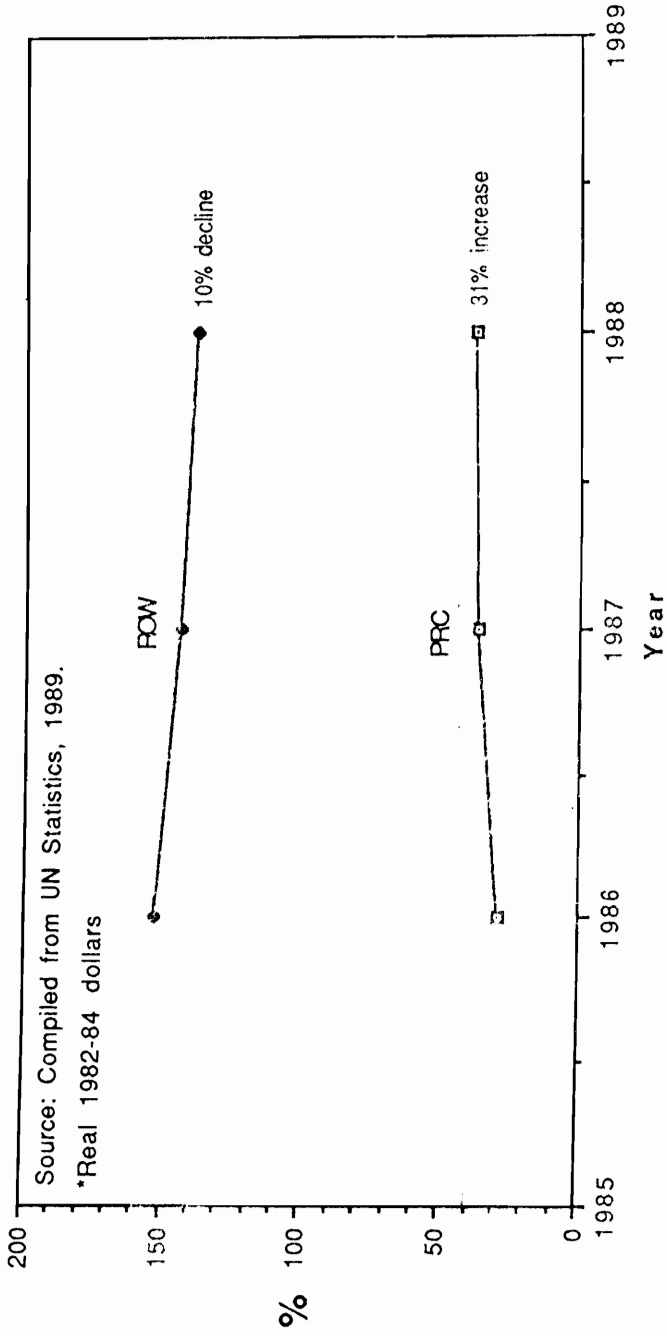


Figure 5.7: MFA-IV Fibers as a Proportion of Imports (by value)

from other countries in terms of value, thus supporting hypothesis 2c.

Hypothesis 3: US apparel imports of the MFA IV-fiber from the PRC, before and after MFA IV (1982-88), followed the trend in US personal consumption expenditures for apparel.

This hypothesis was supported by the data presented in Figure 5.8.

The US personal consumption expenditures (PCE) of clothing minus shoes in 1982 constant dollars increased over the period. The years 1982-86 demonstrated the most rapid growth, with the three years 1982-83, 1983-84 and 1985-86 exhibiting the highest growth. The years 1986-87 and 1987-88 demonstrated the lowest growth of the study period, with 2% and 1% respectively.

When the MFA IV-fiber imports from the PRC were examined between 1982-88. MFA IV-fiber imports were found to increase from 1982 to 1987 and then decline 10% in the last year, with the years 1985-87 exhibiting the most rapid growth. The main difference was seen in the year 1986-87, when imports from the PRC rose 46% despite the low 2% PCE growth; and also in the year 1987-88 when imports actually declined 10% while the PCE increased an even lower 1.4%. The last year when imports from the PRC declined can be explained by two factors, the 1988 imposition of MFA IV-fiber coverage on the PRC and the lag involved in international trade. The upward trend of both apparel PCE and imports of MFA IV-fiber from the PRC were similar, i.e., they followed the same general trends, thus supporting hypothesis 3.

Hypothesis 4: US apparel imports of the MFA IV-fiber from the PRC declined in quantity after 1985, when the value of the dollar began to depreciate against the currencies of the major industrialized countries.

This hypothesis was supported when the real effective exchange rate of the dollar was compared to the US imports of MFA IV-fiber apparel (Appendix A). Figure 5.9 indicates that the value of the dollar

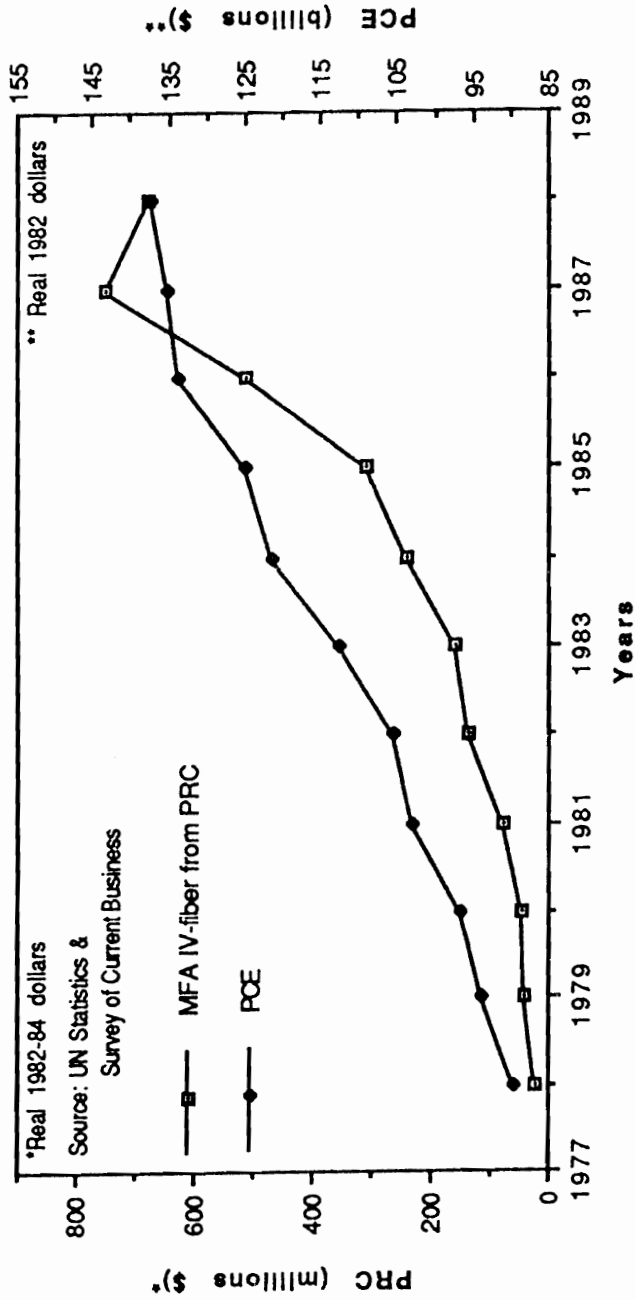


Figure 5.8: MFA IV-Fiber Imports from PRC compared to US Personal Apparel Expenditures

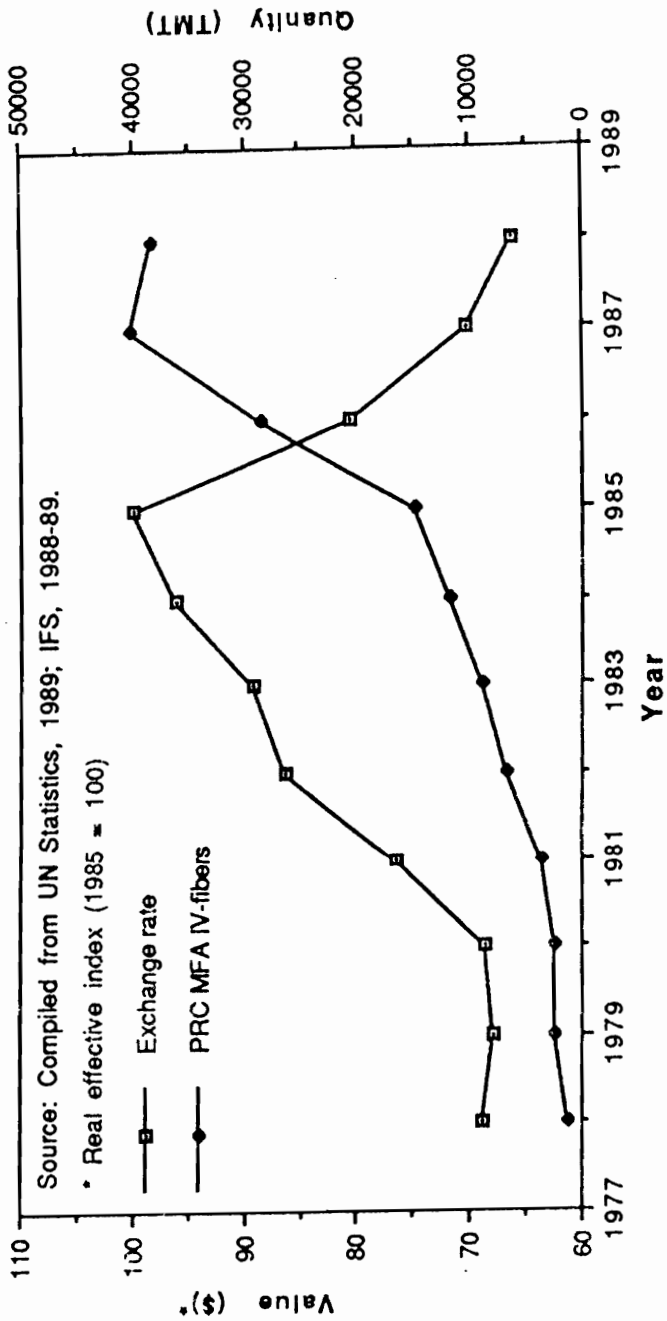


Figure 5.9: MFA IV-Fiber Imports from PRC compared to Value of the Dollar

against the currencies of other major industrialized countries rose from 1980 until 1985 when it reached a peak and then fell until 1988. The quantity of MFA IV-fiber apparel from the PRC rose throughout the study until it reached a peak in 1987. The following year 1988 demonstrated a 5% decline. These results are not unexpected considering the lag of approximately two years seen by other researchers (Cline, 1987; Sanford, 1988a). Two main reasons were suspected for the fall in apparel imports: the fall of the dollar and the imposition of MFA IV. The closeness of these two events make it difficult to conclusively proportion responsibility, however, if the value of the dollar had no effect on imports, the 1988 value would not have declined, since the third Sino-US bilateral (1988) permitted 3% growth. Therefore, the fall in the value of the dollar did reduce imports of MFA IV-fiber apparel from the PRC after a lag, hence supporting hypothesis 4.

Summary and Discussion

A discussion follows which relates the data and conclusions obtained from the hypothesis examined to other relevant data and the economies of the US and the PRC. The governmental policies and the textile industries of both countries were analyzed in the light of trade restrictions so as to assist with the analysis and to determine the impact of the MFA IV.

To aid this discussion, the study period was divided into two separate time periods: 1978-85, 1986-88. These periods coincide with the rise and fall of the dollar, and pre and post MFA IV, respectively. Within these two time frames the interrelationships of the various factors were discussed and summarized by the graphical economic model presented in chapter III so that inferences could be reached.

Aggregate US Apparel Imports 1978-88

Pre-MFA IV, 1978-1985

The first period of the study was divided further by time into the years 1978-81 and 1982-85. These periods coincided with MFA II and III, and were therefore, examined within this context. The US total apparel imports started in 1978 at a constant dollar value of \$7.2 billion and rose to \$8.4 billion by 1981 (Table 5.1), the year 1981 exhibited a higher (13%) than usual import growth, believed to be in anticipation of the MFA III (Hughes, 1987). The US economy was recovering from a recession, experienced at the end of the 1970s, which led the government to stimulate the economy by spending and subsequent personal consumption (Textile Hi.Lights, 1982). The value of the dollar rose 11% in this year along with domestic gross national product (GNP) which increased to 7%; apparel consumption reached record levels (8%) as measured by apparel PCE (Survey Current Business, 1984). These data are supported by the analysis of market disruption carried out by Choi, Chung and Marian (1985), who concluded that increased imports at this time were a result of expanded demand and not contracted domestic production.

The increased US demand and importation of apparel heralded the 1982 introduction of MFA III which resulted in an initial import growth reduction. Reduced import growth was short lived as imports increased dramatically from 1983 to 1985. These two years were called the import surge years, as apparel imports rose by 16% and then a further 38% the following year. Several factors are believed to have fueling the US demand and contributed toward this unprecedented growth. Namely, the delayed introduction of the country of origin ruling and the continued appreciation of the dollar.

These factors are graphically illustrated in Figure 5.10. Figure 5.10(a) depicts a fairly elastic supply and demand curve for the US. The US supply curve remained constant as suggested by Choi et al.,

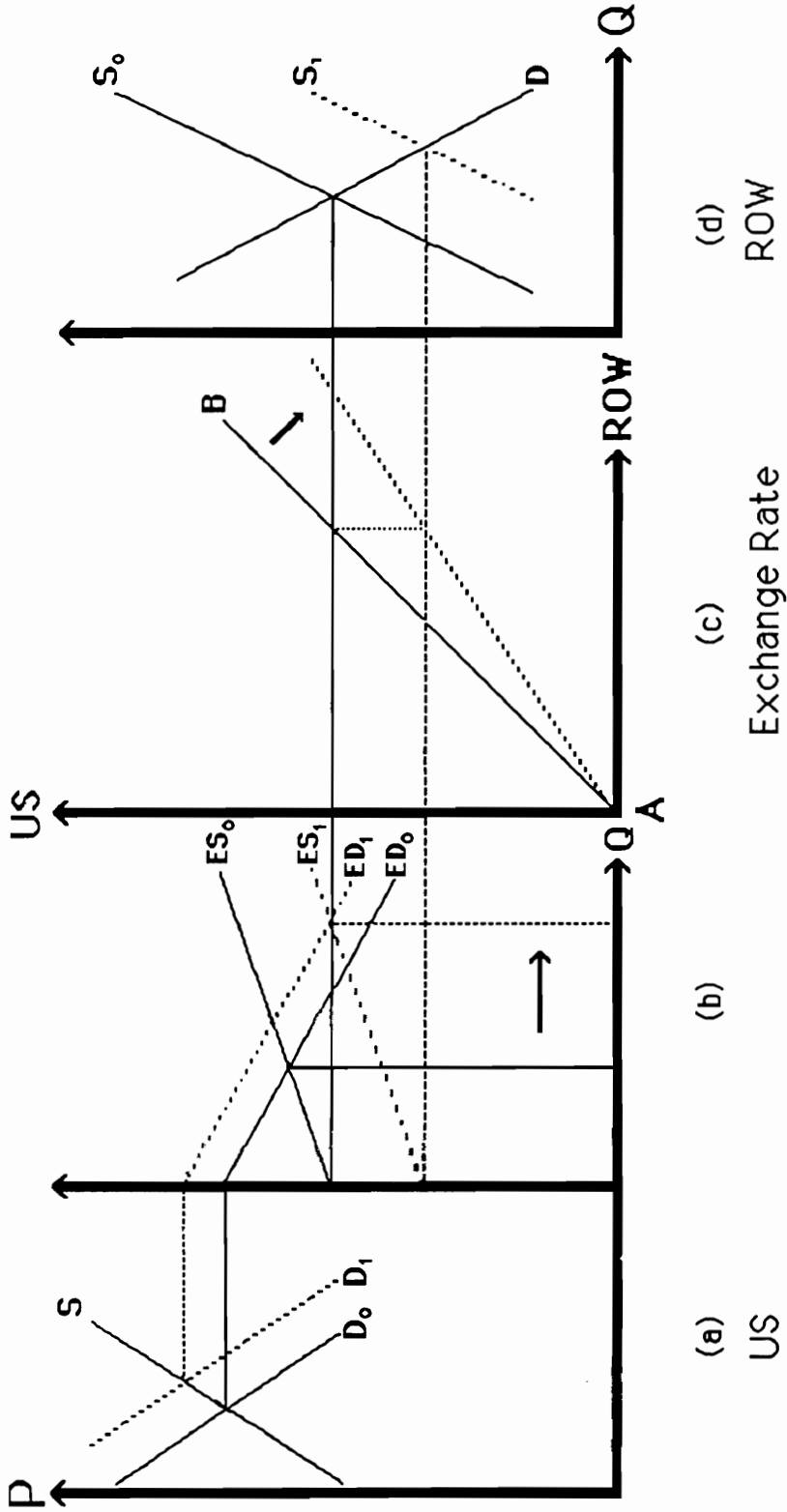


Figure 5.10: Apparel Trade Between US and ROW, 1978-1985.

(1985), however, the domestic demand curve shifted out from D_0 to D_1 as a result of increased US demand depicted in Figure 5.10(b) by an increased demand, shifting ED_0 out to ED_1 .

The rise in the value of the dollar has been depicted in Figure 5.10(c) by the clockwise rotation of the line AB, which suggested an increased quantity imported by the US (Figure 5.10(b)). Table 5.1 illustrated that US apparel imports increased by 117% through this time suggesting that a combination of economic forces were in effect which provided sufficient incentive for foreign suppliers to increase production and shipments to the US indicating that the foreign supply curve shifted out from S_0 to S_1 in Figure 5.10(d). The increased foreign supply had the effect of shifting the excess supply curve out to accommodate the excess demand created by the increased US excess demand, pushing ES_0 out to ES_1 in Figure 5.10(b).

MFA IV, 1986-88

The second period approximates the initial years of the MFA IV as this came into effect in August 1986. When viewing the aggregate data for this period (Table 5.1), apparel imports continued to increase although not at quite such dramatic rates as previously. The value of imports rose from nearly \$18 billion in 1986 to \$19 billion by 1988. The lower growth rate seen at the end of the prior period (1984-85) did not reassure the US industry which pushed for increased protection with the Congressional introduction of two textile bills (in 1985 and 1986), which unintentionally contributed to higher import growth (Hughes, 1987). The introduction of domestic trade bills are believed to precede international trade agreements in order to ensure the domestic stance in this case, the US position at the upcoming MFA IV negotiations (Hughes, 1987; Pelzman, 1987).

The high import rates of 1985-86 through to 1986-87 coupled with the high apparel PCE observed from 1985 to 1986 suggest that US demand

was still strong, although it appeared to weaken between 1986-87 and 1987-88 as US apparel PCE became flatter. In the last year of the study (1987-88) import values declined by 6% suggesting that the MFA IV may have begun to restrict trade. It is therefore, suggested that in Figure 5.11(a) the US demand may initially have moved out but by 1988 it had shifted back to the 1985-86 level and hence graphically maintaining the US demand at D_1 in Figure 5.11(a).

The dollar reached a peak in 1985 and then depreciated for the rest of the study period, however, a lag needs to be considered and imports would not be expected to fall until 1987 when the dual impact of more expensive imports and import restrictions should have been felt (Cline, 1987; Sanford 1988a). This can be illustrated graphically by the anti-clockwise rotation of line AB in Figure 5.11(c) reflecting a reduced import quantity in Figure 5.11(b). The reduced import quantity is depicted as a reduced foreign supply, however, it is more likely that the supply remained constant and was redirected to other importing countries.

US Apparel Imports from PRC, 1978-88

Pre MFA IV, 1978-85

The MFA II and III as such had very limited impact upon imports from the PRC. Little was done to restrict trade from the PRC in fact, the MFN status had encouraged trade between the two countries to such an extent that apparel imports from China rose to \$695 million by 1980-81 from a low base of \$82 million in 1978 (Table 5.1). The year 1978-79 was a year of unprecedented import growth (134%) from the PRC. This year of dramatic growth was followed by two years of slower, yet still strong growth, as imports increased yearly by over 50%.

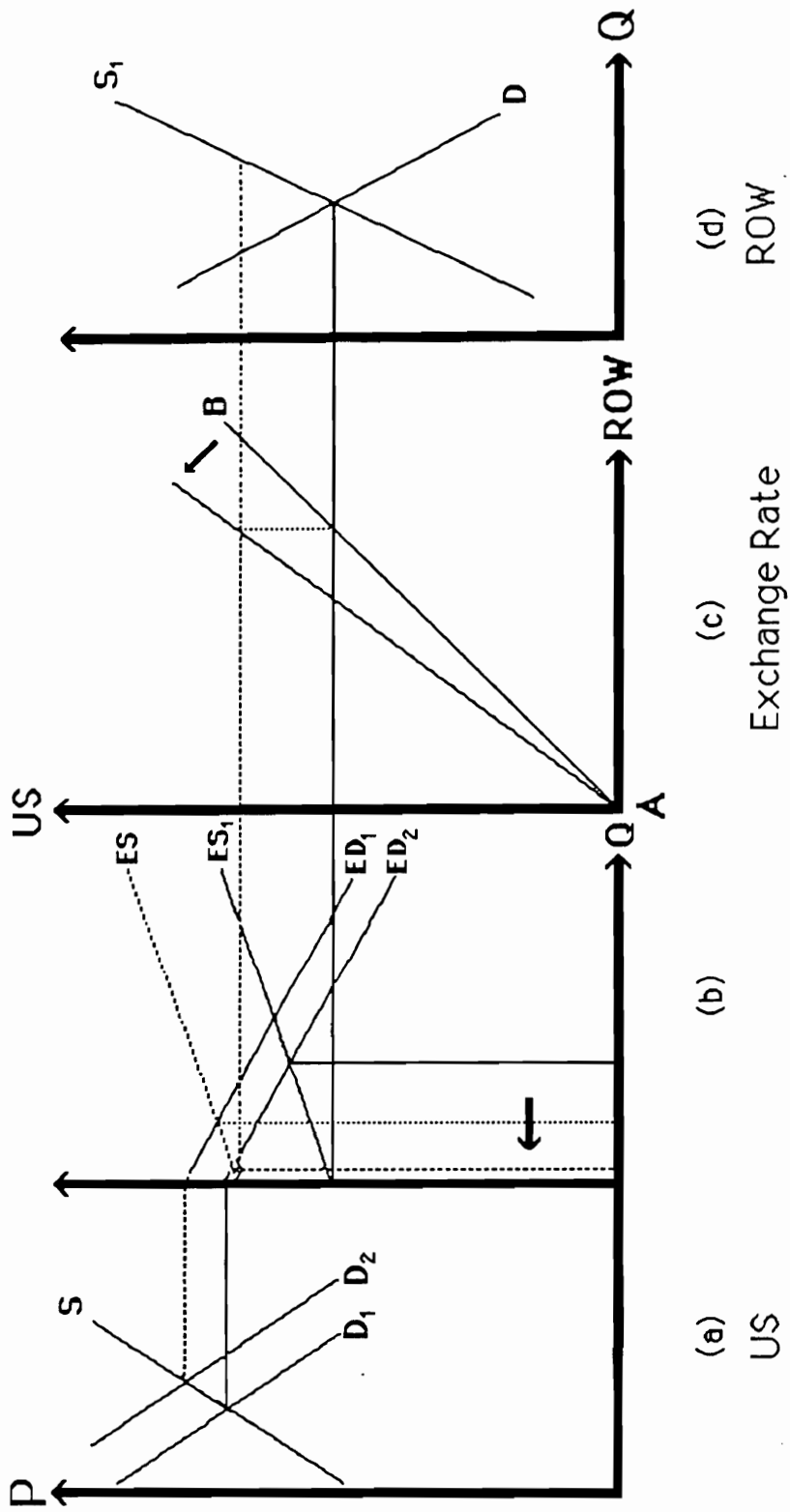


Figure 5.11: Apparel Trade Between the US and Rest of World (1986-85)

The PRC's particularly high export growth of 1978-79 aroused the attention of US industry groups and legislators and resulted in the US request for a bilateral agreement. The data suggest that in 1978-79 the US import growth was met entirely by the PRC. In fact the PRC may have eroded the market share of other exporters since the increase from the PRC in that year was in excess of US apparel import growth. The PRC recorded high export growth rates for the first four years which culminated in the introduction of the first Sino-US bilateral agreement. Import growth rates from the PRC were continued through to 1983 when the second bilateral was instigated and did not show any marked decline until the end of this period when only a 2% increase was recorded (Table 5.1).

In the early part of the study imports of MFA IV-fiber from the PRC increased from \$23 million in 1978 to \$76 million by 1980-81, a 230% increase. This period of import growth could be described as a period of increasing US demand (as mentioned in the earlier section), and especially for natural fibers (Lawson 1987; Glade & Lawler, 1987). Several factors have been put forward to explain the increased apparel consumption between 1982 and 1986, such as, shifting patterns of fiber demand and increased female employment (Dardis et al., 1981; Lawson, 1987).

Examination of the PRC provided many factors within the PRC to help explain the increased supply. In 1978 the Chinese government outlined major reforms, the textile industry was targeted as a major source of both employment and export earnings (Cheng, 1982; Lee & Vaziri, 1986). Four special economic processing zones (EPZs) were established to protect China's domestic industry while taking advantage of low-cost materials available on the world market in the production of export goods (UN, 1987). The reforms led to managerial autonomy and worker incentives (Lee & Vaziri, 1986). In 1979 China indicated a willingness to accept foreign aid, prior to this time she had been a

donor of aid (Lee & Vaziri, 1986). Increased government efforts caused Chinese textile production to grow at an average annual 10% while apparel production grew at a steady 8% annually (Skeik & Wagley, 1989). Exports were encouraged by programs designated to assist or promote them such as direct product subsidies to ensure the exportation of the increased production. Chinese per capita consumption of raw textile fiber was 2.4 kg in 1972-74 and remained low permitting production to be channelled toward exports (Skeik & Wagley, 1989).

By the end of 1982 China was the fourth largest apparel supplier to the US market with 10.6% (375 MSYE) of the import market (Major Shippers, 1982). China had regained its historical world dominance of the silk market by 1983 when its mills used more raw silk (24,716 tons) than the Japanese (20,086 tons). The increase was predominantly in exports as only 8,068 tons were used domestically (Tianshen, 1990). China's production of silk fabric doubled between 1980 and 1985 (Anson & Simpson, 1988). Silk garment production represented 17% of the PRC's silk exports in 1980; by 1985 it reached 23%. The PRC became the major textile exporter and provided 30% of US imports of MFA IV-fiber products by the end of 1985 (USITC, 1989).

China's increased production has been demonstrated, however, as mentioned the end of this period did not represent the PRC's highest US import penetration. In fact, the PRC's share of imports declined from 111% to 2% over this period (Table 5.1). Several economic conditions within the Chinese economy are believed to have been responsible for the reduced import growth and penetration. Manufacturing had been a governmental priority and as such had expanded too fast for the existing infrastructure ("Jinxia," 1990; Foreign," 1988; "Progress," 1990). China was also fighting to control run-away domestic consumption, rationing was relaxed in November 1983 which allowed per capita raw textile fiber consumption to leap up to 4.5 kg (Skeik & Wagley, 1989). Increased Chinese demand was further fueled by rising incomes among the

populace, more relaxed clothing conformity and increased population (despite birth control). China's gross domestic product (GDP) per capita and volume of exports between 1982-86 rose at 6% and 10% respectively (Anderson, 1989). In fact, Stephens (1989) quoted China's GNP more than doubled in the 10 years between 1978 and 1987.

The factors discussed can be graphically illustrated in Figure 5.12 which depicts trade in MFA IV-fiber between the US and the PRC. The high US demand for MFA IV-fibers could have shifted the demand curve in Figure 5.12(a) out from D_0 to D_1 . Table 5.2 provided the proportion of the supply that came from the PRC. The proportion was represented on Figure 5.12(c) as an increased Chinese supply moving the supply curve from S_0 to S_1 . The increased supply from the PRC can be seen in Figure 5.12(b) as providing an increased quantity of US imports, suggesting that as imports increased price would be expected to decline. In Figure 5.12(a) the US supply is taken as the two-thirds of imports obtained from other suppliers since it is believed that the US does not have a natural production of these fibers and is therefore, represented by S_0 .

The Chinese government actively suppressed domestic consumption by rationing and clothing conformity regulation up to 1984, which initially prevented the Chinese demand from increasing (Chow, 1985). However runaway consumption toward the end of this period pushed the Chinese domestic demand out from D_0 to D_1 in Figure 5.12(c).

MFA IV, 1986-88

Chinese net exports to the US remained fairly constant between 1986-88, although a marginal decrease was recorded from \$1,794 million to \$1,790 million (Table 5.1). Overall US economic growth was flat, further contributing to reduced apparel consumption. GNP grew sluggishly (2.7%) during 1986, the lowest for several years. This low growth was traceable to inventory accumulations of the import surge years. Most of the small gain in GNP was accounted for by increased

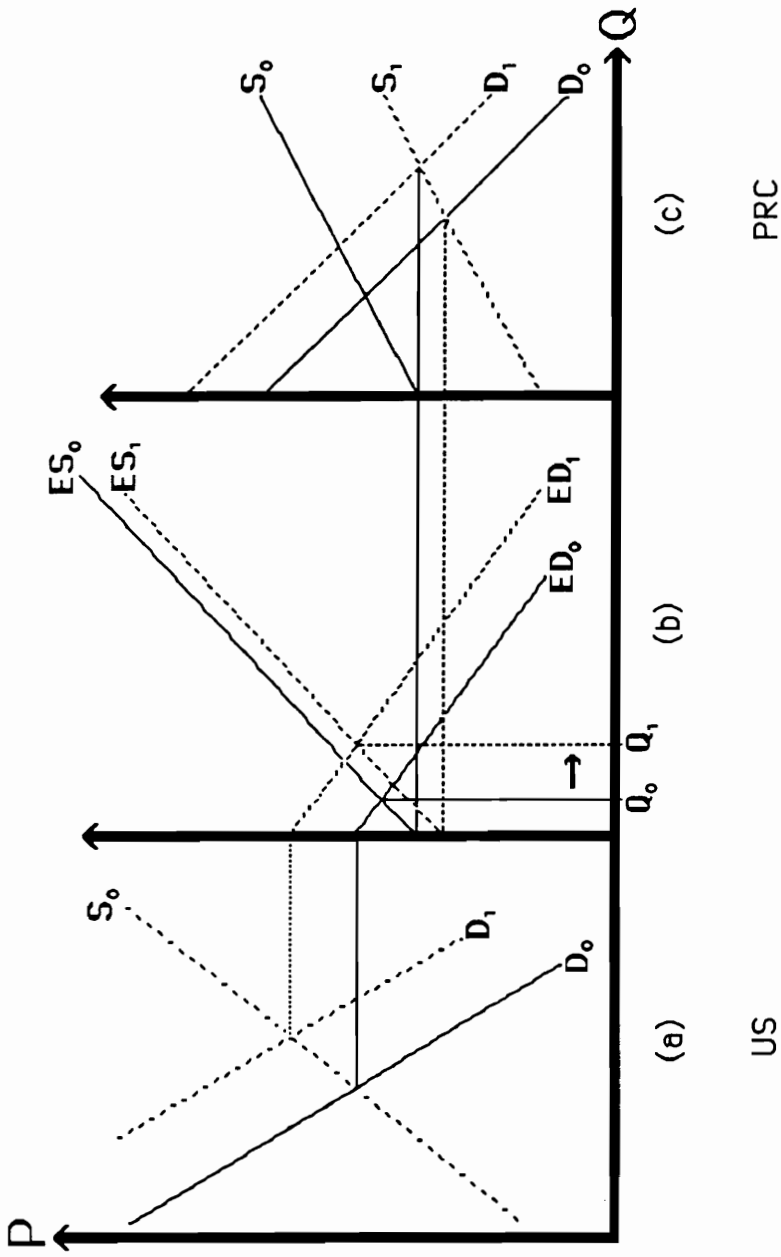


Figure 5.12: MFA IV-FIBER TRADE BETWEEN US and PRC, 1978-85

federal spending and exports due to the falling dollar. Tax reform (1986) was phased in over several years and introduced significant changes, resulting in reduced consumer spending as tax incentives were lost for the use of credit facilities. Basic manufacturing industries were severely impacted by the removal of investment credit and reduced depreciation allowances which dramatically reduced cash flow and investment (Textile Hi.Lights, 1987). Inflation was low as the dollar plunged against the stronger currencies of Europe and Japan causing little initial change in the textile trade imbalance. Figure 5.13 illustrates the MFA IV-fiber trade between the US and the PRC for the last three years of the study. The slow US growth and reduced imports were represented in Figure 5.13(a) by a static US demand curve at D_1 .

The year 1985-86 reported the largest increase, a substantial 78%. In 1985-86 approximately one third of the US import growth was met by China suggesting the Chinese domestic demand was back under control. Chinese per capita fiber consumption was a reported slower 3.8 kg. (Skeik & Wagley, 1989). This rate continued steadily to the end of the study and was depicted in Figure 5.13(c) by the return of the demand curve from D_1 to D_0 .

US bilaterals with the Big Three were signed in early 1986. It has been suggested that since these major exporters were so heavily restricted imports were simply redirected, with China supplying the American demand (Dardis et al., 1988; Hester & Yuen, 1989). This suggestion has been supported in part since China became the second largest US supplier. Indeed, by 1987 textiles and clothing were most important to China's total exports, and amounted to more than half of the country's manufactured exports (Anderson, 1989). Data suggest that China increasingly exported MFA IV-fiber apparel to the US (Figure 5.2) supplying approximately half of the MFA IV-fiber apparel import growth in the year 1985-86 as supported by Hester and Yuen (1989). In 1986 China became the world's leading producer of cotton, the third largest

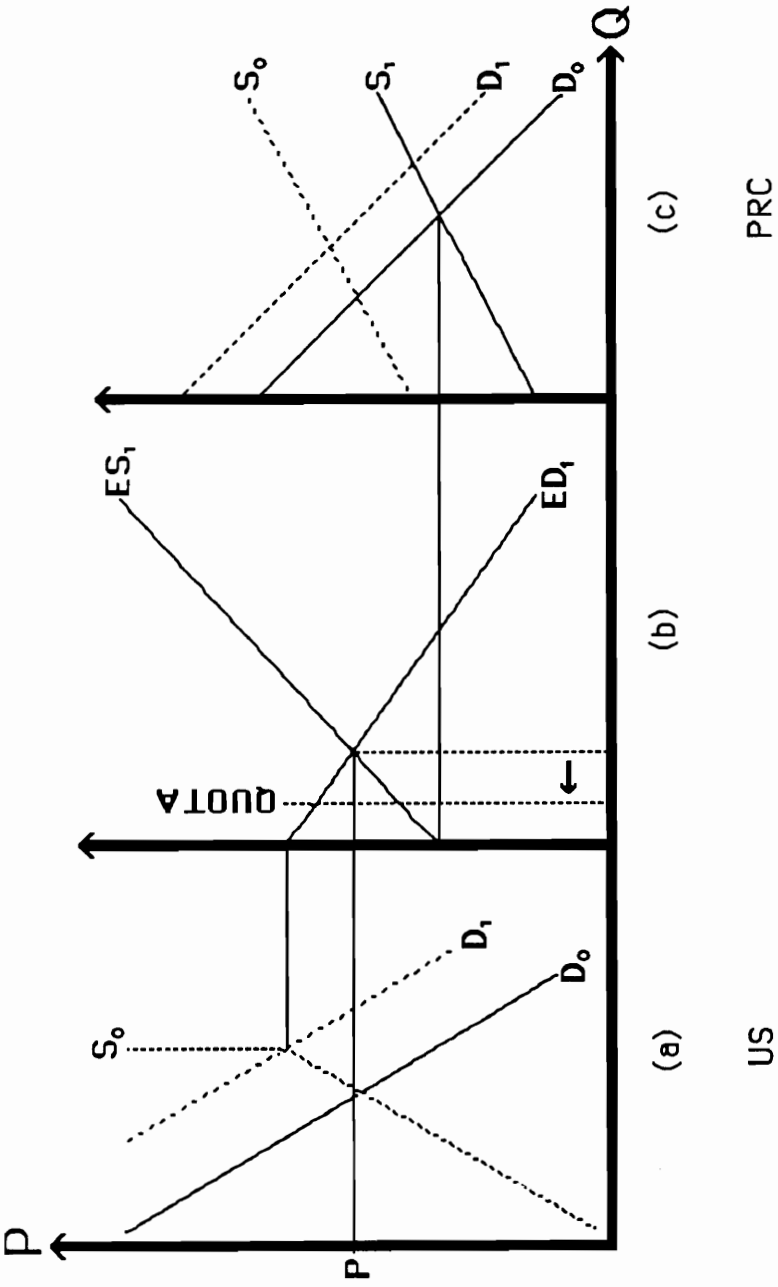


Figure 5.13: MFA IV-FIBER TRADE BETWEEN US and PRC, 1986-88

producer of ramie and jute producing 27% of jute world output, the fourth largest producer of wool, and a major producer of linen and several luxury fibers such as cashmere (Anson & Simpson, 1988; Hester & Yuen, 1989).

However, China's exports to the US declined 11% in 1988. This may in part have been explained by the fall in the dollar which reduced US demand and may have caused the redirection of Chinese exports to other markets. Despite the 1988 decline, China held the position of the world's largest producer and processor of ramie fiber with 75% of the world's supply (Hester & Yuen, 1989). Silk exports represented 20% of the nation's total textile exports, earning \$1.03 billion (Tianshen, 1990). The PRC's supply of MFA IV-fiber apparel was illustrated in Figure 5.13(c), by the supply curve S_1 as it was assumed that the Chinese supply remained unchanged Figure 5.13(c).

At the beginning of 1988 the third Sino-US bilateral agreement was implemented. It extended category limits to include 10 new silk categories and 83 other clothing categories. It also severely reduced the Chinese imports, since quotas reduced growth to between 1% and 3% (Pelzman, 1989). The imposition of quotas through the third Sino-US bilateral reduced import quantities and are believed to be the main cause of decline in imports seen between 1987 and 1988 effectively holding imports at the 1986 quantity.

In summary, US demand was strong from 1978 until 1987 as evidenced by the increasing imports observed in all apparel categories. However, demand slowed or was reduced during the final year of the study 1987-88. This year demonstrated a decline in imports in all categories except for one (MFA IV woven apparel) which continued to rise despite the MFA IV. The imposition of MFA IV appears to have been one of the factors that contributed to reduced US apparel consumption. Since the MFA IV and the fall of the dollar overlapped it is difficult to conclusively say which was the primary reason for the decline in imports as both played a part.

Chinese production increased quite dramatically over the period due to the excessive governmental encouragement of production, primarily for the export market while keeping a tight reign on domestic consumption allowing export growth to earn hard currency much needed by the country for development. It would appear that China has become increasingly restricted over the study period with the introduction of the first Sino-US bilateral in 1981 up to the third Sino-US bilateral of 1988, and the restrictions have effectively reduced the supply of US imports from the PRC.

CHAPTER VI

CONCLUSIONS AND IMPLICATIONS FOR FUTURE RESEARCH

The purpose of the study was to analyze US apparel trade building up to and following the MFA renewal in 1986, so as to gain insight into the reasons for US apparel industry support of the new fiber inclusions, and to gauge effects of MFA IV on US apparel imports overall and specifically from the PRC. Examination of apparel import patterns revealed imports increased from 1978 to a peak in 1987 for almost all of the categories investigated with the exception of one category which continued to rise in spite of the MFA IV, namely, the imports of MFA IV-fiber woven goods. The MFA IV imposed restrictions on certain new fibers to reduce import growth. The data revealed that imports from the ROW increased 7% between 1986-88 whereas imports from the PRC remained constant. The PRC's imports peaked in 1987 but declined back to the 1986 value in the final year of the study (Figure 5.1).

Imports from the PRC were found to increase more than imports from the ROW. The PRC's imports not only increased at a faster rate than those from other countries but they were also increasingly made of MFA IV-fiber. The increased growth of MFA IV imports was to a large extent responsible for the Chinese rapid growth as their comparative advantage in MFA IV-fiber production provided the opportunity to obtain an increased share of the market.

The MFA IV, effectively reduced the quantity of imports of MFA IV-fiber. Imports of MFA IV-fiber from the ROW increased by a modest 1% between 1986 and 1988 with the dollar value of these imports actually

declining by 3%. In comparison imports of MFA IV-fiber from the PRC increased 34%, and 32% by value between 1986-88 (Figure 5.2). This dramatic increase is believed to have occurred for several reasons. Imports from the rest of the world were more severely restricted than China and also at an early time 1986 as opposed to 1988 from the PRC. Therefore, since the US still demanded MFA IV-fiber apparel the PRC provided, hence the supply was transferred from the restricted countries to the PRC. However, when a more detailed break down of imports were examined the 1988 data showed that the MFA was effective in reducing apparel imports of MFA IV-fiber with the exception of one category (Figure 5.4). The category of woven apparel made of these newly restricted fibers continued to increase between 1987-88 by both value and volume in the order of 7% and 8% respectively from the ROW. However, the imports of woven MFA IV-fiber apparel from the PRC increased only by value. The value of these imports from the PRC rose by 6% whereas the quantity from the PRC declined by 3% in the year 1987-88, strongly suggesting that since these imports were now covered by quotas the imports were being upgraded.

The high growth (63%) seen in the year prior to the introduction of the third Sino-US bilateral agreement substantiates claims that import levels are pushed artificially high in order to increase base levels when restrictions are pending (Hughes, 1987). This practice of increasing the base quantity confirms previous observations. Once a large base has been obtained the supplier can divert resources into the upgrading of the product so that the maximum value can be obtained in the face of restricted numbers. This pattern is clearly demonstrated by the PRC as MFA IV woven fiber products decreased in quantity but increased some 6% when measured by value.

From the data it is not possible to determine if the observed upgrading is real or not, i.e., just a higher cost, brought about by the restriction of the product or a real improvement. If it is real, one

explanation could be the increased use of silk fiber in order to circumvent the restriction since pure silk remained unrestricted as of 1988. This could explain the slow and continued import increases in this category. An attempt has been made to explain the data observed, this theory however, cannot be confirmed unless the clothing subgroups were recorded by the individual MFA IV-fiber.

The import increases from 1978 up to 1986 were the most dramatic, with some categories amounting to as much as 22 times the 1978 levels, or an increase of 2,167% (by quantity), with even larger increases by value. The highest import increases over the study period were observed in the Chinese import sector as mentioned. As soon as the Chinese economy opened up after the Cultural Revolution there was little doubt that the PRC would represent a major force in world textiles and a potential source of disruption, given the vastness of the Chinese industry, its low labor costs (3% of those in US), its indigenous supply of raw materials and a determination by the state to achieve modernization and export orientation. The large numbers of imports from China were predicted as far back as 1974, when Business Week described China as the untapped hope of importers ("The Search," 1974).

In 1983, Hester, reported that US imports from the PRC had tripled in the period 1976 to 1981. This early import growth was small in comparison to increased growth seen between 1978 and 1988. The PRC's share of US apparel imports has risen from 1% to 10% during this time. Exports to the US increased by 2,000%, a most impressive record particularly in light of the over 50% devaluation of the Chinese currency against the dollar (1.4984 Rmb/\$ to 3.7221), 1980-87 (Anson & Simpson, 1988). By 1986 China had become established as the dominant supplier of items of the MFA IV-fibers, silk blends and vegetable fibers other than cotton. In that year imports of MFA IV-fibers were 17% of imported apparel, having risen from a 9% share in 1978. By 1987 China was the major supplier of imported apparel items to the US, holding 10%

of the import market. This figure was to increase further by 1988 to 22% and 25% respectively by value and volume.

Since the US does not produce MFA IV-fibers it was originally believed that apparel of these fibers was not in direct competition to American made products of cotton, and some blends, and hence omitted from trade restrictions (Jacobs, 1987). The MFA IV-fibers had been historically traded in large volumes and were not a problem. The problem for the US industry was created as these fibers became increasingly used in nontraditional uses namely, apparel. These findings were also observed by Hester and Yuen (1989) in their research on ramie. The rate of increase of these new fiber imports raised concern as the issue of direct domestic industry competition arose. The rate of increase of these fibers was most dramatic between 1982 and 1986, the import surge years and was seen by the industry as circumvention of the MFA, hence the perceived need for MFA IV.

MFA IV has succeeded in lowering the growth of apparel imports, based on data through 1988 and has stopped the runaway importation of MFA IV-fibers. However, circumvention in one form or another has occurred as long as trade restrictions have existed enabling rapid growth to be achieved in a very short time. The MFA flexibility provided the arena, various international economic factors such as high US demand and the rise of the dollar compounded by the Chinese comparative advantage provided the circumstances which permitted China, a recent player in the textile trade game, to take advantage and acquire its eminent position surpassing all US expectations and projections. The imposition of MFA quantitative restrictions result in shifts of production and supply to new untapped sources of export therefore, partially offsetting the intended reduction (Cline, 1990; Pelzman, 1989)

The PRC emerged in 1988 as a severely restricted supplier. Tightened restrictions have left China little room to manoeuver. There has been talk of further restriction by the removal of current MFN

status (Benedetto, 1990; Hackett, 1990a; Hackett, 1990b). However, China has built up substantial base levels which will be used to increase hard currency earnings by upgrading. Perhaps China will also benefit from the scarcity rents associated with quota restrictions as it is claimed do the other major suppliers (Bergsten, 1975; Hufbauer et al., 1986). For instance in Hong Kong, quota rents are estimated to amount to about 5% of GNP (Tarr & Morkre, 1987).

The future of the MFA and its recumbent quota system looks fairly secure since expectations of a continuation of quotas affect investment decisions both here in the US and abroad. Domestic investment is tied up with the misallocation of resources caused by the imposition of trade restrictions (Cline, 1989). The price premia which accrue to exporters because of the scarcity value of their exports have been used for diversification and moving up-market (Hufbauer & Schott, 1985).

Returning textiles to the GATT rules and trading procedures and the "phase out of the MFA" has been suggested by President Bush (Pelzman, 1989; Pullen, 1990). However, it is doubtful if anything will come of it and especially since the introduction of the 1990 textile bill as it would appear the industry is again mobilizing to ensure the continuation of its heavy protection.

The MFA is not totally restrictive does guarantee access to certain markets and it can also provide the opportunity for change through its flexibility or wire-mesh screen as described by Cline (1990). Competitive market forces can be said to work albeit much more slowly than would occur in a less restrictive market place as demonstrated by the developmental path established by Japan, and now followed by the other NICs (Pelzman, 1989; Whalley, 1990). It has been suggested that China is already well along the same path however, with each MFA renewal the flexibility provisions or loopholes, as referred to by some, are being eliminated (Pelzman, 1990; Whalley, 1990). Tightened MFA restrictions are certainly the aim of the textile industry but are

they in the best interest of the American consumer? This I doubt.

As to the future of China is not clear, it could lie in other areas of textile production which are still open and unrestricted, such as industrial and specialty markets which would require a product mix change away from fibers for basic apparel use. These textile uses do, however, require a further stage of industrial development for which China may not yet be ready. Chinas future will certainly include the increased production of silk and silk products and the improvement of these products or upgrading with the inevitable move toward higher value exports (Anson & Simpson, 1988; Epstein, 1990; "Foreign," 1988).

After the rapid growth experienced by Chinese imports, a slower period is predicted due in part to the more restrictive world environment but also to the current Chinese economy which is characterized by a rapid growth of national income, with increased domestic consumption and inflation resulting in declining living standards for the population ("Federal," 1988). The imposition of price controls and rationing in an attempt to control inflation contributed to the 1989 political unrest. These economic factors and now the more conservative political climate will all play a part in controlling China's future exports. In fact, several researchers have expressed fear that too restrictive an environment could inhibit China's slow and orderly march toward industrialization since they are so heavily dependent upon exports.

FURTHER STUDY

Apparel import patterns should be continually tracked so that trends can be observed and new suppliers predicted and identified so that countries of origin can be tracked. The group woven MFA IV-fiber apparel should be investigated in more detail in order to determine exactly how they managed to escape quota restriction, whether it was

because of increased production of pure silk woven items as suspected. Currently the MFA IV-fiber is an aggregated category "others". If and when data becomes available the exact fiber content i.e. whether ramie or silk fibers used and the country of origin could then be determined. This type of research has a varied audience. Retailers may find it useful to enable potential sourcing outlets to be found. The information is also of use to educators and policy makers, in order to provide them with unbiased data to enable them to make more informed decisions and to enable the consumer to become aware of the costs involved with trade protection. When sufficient data become available, an econometric analysis could be carried out to provide empirical values of the factors responsible for the import surge observed and the effects of the MFA IV before 1991 when it will come up for further renewal.

The increasing MFA IV-fiber use in apparel compared to the use of these fibers in other textile products could be investigated since the data were not available in this study and it was suspected to be one of the major reasons for the inclusion of these MFA IV-fibers in the MFA. The substitution (cross-price elasticity) between the MFA IV products and those of other fibers could be investigated so as to analyze the claimed substitution between fibers. Also the substitution between imported and domestic goods could be analyzed.

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Appendix A

Exchange Rates of Major Industrialized Countries (Real Effective Index*)

Year	Japan	Canada	Germany	UK	US
1978	127.7	97.5	114.0	76.4	68.9
1979	110.9	94.3	115.5	87.8	68.0
1980	100.1	94.3	111.5	105.0	68.7
1981	108.9	100.1	101.0	112.3	76.6
1982	97.3	103.1	108.7	107.6	86.4
1983	101.5	106.8	103.0	101.5	89.2
1984	102.6	104.7	100.6	99.3	96.2
1985	100.0	100.0	100.0	100.0	100.0
1986	121.4	92.0	108.7	95.1	80.5
1987	124.1	94.8	115.3	97.8	70.2
1988	130.6	102.9	111.1	107.9	66.2

* 1985 = 100

Source: Compiled from IFS, 1988-89.

Appendix B

The PRC's Exchange Rate
(percentage change in parenthesis)
(Yuan to the dollar)

Exchange Rate

Year	PRC	
1978	1.68	n/a
1979	1.56	(-8)
1980	1.50	(-4)
1981	1.71	(14)
1982	1.89	(11)
1983	1.98	(4)
1984	2.32	(17)
1985	2.94	(27)
1986	3.45	(17)
1987	3.72	(8)
1988	3.72	(0)
Annual % change between 1985-88		13%
Total annual % change		8%

Source: Compiled from IFS, 1988-89; and UN statistics, 1989.

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