Development Strategies and the Exports of Textiles and Apparel

A Comparative Analysis of South Korea and India

by

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DEVELOPMENT STRATEGIES AND THE EXPORTS OF TEXTILES AND APPAREL

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(ABSTRACT)

In the post World War II era, a group of east Asian exporters achieved rapid economic growth through the exports of labor intensive manufactures, among which textiles and apparel were the most prominent. Previous research has sought to explain the determinants of international textile and apparel trade through the theory of comparative advantage.

The aim of this research was to examine the textile and apparel export patterns and government intervention of South Korea and India, 1955-1985, through comparative historical analysis. The sectoral study proceeded under the premise that a prime determinant of export success is the nature of government intervention. The conceptual framework of the study was based on Liang's (1992) classification of trade regimes. The focus of the study was on the overall policy atmosphere in the two countries examined, which affected the development of the textile/apparel sectors and their trade patterns.
The procedure utilized followed the general framework of comparative analysis. The variables chosen were identified by the theory as relevant to policy analysis, and were examined to determine whether they provided evidence to support the hypotheses. To judge the overall policy atmosphere of South Korea and India, the effects of various government incentives were analyzed. The study contained descriptions of policy measures and explanations of the reasoning governing their implementation. An evaluation of the effects of each policy, as well as the overall effect of the combined policies was provided. For both countries, qualitative and quantitative variables associated with import protection and export promotion were analyzed.

The cross-country comparison revealed that both South Korea and India displayed high levels of government intervention in industry and trade as related to their textile/apparel sectors. The method of comparative analysis permitted an in-depth view of various individual policies affecting the textile/apparel sectors of both countries. An important finding was that the government intervention in South Korea fostered the growth of its textile/apparel exports, whereas Indian government intervention hampered the growth of Indian textile and apparel exports.

The analysis also showed that the South Korean policy package resulted in the textile/apparel industry emerging as the country's largest exporting sector in the late 1960s, a position it retained until the early 1980s. Meanwhile, the Indian policy package nearly stagnated textile/apparel exports from the 1950s onwards, and the country's share of the world market was taken over by South Korea, China and Taiwan, among others.
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CHAPTER 1

INTRODUCTION

The roots of the modern economic growth of many nations can be traced to the textile industry. The industrial revolution in England and the expansion of world trade in manufactures were concentrated for a long period on textiles. In the post World War II era, the growth of third world trade was dominated by a small group of dynamic east Asian exporters, including Hong Kong, Taiwan, South Korea and Singapore. The rapid growth of income and industrialization in these economies was achieved to a large extent through the exports of labor intensive manufactures, among which textiles and apparel were the most prominent (Schmid & Phillips, 1980).

Historical experience and the theory of comparative advantage imply that countries which attain higher levels of industrialization and economic growth lose their comparative advantage in the manufacture and exports of textiles and apparel. The two sectors are among the few where an unsophisticated level of industrial production allows a substantial amount of exports (Cline, 1990). The labor intensive nature of these industries is much more pronounced in apparel than in textiles. Industrial nations such as Germany, Italy and Japan remain the world's major exporters of textiles, specially in the area of man-made fibers which have large technological and capital requirements. However, the flow of financial and technological capital to the newly industrializing countries (NICs) has eroded the market share of many industrial nations (Cline, 1990).
Previous research has sought to explain the patterns and determinants of international textile and apparel trade. Anderson and Park (1989,1991) examined the patterns of east Asia's textile and apparel exports and found them to be in accordance with the theory of comparative advantage. Rising labor costs and a movement towards manufactures with high technology requirements were found to be important factors influencing losses of market share in textiles and apparel.

Zhang and Dardis (1991) analyzed the determinants of the export performance of major textile exporting countries, and found that the factors contributing to high levels of exports were high levels of physical capital and low unit labor costs. In their analysis, high technological capital and high levels of education were negatively related to a country's level of textile exports.

Although the natural endowments of a country constrain the universe of possibilities and help explain patterns of trade, these patterns can vary widely if similarly endowed countries pursue different trade strategies (Haggard, 1990). Trade strategies affect a country's trade patterns and national economic policies, which in turn influence its business environment, international competitiveness and economic growth. Researchers generally concur that the east Asian economies of Taiwan, South Korea, Hong Kong and Singapore were fuelled by strategies of export led growth, irrespective of their natural resource base or levels of industrialization. The export led growth in turn has been found to be greatly influenced by government policies.

Although no single development strategy has been found to be universally
successful for economic development, the merits of an export promoting (EP) trade strategy over that of an import substituting (IS) development strategy have been widely purported by development economists during the last four decades. Major studies conducted by the World Bank (1987) and the National Bureau of Economic Research (Bhagwati & Kreuger, 1978) have strongly supported the view that an EP strategy is far superior to an IS strategy. The two strategies have been depicted as polar opposites which cannot coexist simultaneously. An EP strategy is one which is non-interventionist in trade and industry, whereas an IS strategy is highly interventionist and promotes import substitution through the protection of domestic industries. The success stories of the east Asian economies are thus interpreted in terms of their following an EP strategy.

Recently, there has been controversy over the conventional bipolar classification of trade and development strategies. The bipolar classification has been disputed by researchers who cite well-documented instances of import protection and export promotion which existed simultaneously in the east Asian economies. They argue that the dual policies were in fact instrumental in the export growth of these regions (Krugman, 1986; Rodrick, 1992). Liang (1992) redefined trade strategies according to the nature of government intervention, rather than the degree of government intervention as defined by the bipolar classification. The new typology recognizes the coexistence of both import substitution and export promotion, and is termed a protected export promotion (PEP) strategy.

This research examines the textile and apparel export patterns and government
intervention of South Korea and India, 1955-1985, through comparative historical analysis. The sectoral study proceeds under Liang's (1992) premise that a prime determinant of export success is the nature of government intervention. The focus of the study is on the overall policy atmosphere in the two countries examined, which affected the development of the textile/apparel sectors and their trade patterns.

As both countries began implementing development policies in the early 1950s, the year 1955 is chosen as the first year under study. Policies which affected the later development of the textile/apparel sectors of both countries but were implemented before 1955 are also included. The last year under study is 1985, as subsequently the composition of South Korea's exports shifted from mostly light manufactures exemplified by textiles and apparel, to more capital and technology intensive manufactures. The method of study and the choice of the two countries are based on several factors.

Considering that government policies critically influence the exports of countries, and that exports are not entirely governed by factor endowments, the method of comparative analysis permits an in depth examination of policies and exposes the mechanisms that link variables (Haggard, 1990). The method stresses the importance of policy analysis, and explicit variables are used to compare systems across geographic space and time (Hecksher, 1957). Countries with similar growth paths should exhibit some crucial similarities and those which follow alternative paths can be compared on the basis of critical differences (Haggard, 1990).

As textile and apparel exporters, India and South Korea have had comparable
features in terms of government policies. India and South Korea each began the process of development in the 1950s after a period of colonial rule and chaos resulting from the partition of territories. Unlike South Korea, India was historically involved with textile trade. In spite of India being a major producer of raw materials used in the manufacture of textiles, its enormous market share of the 1950s eroded. In comparison, South Korea established itself as a major contender in world trade with almost no historic base and with very low levels of raw material production. Lal and Rajapatirana (1987) remark that South Korean manufactured exports rose from virtually nothing in 1960 to more than $15 billion in 1980. During the same period, India's manufactured exports rose from $600 million to only $4.1 billion.

Textile and apparel trade policy remains a contentious issue in the U.S. as well as in other advanced economies whose domestic industries have experienced tremendous competition from developing country exports. As the Asian NICs advance and move away from textile and apparel exports, it will be of interest to policy makers in the West to predict the new generation of exporters. This research should fill in some gaps in the existing literature which identifies variables governing textile and apparel exports. No previous studies containing an analysis of trade orientation and policy regarding the textile and apparel sectors of South Korea and India were found.
CHAPTER 2
REVIEW OF LITERATURE

The review of literature is divided into two parts. The first part outlines the historical background of South Korea and India, the different policies followed by the governments of these nations and their general effects on the exports as well as the textile and apparel sectors of each nation. The second part consists of four sections. Theories of international trade leading to the development of the theory of trade orientation are discussed first. The subsequent section describes the main tenets of the theory of trade orientation, and the third section presents empirical research in the area of trade orientation. The chapter concludes with criticisms of the trade orientation approach, and empirical evidence in support of the criticisms.

South Korea and India: A Comparison

After gaining independence from colonial powers in the 1940s, the governments of South Korea and India formulated specific development strategies. Both governments relied on a variety of controls and incentives to direct the economy towards the attainment of set goals. The government of South Korea granted exports an all important role in the process of economic development, and established an incentive structure that strongly promoted exports. On the other hand, the government of India aimed at achieving self sufficiency in
all sectors of production, and established a system of import substitution. Its incentive structure was aimed at protecting the domestic market, and exports were considered unimportant as tools for economic growth. The next section outlines the historical background of both nations, the different policies followed by their governments and their general effects on the textile and apparel sectors.

South Korea

Historical Background

Known as the "hermit kingdom" in the 19th century, Korea remained a completely closed pre-modern society until it was forced to open its doors by the powerful Japanese (Das, 1992). During the late 1800s, many colonial powers struggled for dominance over the Korean Peninsula. Following the victory of Japan in the Sino-Japanese war of 1894 and in the Russo-Japanese war of 1904, Korea was completely annexed to Japan. At the end of World War II, the Korean Peninsula was partitioned into zones of Soviet and US occupation. In 1948, the zone of Soviet occupation became the Democratic People’s Republic of Korea, or North Korea, and the US-occupied zone became the Republic of Korea, or South Korea. Two years later, the stronger North Korea invaded South Korea and only through U.N. intervention did South Korea retain its sovereignty.

South Korea’s first president Syngman Rhee and his successor Chang Myon were unable to retain power, and in 1961 General Park Chung Hee seized control through a
military coup. General Park remained in power until his assassination in 1979, and his government was the architect of South Korea’s development strategy.

Economic Development during Japanese Colonial Rule and after Liberation

During the major period of colonial rule from 1904 to 1930, the Japanese government discouraged manufacturing activity and promoted agriculture and primary production activities. The Korean Colony was chiefly a supplier of grains and industrial raw materials to Japan, and a market for Japanese manufactures (Kim & Roemer, 1979). The expansion of Japanese exports and the Sino-Japanese war of 1937 led to an expansion of manufacturing activity in Korea. The colonial government emphasized heavy and chemical industries to supply industrial goods as well as the expansion of rice, raw cotton and silk production in the primary sector. During the final period of colonial rule from 1930 to 1948, industrialization proceeded rapidly, particularly in industries supplying military requirements (Kim & Roemer, 1979).

The partition of Korea in 1948 wreaked havoc in the economy of the country. South Korea was left with less than half the Korean Peninsula and with 66 percent of the population. Compared to North Korea, South Korea had a greater amount of light industry products and a much larger share of agriculture. However, 90 percent of metal products and 82 percent of chemical industries were in the North. Most critically, 92 percent of total electric power was generated in the North (Frank, Kim & Westphal,
The first ten years of South Korea's independent rule were dismal. The economy was in dire straits after the partition of the country, and the departure of the Japanese created a vacuum in domestic industrial management. Further devastation was caused by the war with North Korea and by President Rhee's incoherent economic strategy and corrupt regime (Haggard, 1990). Between 1944 and 1946, manufacturing employment dropped by nearly 60 percent and total industrial output in 1948 was one fifth of the 1940 level, whereas retail prices almost doubled between 1946 and 1947 (Haggard, 1990).

Rhee embarked on a course of import substitution, where US aid financed nearly 70 percent of total fixed capital formation. Rhee employed various instruments of economic policy to retain political support, such as allocation of foreign exchange, bank credit and import licenses (Haggard, 1990). The won currency was overvalued against the dollar and inflation was rampant. Thus, in 1955 the South Korean economy was much the same as it had been at the end of Japanese occupation, with manufacturing activity accounting for only 8 percent of GNP, exports equal to only 1.4 percent of GNP and negligible manufactured exports.

Faced with pressure from the US, and threats of aid reduction, the government implemented a financial stabilization program in 1957, aimed at reducing the rate of inflation. The industrial policy remained strongly inward looking with an overvalued official exchange rate, and high tariffs as well as quantitative restrictions on imports in order to offset the increasing overvaluation of the currency.
Rhee's government concentrated on maximizing foreign aid to create capital formation. However, the import substitution policy had some positive effects on the economy. The high levels of protection of the domestic market encouraged industrial development in light consumer goods including textiles. By the late 1950s, the economy faced the problems of high dependence on imported intermediates and foreign capital, low exports and chronic balance of payment problems. There was an economic decline in 1958-1959 which, along with the rampant corruption in the government, led to the fall of President Rhee's regime in 1960 (Haggard, 1990). Unfortunately, the new Chang Myon government proved incapable of providing stability and maintaining power, and in 1961 General Park assumed power.


President Park's military government was highly centralized and authoritarian, and his government actively directed the process of industrialization in South Korea. It influenced the course and pace of industrialization and determined the evolving structure of the domestic economy. The government was actively and consistently interventionist, and the president and his staff had strong control over economic and political power. The policies of the government were enacted through institutions like the Economics and Planning Board (EPB), the Ministry of Finance (MoF) and the Ministry of Commerce and Industry (MCI). The EPB controlled the budget, decided on foreign loans, foreign investment and the transfer of foreign technology.
Industrial policies. Under Park, industrial intervention went deep down to the unit level. Almost every major investment in the private sector was initiated by the government, which in turn ensured that the companies which made investments profited as well. The state promoted or discouraged industrial ventures, and went as far as matching firms with projects (Das, 1992). From 1962 to 1981, the government relied on a variety of incentive measures to accomplish its economic goals.

The system of industrial incentives was extremely complex. Most import substituting industries were protected through various import control measures. Export industries received special treatment such as preferential loans, tax credits and raw materials at world market prices. Through special industrial promotion laws, a multitude of package assistance programs were available for industries designated as strategic industries (Nam, 1981). Even protected infant industries were encouraged to export as soon as possible, and were exposed to international competition at an early stage.

The South Korean banks were government owned, and the growth of non-bank financial institutions was restricted. Thus, the government controlled the corporate sector through the financial system, which provided an enormous steerage capacity to the government in terms of controlling the direction of industrial growth (Das, 1992).

The government also encouraged the activities of the Chaebol, a system of large family owned and family controlled industrial conglomerates. They were regarded as a source of highly concentrated private sector economic power, and were promoted as
companies that could provide economies of scale as well as compete with large companies in the international market. During the late 1970s, the government began promoting and protecting heavy and chemical industries (HCI), and these took over a large share of the investment money formerly reserved for light manufacturing industries (Nam, 1980).

Macroeconomic and exchange rate policies. The military government was primarily concerned with stabilizing the economy, earning foreign exchange and raising domestic savings since US aid declined after 1960 (Kim & Westphal, 1970). Various economic reforms were undertaken and tax laws were revised. Foreign loans and foreign direct investments were encouraged, which along with grant aids financed the bulk of investment. Special exchange rates were applied to export earnings, which were better for exporters than the official rates.

In 1964, there was an important exchange rate reform. From the end of the Korean war until 1964, South Korea had maintained a system of multiple exchange rates. In spite of periodic devaluations, the exchange rate remained mostly overvalued, and the multiple exchange rate system led to a bewildering complexity of transactions. In 1964 the government devalued the won from 136 to 256 won per US dollar. The new exchange rate was considered to have slightly undervalued the won (Kim, 1991). As a result, South Korea's exports increased rapidly in 1964, while imports declined. The won was floated in 1965, followed by the decrease of non-tariff barriers for imports.

The government also maintained a stringent fiscal and monetary policy to curb domestic inflation in the face of the massive devaluation. In 1965, the government
undertook an interest rate reform, which raised the South Korean interest rate slightly above that of foreign financial markets (Kim, 1991).

During the next few years, there was a rapid accumulation of foreign reserves caused by a combination of foreign borrowing and the rapid expansion of exports. To control the money supply and inflation, the government devised a system of pegging the won, so that further depreciation would be gradual and would mainly offset the widening inflation rate gap between South Korea and its major trading partners (Kim, 1991).

In the early 1970s, the won remained somewhat overvalued, mainly due to political pressure on the government from business firms with large foreign debts (Kim, 1991). After 1974, the exchange rate was fixed at 484 won per US dollar, and remained fixed until the early 1980s despite its gradual overvaluation, causing a deterioration in the balance of payments situation (McDermott & Young, 1989).

The Years Following Park's Assassination

Following President Park's assassination in 1979, there was a period of economic and political instability. The dramatic growth of the economy and the promotion of heavy and chemical industries (HCI) led to several problems. The strains on the labor market led to a wage explosion; the exchange rate was overvalued and exports suffered. As the economy experienced the second oil shock since 1973, inflation increased as did the current account deficit. The HCI were being protected at the cost of light manufacturing, resulting in large scale resource misallocation. Also, for an economy so dependent on
exports, the effects of a world recession were deeply felt.

The new government of President Chun began restructuring the economy, as Park's authoritarian economic management style was becoming inappropriate in the more complex new economy. Chun liberalized economic controls, decreased the protection accorded to HCI, denationalized commercial banks, and reduced import barriers as well as export subsidies, and the currency was finally devalued in 1983 (McDermott & Young, 1989).

Government Policies and the Textile and Apparel Sectors

During the Korean war in 1950, the South Korean textile industry lost 70 percent of its capacity. From 1953 to 1960, it was protected and encouraged to supply the domestic market through strict import restrictions, and US aid financed most of the raw cotton imports. In the early 1960s, government policies providing strong export incentives emerged, including free access to imported inputs, indirect tax and tariff concessions and credit preferences (Westphal, 1979). The exchange rate policies also favored textile exports.

The development of the textile industry was aided by government promotion of the synthetic fiber sector. During 1963-1973, the government encouraged foreign capital investment in the synthetic fiber and fabric industries, specially in the domestic chemical fiber industry. Strong synthetic fiber and fabric production linkages through the Chaebol
were also supported. Within a decade, South Korea went from dependence on synthetic fiber imports to self-sufficiency and to net exports of synthetic fibers, specially to third world markets (Kim, 1980).

In summary, the process of industrialization in South Korea was closely directed by an authoritarian regime. Unlike the case in many developing countries where economic intervention has led to macroeconomic confusion and stagnation, intervention appears to have been particularly successful in South Korea. The government's industrial and macroeconomic policies were conducive to export growth, and the textile and apparel sectors benefitted greatly from these policies. South Korea's share of developing country textile exports to the OECD expanded from 0.8 percent in 1963 to 12 percent in 1984. In apparel, its share of developing country exports grew from 1.4 percent in 1963 to 19.4 percent in 1984 (Cline, 1990).

**India**

**Historical Background**

India traded in cotton and silk textiles with south-east Asia, Iran, the Arab countries and South Africa as early as the 17th century. The consolidation of British power over the Indian subcontinent during the latter half of the 18th century initially led to the expansion of Indian textile exports to western nations. The onset of Britain's industrial revolution resulted in the large scale exportation of raw materials to Britain, and India
became one of the markets for British mill-made textile goods.

The inability to compete in price with imported textiles led to the closure of many indigenous handloom textile factories. However, the country had a large growth of cotton textile mills with machinery imported from Britain, which were extremely successful in capturing segments of the domestic market (Bhagwati & Desai, 1970). In 1946, Indian industrial output was dominated by cotton and jute textiles, which together provided 63.5 percent of value added in manufacturing. However, the primary agricultural sector dominated with a GDP share of 83 percent (Bhagwati & Desai, 1970). India gained independence in 1947, and was divided into India and Pakistan. India retained over 77 percent of the territory and over 80 percent of the population, as well as a much larger share of the manufacturing industries, such as cotton and jute mills. On the other hand, Pakistan received a major share of the raw cotton and jute producing areas. Transportation facilities were fairly equally divided, and India retained the major financial markets of Bombay and Calcutta (Bhagwati & Desai, 1970).

Economically, India emerged quite well from the partition, but the upheavals caused by riots and massive transfers of population that ensued threw the country into economic and political disarray. By 1951, when planned development was implemented, the economy was on the way to normalization.

The Indian Development Strategy

The development strategy followed by the Indian government was greatly
influenced by socialism and the Soviet planning model, and granted a central role to the
state in the control and direction of economic activity (Chakravarty, 1987; Jalan, 1991).
The primary goal of the government was to foster self-sufficiency in all sectors, which led
to a strong promotion of the capital goods sector and of heavy industry at the expense of
light manufacturing. The role of the state was to mobilize savings and investment as well
as to own capital.

Thus, it followed that private sector activities were strictly regulated and directed
towards the attainment of policy objectives. In this scheme, agriculture and exports played
a negligible role, as it was believed that both were subject to diminishing returns
(Jalan, 1991). A strong policy of import substitution was implemented, accompanied by all
its features of excessive protection of the domestic market and industries, reliance on
physical controls such as restrictions on industrial capacity of privately owned enterprises,
and the strict regulation of imports through quantitative and tariff restrictions (Bhagwati &
Srinivasan, 1975).

The Indian Planning Commission was established in 1950 within a complex
political framework and set of institutions, including the Indian Statistical Institute and the
National Development Council. The Chairman of the commission was Prime Minister
Nehru, and the idealistic but impractical aspirations of Indian planning were formulated
under his government (Chakravarty, 1987).

The government employed both domestic and foreign policy instruments to
achieve its goals. Domestic industrialization was controlled by a powerful and all
pervasive industrial licensing system, which controlled and restricted capacity expansion, as well as occasionally controlling prices and distribution. The growth of the public sector being an objective in itself, private industry came under a myriad of restrictions. Trade policies were used to shield public and private enterprises from competition, and exports were often discouraged by taxes, tariffs on raw materials and exchange rate policies (Bhagwati & Desai, 1970). India's policies towards industrialization and trade have hardly changed over the decades, although occasional attempts have been made to encourage exports.

**Industrial policies.** A major feature of the Indian industrial strategy was to carve out a prominent role for the public sector. All investments in the industrial sector were regulated by the industrial licensing framework under the Industries Development and Regulation Act (IDRA). The IDRA controlled not only entry into an industry and expansion of capacity, but also technology, output mix, industry location and import content (Ahluwalia, 1991).

The complex licensing system under the IDRA was characterized by undue conservatism and administrative delays, and industrial controls were reinforced by the Monopoly and Restrictive Trade Practices Act (MRTP) as well as the Foreign Exchange Regulation Act (FERA). These acts were major obstacles to entry for new firms wishing to enter an industry, and labor legislation in the organized sector made the closure of sick units a complicated and extended process.

As the capital intensive public sector had no scope for regional dispersal, the
government protected and promoted the small scale sector to provide regional employment and to produce consumer goods. A growing list of items were reserved for production in the small scale sector, irrespective of whether a product was suited to small scale production (Ahluwalia, 1991).

A majority of the available foreign exchange was earmarked for imports in the capital intensive public sector enterprises. Whatever remained was allocated to the private sector through extremely complex licensing procedures entailing three different license issuing authorities. In addition, imports were subject to stringent quantitative and tariff restrictions, irrespective of their being consumer goods or raw materials required in the production of exportables. There was a rigid itemization of permissible imports, and any item classified as "produced domestically" was restricted (Bhagwati, 1970).

As a result, the industrial policy virtually eliminated foreign competition, as every item of domestic production, no matter how much its cost of production exceeded world market prices, was shielded from competition. At the same time, domestic competition was minimized by the combination of IDRA and MRTP licensing, and economies of scale were never even considered under the system of small scale sector protection (Ahluwalia, 1991).

At times of severe foreign exchange crises, the government subsidized exports and introduced ad-hoc incentive measures. According to Bhagwati and Srinivasan (1975), "one of its remarkable features was that it was as selective, chaotic and cost unconscious as the process of automatic protection for import substitution" (p.59).
Macroeconomic and exchange rate policies. Throughout the period 1951-1985, the government maintained strict capital controls. During the initial years of development after independence, India's economy remained in a fairly comfortable position. Exports were stagnant in value terms, but the level of import demand was rather low and there were no signs of a balance of payments problem. By the late 1950s, the government's ambitious import substitution policy steered the country into severe balance of payments problems.

The development of public sector heavy and capital intensive industries required increasingly large imports of machinery which could no longer be financed by export earnings. The government had to draw from the country's foreign exchange reserves accumulated during World War II, as well as seek massive international aid (Bhagwati & Desai, 1970). Foreign direct investment was very limited, due to the unwillingness of the government to permit it. At the same time, the government undertook export controls.

The logic behind export controls in times of a foreign exchange shortage was based on the assumption that adequate supplies to the domestic market would curb inflation (Singh, 1964). The wars with China and Pakistan in 1962 and 1965 respectively led to a large increase in defense spending. The Indo-Pakistan war resulted in the suspension of grant aid, adding to the chronic balance of payments problems (Jalan, 1991).

By 1966, pressure from aid donors as well as domestic pressures led to the introduction of a new policy package for exports, including a major devaluation of the currency and a reduction of import controls on raw materials. However, droughts in 1966 and 1977 led to a rise in the wholesale price index and to a fall in real income originating
in agriculture. The government attempted to curb the ensuing inflation through contractionary policies, with little regard for the export policy package. With a firm belief that the devaluation was the major cause of the inflation, the government reversed all earlier attempts at liberalization by 1969 (Bhagwati & Srinivasan, 1975).

In the early 1970s, there was a large growth of remittances from Indian workers in the Persian Gulf, as well as improved harvests. There was an increase in the production of capital goods such as steel, iron and fertilizers, resulting in decreased import demand. Combined with the strict restrictions on imports, the country's balance of payments witnessed a surplus. The government's policies towards exports remained unchanged, and import controls were somewhat reduced (Wolf, 1982).

However, a growth in GNP led to increased import demand, and soaring oil prices after the first oil shock in 1973 led to another crisis in the balance of payments. Receipts from Indian workers in the Persian Gulf could not be expected to increase beyond a certain level, and once more the government attempted to promote exports (Jalan, 1991). The perpetually overvalued exchange rate and the uncompetitive industrial structure ensured that export prices remained well below domestic prices in most cases. This pattern of ad-hoc export promotion in the face of recurring balance of payments problems remained largely unchanged throughout the 1970s and the 1980s.

**Government Policies and the Textile and Apparel Sector**

The Indian government's policy of protecting the small scale and restricting the
expansion of the private sector had severe adverse effects on the textile and apparel sectors. In the textile sector, the IDRA banned the installation of new looms in large factories; mills could buy looms only for replacement. Imports of textile machinery were restricted, specially those of automatic looms (Mazumdar, 1991). Excise duties were imposed on mill-made cloth, and the synthetic fiber sector was subject to capacity restrictions which made production uneconomic. Imported synthetic fibers were taxed ridiculously (over 100 percent of their ad-valorem value). In the late 1960s, exports of cotton and jute textiles were taxed on the false assumption that they had monopoly power in trade (Bhagwati & Srinivasan, 1975). Combined with the government's macroeconomic policies, textile exports declined drastically (Mazumdar, 1991).

The apparel sector fared somewhat better, mainly because it remained an informal, "unorganized sector" which could function in small, dispersed units (Kumar & Khanna, 1990). As a result, it could circumvent the industrial controls and the elaborate licensing schemes of the government. Firms involved in apparel exporting rarely, if ever, established their own manufacturing facilities. All production was subcontracted to small, independent manufacturers, who in turn only employed workers on a temporary basis. Although this method enabled firms to remain profitable in the face of overvalued exchange rates, it led to problems of quality control. Indian apparel exports remained low end goods, and increased more in volume than in value terms (Kumar & Khanna, 1990). This problem was exacerbated by the unavailability of quality fabric at world market rates.

In summary, Indian policies towards industry and trade remained myopic
throughout the period 1955-1985. Government economic intervention led to excessive market distortions. The large scale public sector was a white elephant which dissipated scarce foreign resources, and the protection of the small scale ensured that light manufacturing remained backward and uncompetitive on world markets. Combined with macroeconomic policies, exports of light manufactures, specially those of textiles and apparel, suffered serious setbacks. In 1963, India's market share of total developing country textile exports to the OECD was 52.2 percent, which dropped to 8.2 percent by 1984. Its market share of total developing country apparel exports increased from 1.3 percent in 1963 to only 3.3 percent in 1984 (Cline, 1990).

Theories of International Trade

In order to address the economic reasoning behind the policies of India and South Korea, this section outlines various theories of international trade. The review of these theories begins from Adam Smith and the free traders of the 18th century, followed by critics of neoclassical international trade theory, and factors which led to the development of the theory of trade orientation.

Free trade and the Theory of Comparative Advantage

One of the earliest proponents of the advantages of international trade was Adam
Smith in the 18th century. The fundamental idea behind Smith's theory was that nations had different relative costs in the production of goods, which led to an international division of labor and specialization. Accordingly, the reason for trade was the differing efficiencies among nations in the production of different goods. Each nation specialized in the production of those goods in which it had an input cost advantage. International trade would encourage the efficient utilization of resources brought about by international specialization, and market size would increase so as to permit economies of scale.

Smith hypothesized that both domestic and global economic growth were functions of the division of labor and the scale of the market, so that national as well as international patterns of production were determined by the "invisible hand" of the market (Smith [1776], 1948). The free market and free trade practices were viewed as the most efficient means of resource allocation, as they were based on the absolute advantage of nations, even if trading nations possessed varying levels of economic development and wealth.

Adam Smith's theories were further refined by David Ricardo and John Stuart Mill, who introduced the concept of comparative cost advantage over absolute cost advantage. Ricardian theory assumed labor to be the only means of production, where value and output would be determined by the amount of labor required for the production of each good. The underlying assumptions were domestic factor mobility, international factor immobility, and constant unit costs in labor. The basis for trade was differing labor intensities in the production of different commodities across nations. Under free trade,
countries with a lower ratio of capital to the supply of land would have a comparative advantage in agricultural products and export these in exchange for imports of manufactures.

Thus the classical comparative advantage theory of free trade demonstrates the gains from trade through a static model, which is based on the restrictive assumption of one variable factor (labor cost), and on the notion of complete specialization (Todaro, 1989). The work of Smith and Ricardo engendered the widely accepted Heckscher-Ohlin model for international trade, known as the theory of comparative advantage.

Eli Heckscher and Bertil Ohlin modified the 19th century model of Mill and Ricardo to include the effects of differences in the supply of factors on international trade. These differences were considered to be mainly land, labor and capital. The Heckscher-Ohlin neoclassical (variable proportions) factor endowment theory assumes that all countries have access to the same technology. Although different products utilize productive factors in different relative proportions, certain products will always be relatively more labor intensive, while others will always be relatively more capital intensive, irrespective of where they are produced.

In the absence of trade, relative factor prices within countries vary, and the basis for trade is the difference in factor supplies between countries. Countries with an abundance of labor will have a relative cost and price advantage in the manufacture of commodities requiring the intensive use of labor, compared to countries where capital is the more abundant factor. Labor abundant countries should concentrate on the production
of labor intensive goods, and export their surplus in return for imports of capital intensive goods.

Similarly, countries with an abundant supply of capital as compared to labor will have cost and price advantages in the manufacture of capital intensive goods in which they should specialize and export in return for imports of labor intensive goods. Trade is the means by which countries can capitalize on their abundant resources through intensive production and exportation, while relieving their factor shortage by importing commodities that utilize large amounts of their relatively scarce resources (Leamer, 1984).

The theory of comparative advantage played a dominant role in the trade and development literature of the early 20th century. Third world countries were encouraged to concentrate on the manufacture and export of labor and land intensive primary products, while importing more capital intensive manufactures from developed countries. It is said that this free trade doctrine also served the economic interests of colonial powers which required an abundant supply of raw materials to facilitate their industrial expansion, while simultaneously acquiring markets for their manufactured goods (Nurkse, 1962).

The major conclusions to be derived from the neoclassical model are that free trade benefits all countries, and world output increases. The secondary conclusions are as follows.

(a) Increasing opportunity costs due to resource shifting among commodities with different factor intensities of production will prevent complete specialization. As countries specialize in and export products which intensively utilize their abundant factors, rising
domestic costs would lead to prices in excess of world prices, if carried to their logical end. As a result, complete specialization will not occur.

(b) As countries intensively utilize their abundant factors, the prices of those factors will rise domestically, while the lesser utilized scarce factors will drop in price. Thus, international real wage rates and capital costs will eventually tend towards equalization.

(c) Domestic income distribution will become more "equal", as owners of abundant resources will experience greater economic returns. There will be sizeable income redistribution towards owners of the abundant factors. When applied to third world countries, which are characterized by poverty and by glaringly large differences between the rich and the poor, the second and third conclusions predict a rise in the income of laborers, as well as more equitable income distribution.

(d) Free trade enables poorer countries not only to move outside their production-possibility frontiers in terms of the total goods available for consumption, but also to obtain capital and consumption goods from other nations at prices lower than those which would accrue domestically. Trade is visualized as a stimulant of self-sustaining economic and industrial growth (Todaro, 1989).

**North-South Models of Unequal Trade**

Proponents of the North-South (NS) models of unequal trade object to the initial assumption of the neoclassical model, namely that resources are fixed and internationally
immobile. According to the NS theory of international trade, the global economy is subject to constant change, and factors of production are neither quantitatively nor qualitatively fixed. Capital accumulation and human resource development take place continuously, and trade in fact causes the unequal growth of productive resources in different countries, specially as regards physical capital, entrepreneurial abilities, scientific skills and technical skills. Thus, relative factor endowments and comparative costs are often determined by the nature of international trade (Todaro, 1989).

Since rich nations (the "North") are historically relatively well endowed with capital and skilled labor, their continued specialization in capital and skill intensive products will lead to incentives which further their growth. Meanwhile, poor nations (the "South") will continue to specialize in the production of goods which require low skills and high labor contents. This will inhibit the poor "South" from developing capital and technical skills. Static efficiency will become dynamic inefficiency, and trade will worsen the prevalent inequality between the haves and the have-nots.

The NS models focus on trade between rich and poor nations, and argue that initial higher endowments of capital in rich countries generate external economies in manufacturing output, lead to higher profit rates, and perpetuate monopolies and capital accumulation, which aid in the further development of these nations. The "North" gains a cumulative comparative advantage over the "South", considering that income elasticities of demand are higher for capital intensive goods than for primary goods (Todaro, 1989).

During the 1940s, as many third world countries achieved independence from
colonial powers and were struggling to establish a coherent development policy, the view that the gains from trade were biased assumed growing importance. The best known exponents of export pessimism were Raul Prebisch and Ragnar Nurkse, who argued that free international trade leads to a decline in the terms of trade of primary producers, or the less developed countries (LDCs), vis-a-vis those of manufactured goods producers, or developed countries (Greenaway & Milner, 1987). The result would be a long-term transfer of income from developing to developed countries. The lower income elasticity of developing countries' products as compared to developed countries' products would lead to payments deficits for the developing countries, as well as to currency depreciation and terms of trade deterioration. All these factors would contribute to slow economic growth for the developing countries. Population growth in developing countries, coupled with the falling relative price of their exportables, would make productivity gains and consequently higher wages unattainable. The sole solution would be the protection of the manufacturing industries in developing countries, which would lead to wage increases in all sectors and would prevent the over-expansion of the primary export sector.

Nurkse's (1962) renowned Wicksell Lectures advocated a strong policy of import substitution and domestic industry protection for developing countries. He argued that the composition of industrial production in advanced economies was shifting away from light industries in favor of heavy industries, namely from industries where the raw material content of finished output was high to those where it was low. The rising share of services in the total output of advanced industrial countries would lead to a lessening demand for
raw material, which in turn would soon be replaced by synthetics. These changes would result in unsymmetrical patterns of world trade with the poorer nations being dependent on the advanced nations for capital goods, whereas there would be no reciprocal dependency of the advanced nations on poorer nations' raw materials. Moreover, the growth of exports of the developing countries would be dependent on the growth of developed countries' incomes, and the developing countries would be helpless victims of the vagaries of international goods markets (Tyler, 1980).

According to Nurkse (1962), "In a world in which [outside the Soviet area] over nine-tenths of the manufacturing and over four-fifths of the total productive activity are concentrated in the advanced industrial countries, the ideas of symmetry, reciprocity and mutual dependence which we associate with the traditional theory of international trade are of rather questionable relevance to trade relations between the center and the periphery" (p.26).

Nurkse suggested that developing countries needed to begin exporting manufactured goods which had a rising total demand, such as high technology manufactures, along with their primary goods exports. Since the developed countries possessed an overwhelming comparative advantage in this arena, developing countries could only attempt light manufactures, such as textiles. Light manufactures in turn had no rapidly rising total demand, so that exports from developing countries would harm the existing producers in developed countries, and lead to protective acts by the governments of the importing nations.
In this scenario, the only solution was output expansion for the domestic market. Since there was a lack of real purchasing power in developing countries, the few expanding, active industries would be inhibited by the passiveness of the rest of the economy. Efficient growth would require every sector to grow simultaneously, with increases in output diversified in accordance with domestic income elasticities of demand, in contrast to output expansion for the export market which was specialized in accordance with international comparative advantage. Productive capacity could be improved through import substitution, which included the substitution of capital goods imports for consumer goods. Nurkse hypothesized that the creation of additional production capacity would lead to an increase in the total market size of the country, i.e., it was necessary to develop a domestic industrial sector via protection at the expense of export growth (Tyler, 1981).

The theories of export pessimism were used to justify the excessively protectionist policies followed by many developing countries during the 1950s and early 1960s (Tyler, 1981). The idea of self-sufficiency as advocated by Prebisch and Nurkse no doubt touched the emotive chords of nations which had only recently acquired independence, and a large number of developing countries began to follow the path of import substitution.

The foremost critics of import substitution were development agencies and development economists, whose arguments were strongly based on the neoclassical view of the appropriate role of markets and governments. According to the neoclassical view, the efficient allocation of resources is of far greater importance than capital formation (Wade, 1990). Any capital formation which takes place will constitute the social optimum,
and profit incentives will drive the economy to its maximum production potential. The role of the government should be limited to providing public goods and to maintaining macroeconomic stability (Wade, 1990).

One of the earliest criticisms of import substitution was that a shortage of foreign exchange is among the most limiting factors in economic development (Cairncross, 1962). A country on the path of development needs to import nearly all its industrial requirements in the form of machinery and technology, and the scale of industrial investment is limited by the foreign exchange available to pay for it. It follows that a developing country's policy should be none other than export oriented, so that the import of equipment can be financed without endangering the balance of payments.

**The Theory of Trade Orientation**

In the 1960s, there was a dramatic rise in the exports as well as in the economic growth rate of several east Asian economies including Taiwan, Hong Kong, South Korea and Singapore. As researchers began scrutinizing the cases of these nations, many of them discovered a positive relationship between export oriented policies and economic growth. The results of these studies led to the development of the theory of trade orientation (TO).

The theory of trade orientation addresses differences in the economic performance of developing countries arising from export promoting policies as opposed to import substituting policies. Proponents of this theory believe that export promotion strategies are
superior, as they encourage the efficient allocation of resources and prevent market
distortions. The theory is grounded in the belief that the fundamental source of economic
growth in the third world is exports. The resulting gain in foreign exchange permits
capital accumulation as well as imports, which are viewed as the primary vehicles of
economic growth.

Balassa (1981) argues that following an import substituting policy would
necessitate replacing imports of intermediate and producer goods with domestic
production characterized by capital and technological intensity and by economies of scale.
Developing economies do not possess the resources necessary to undertake the efficient
production of these goods.

Balassa (1981) also considers domestic resource cost ratios (DRCRs), which relate
the domestic resource cost of production in terms of labor, capital and natural resources
utilized to net foreign exchange savings (in the case of import substitution) or to net
foreign exchange earnings (in the case of exports). In less developed countries, if factor
markets are free from serious distortions, the DRCRs for light manufactures and related
exports will be relatively low, as compared to the high DRCRs for intermediate
manufactures. It follows that industries engaged in the production of intermediates will
require high levels of protection as they supply limited domestic markets. The levels of
protection and the DRCRs will increase as economies undertake the manufacture of goods
that deviate increasingly from their natural comparative advantage. Light manufactures
will stagnate as domestic markets reach saturation, and high protection will inhibit the
development of an export sector.

Another characteristic of inward oriented economies would be the prevalence of sellers' markets (monopolies, oligopolies), as import competition would be virtually non-existent. Sellers' markets are not conducive to quality or productivity improvement, and they often lead to reduced competition as well as inefficient backward integration. The prevalence of negative real interest rates encourages inventory accumulation and the transfer of funds abroad, as well as credit rationing by the banks and the government in favor of import substituting industries. The justification for these acts is the lower risk of investments in production for domestic markets. The low prices of exportables received by producers discourage production and encourage domestic consumption, thereby reducing the exportable surplus. In the long run, such economies will witness a decline in their export market share.

Krueger (1984) describes the fundamental difference between import substituting (IS) and export oriented (EO) regimes as follows. A major feature of IS regimes is overvalued exchange rates such that domestic producers of import substitutes receive a much higher price on the highly protected domestic market than they would on the international market. As a result, there is no incentive to expand production beyond that which is required by the domestic market. EO regimes have realistic exchange rates, so that industries need not base their capacity purely on domestic sales; the feasibility of sales on the international market leads to capacity expansion and thereby to economies of scale.

IS regimes are further characterized by prohibitive tariffs and quantitative
restrictions on most imports. EO regimes avoid the use of quantitative restrictions; if
tariffs are erected, they are generally low and tend to decrease with time. A continuing IS
policy would impose an almost total ban on imports, or a tariff so high that imports
become economically unfeasible. As a result, different import substituting industries are
protected by differing levels of nominal and effective tariffs and tariff equivalents. In an
EO regime, incentives to exporters are based either on the dollar value of export sales or
on the value added in export sales, both of which lead to uniformity in incentive
distribution to different producers of different products.

According to the World Bank (1987), alternative development strategies could be
classified according to the form of government interventions in trade and industry among
countries. A combination of four qualitative and quantitative indicators were used to
define a country's trade orientation: (1) effective rates of protection, (2) the use of direct
controls such as quotas and import licensing schemes, (3) the use of export incentives, and
(4) the degree of exchange rate overvaluation. Using information collected for 41
developing countries for the period 1963-1985, the countries were divided into "strongly
outward oriented," "moderately outward oriented," "strongly inward oriented," and
"moderately inward oriented." The sample of 41 accounted for 66.5 percent of total
output from developing countries in 1985. The time period examined was divided into

The criteria for the four divisions of trade orientation were:

(a) Strongly outward oriented: countries in this category display very low or nonexistent
trade controls, licensing arrangements or other forms of direct controls, and export incentives which more or less counter-balance import restrictions. The exchange rate is fairly realistic.

(b) Moderately outward oriented: although the overall incentive structure tends towards domestic market production, the average rate of domestic market protection is low, and the range of effective protection rates is narrow. The use of controls and licensing arrangements is restricted, and the exchange rate is slightly overvalued.

(c) Moderately inward oriented: production for the domestic market is clearly favored above that for the export market. There is extensive use of direct import controls and licensing arrangements, the average rate of effective protection for the domestic market is relatively high, and the range of effective protection rates is relatively wide. The exchange rate is clearly overvalued, and there is an overall bias against exports.

(d) Strongly inward oriented: production for the domestic market is strongly favored against that for the export market. There is a high effective rate of protection for the domestic market, and a wide range of effective protection rates across different industries. The use of direct controls and licensing arrangements is employed in almost every industry sector. There are either few or no incentives to the traditional export sectors, and the exchange rate is excessively overvalued.

Empirical Studies of Trade Orientation

There is a large body of literature on the effects of government policies on the
overall macroeconomic performance of developing countries, including the growth of their exports. A few of the studies, which are representative of the larger body of literature, are described below.

The World Bank (1987) examined indicators of the macroeconomic performance of 41 developing countries, which were divided into groups according to their trade orientation, for the periods 1963-1973 and 1973-1985. The indicators were expressed as weighted group averages, and included the average annual real growth rate of manufactured exports in value terms. The data indicated that the outward oriented economies witnessed the largest increase in average annual real growth rates of manufactured exports.

During 1963-1973, export growth rates for the strongly outward and moderately outward oriented economies increased by 14.8 percent and 16.1 percent respectively, and during 1973-1985, the respective percentages were 14.2 and 14.5. In contrast, during 1963-1973, the moderately inward and the strongly inward oriented economies witnessed a growth of only 10.3 percent and 5.7 percent respectively, and during 1973-1985, the figures were 8.5 percent and 3.7 percent.

The basis of the World Bank's research was a study by Greenaway and Nam, which was published a year later. Greenaway and Nam (1988) examined whether there were any differences in the industrial and macroeconomic performances of countries following different trade strategies. The study analyzed the same groups of countries as those in the World Bank (1987) study, as well as the same time periods. Their results were
similar to those of the World Bank study; countries following an outward oriented trade strategy were far more successful as exporters than countries following inward oriented trade strategies. The results of both studies as regards the annual average growth rate of exports of the four groups of countries are summarized in Table 1, and Table 2 lists the countries included in the studies.

Greenaway and Nam (1988) note that the results of their study are suggestive rather than conclusive. Although outward orientation is associated with neutral and non-interventionist policies, two members of the outward oriented group, namely Singapore and South Korea, are known to have pursued export promotion via interventionist policies. Thus, although one may not be able to determine the exact factors determining successful export growth, the export performance of the inward oriented economies points to factors which can be identified as detrimental to export growth.

Lal and Rajapatirana (1987) summarized comparative studies of the trade regimes of developing countries undertaken in the 1960s and the 1970s, which indicated that outward orientation was associated with better economic performance. The conclusions of these studies were tested for the more volatile global environments of the 1970s and the 1980s. The authors chose three groups of economies. Group A consisted of Hong Kong, South Korea, Singapore and Taiwan, which had followed export promotion strategies. Group B consisted of Argentina, Chile, Uruguay and Sri Lanka, which were cited as moderately import substituting countries. Group C included only India, which had consistently followed a strong import substitution policy.
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\(^1\text{SOO: Strongly outward oriented}\)
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The authors found that the Group A countries had been the most dynamic exporters of those examined, with the highest annual average export growth rates among all three groups. Although the Group B countries undertook several trade liberalization policies during 1975-1980, their fiscal deficits and domestic inflation, coupled with appreciating real exchange rates, led to macroeconomic chaos. As a result, the trade reforms were reversed. The authors stress the need for appropriate macroeconomic policies and appropriate real exchange rates, which are vital for trade liberalization.

The Group C country, India, which had almost delinked itself from the world economy, was relatively immune to the external shocks of the 1980s. But it lost its share in world exports from 2.4 percent in 1968 to 0.41 percent in 1981. The authors ascribed India's loss in export market share to its import substitution policies, which led to production inefficiencies.

Balassa (1978) analyzed the effects of different export incentives on the exports and economic performance of 11 major developing countries which had already established an industrial base. The time periods examined were 1960-1966 and 1966-1973. The countries were divided into four groups, depending upon their trade orientation.

The first group, consisting of South Korea, Singapore and Taiwan, was identified as being strongly export oriented. The second group, consisting of Argentina, Brazil, Mexico and Colombia, provided a few export incentives, but restricted the imports of intermediate producer goods. The members of the third group were Israel and Yugoslavia, which had
slackened their earlier attempts at export orientation. The fourth group, consisting of India and Chile, had followed a policy of import substitution throughout the time periods under study.

Balassa chose to rely on a comparative analysis of export trends in the four groups, due to problems in the statistical estimation of incentive structures. The study provides a description of the incentives and policies followed by each of the countries under consideration. The results of Balassa's (1978) study showed the countries in the first group to possess the highest incremental export-output ratios, and the highest rates of manufactured exports growth. The countries in the second and third groups followed, whereas the fourth group exhibited the lowest growth rates of manufactured exports.

Criticisms of the Theory and Empirical Research

Pertaining to Trade Orientation, and Liang's (1992)

New Classification of Trade Strategies

Overall, the results of the empirical studies on trade orientation were similar in their conclusions; export oriented trade strategies led to superior export performances. However, as Rodrick (1992) notes, the researchers conducting these studies appear to be "predisposed" towards their results. Most of the studies examine the same group of countries, and the choice of countries representing strongly outward oriented and strongly inward oriented regimes seem to guarantee the desired results (Rodrick, 1992).
Controversy remains over the categorization of the east Asian NICs as strongly outward oriented regimes. While proponents of trade orientation maintain that an outward oriented strategy is simply one that does not discriminate against exports in favor of production for the home market, South Korea and Taiwan have been known to protect and promote their exporting sectors. In fact, Krueger (1978) remarks that "there have been numerous countries where incentives for export and import substitution have been about equal, and the results have not been spectacular" (p. 282).

According to Ocampo (1986), the essence of the success of the export oriented regimes appears to be a systematic promotion of exports. In addition to a liberalized trade regime, preference is granted to exports over production for the domestic market; infant industries are actively protected.

Krugman (1986) emphasizes that the assumption of perfect competition, which is the basis of the theory of comparative advantage, is rarely a reality in developing countries. When oligopolies and scale economies prevail, the protection of infant industries may even be instrumental in promoting exports. The most frequently cited case is that of South Korea, which followed dual policies of export promotion and import substitution simultaneously (Krugman, 1984; Pack & Westphal, 1986).

According to Liang (1990; 1992), the contradiction in the literature over the categorization of the east Asian NICs is a result of the ambiguity in the definition of trade strategies. According to the theory of trade orientation, an EP and an IS regime are at two ends of a bipolar spectrum, and their coexistence is not recognized by the theory. Liang
(1990; 1992) concurs with the viewpoint of the theory of trade orientation insofar that the nature of incentives prevalent in a regime defines the regime's trade orientation. However, he opposes the view that a regime can be classified exclusively as EP or IS depending on whether it promotes exports or encourages import substitution.

Liang (1992) notes that import protection and promotion might be given not only to the sector which produces import substitutes, but also to the sector which produces exportables. Similarly, export incentives might be given to either of these two sectors. Thus, depending on the sectoral orientation of the regime, either the exportables or the import substituting sector can be protected and promoted. Depending on the market orientation of the regime, the sales of the protected sector may be destined for either the domestic market or the world market.

According to Liang (1990), the nature of the incentives or disincentives is not always made explicit in much of the literature on the merits of alternative trade strategies, and sectoral orientation is often overlooked. The author introduces five possible trade strategies, based on a specific combination of market and sectoral orientation, which are as follows. (1) An export promoting (EP) regime is one where the incentive structure encourages the sector producing traditional labor intensive exportables, and the market orientation is towards the export market. (2) An import substituting (IS) regime favors the production of import substituting goods, and the market orientation is inward; sales are intended to replace imports on the domestic market. (3) A free trade (FT) regime is one where the government does not provide any sort of sectoral or market incentives. (4)
Protected export promotion (PEP) is a strategy whereby the government protects and promotes the import substituting sector, and the market orientation is towards the export market. (5) A de facto import promotion (DIP) strategy is more an unintended outcome of policies rather than a planned strategy. In cases where trade liberalization programs are badly implemented or government budget deficits are reduced through inflationary financing, imports can soar while exports decline.

Using empirical data collected by the World Bank on incentives and disincentives, Liang (1990, 1992) examined the trade strategies of Argentina, South Korea, Taiwan, Colombia, Israel and Singapore. He found that South Korea was ranked the highest among the countries on both IS and EP incentives, thus placing it into a PEP strategy. He stresses that the World Bank (1987) classification of South Korea as strongly outward oriented and Argentina as strongly inward oriented is misleading, as it implies that Argentina was more protectionist than South Korea. What distinguishes South Korea is not the absence of IS activities, but the presence of strong EP incentives. South Korea and Argentina share the same sectoral orientation, but different market orientations.

In summary, differing theories of international trade and the benefits or drawbacks of trade as emphasized by these theories have influenced the choice of development strategies in the Third World. Whereas certain developing countries chose free trade as a means of economic growth, others undertook import substitution based on notions of export pessimism. As certain east Asian states emerged as super-exporters with high levels of economic growth in the 1960s and 1970s, various researchers began scrutinizing their
cases. They concluded that exports were positively associated with economic growth, and a non-interventionist government, i.e., one that allowed market forces to guide trade and industry, was a prerequisite for a high level of export growth.

According to the theory of trade orientation, countries could be categorized as export oriented or import substituting depending on the level of government intervention. This view was countered by researchers who analyzed the same group of successful exporting states, and concluded that it was in fact government intervention which led to their success. In an attempt to resolve the controversy, Liang (1992) redefined trade orientation based on the nature of government intervention.
CHAPTER 3

THE RESEARCH QUESTION

This chapter presents the statement of the research question and the objective of the study. The conceptual framework of the research based on Liang's (1990; 1992) classification of trade strategies, as well as the conceptual definitions pertaining to the research, are discussed in the second section of the chapter. The third section states the hypotheses associated with the research objective and the justifications for them. The chapter concludes with the limitations of the study.

Research Question and Objective

When examining the trade orientation of South Korea and India, what insight can be gained about the factors influencing the pattern of textile/apparel exports of each? If South Korea and India are truly representative of the World Bank classification of trade orientation, then South Korea, which is classified as export oriented, should display a low or nonexistent degree of intervention in all its industrial sectors, including textiles and apparel. India, which is classified as import substituting, should show the contrary. However, sectoral literature on the two countries reveals that both nations were highly interventionist as regards industry and trade. Thus, the new classification of trade orientation by Liang (1990, 1992), which classifies nations not according to the degree of
government intervention, but according to the nature of government intervention, appears to be more valid in analyzing the growth of the textile and apparel exports of South Korea and India.

The aim of this research is to examine the textile and apparel export patterns and government intervention of South Korea and India, 1955-1985, through comparative historical analysis. The sectoral study proceeds under Liang's (1992) premise that a prime determinant of export success is the nature of government intervention. The focus of the study is on the overall policy atmosphere in the two countries examined, which affected the development of the textile/apparel sectors and their trade patterns.

Conceptual Framework

The conceptual framework of this study is based on the classification of trade regimes as conceptualized by Liang (1990; 1992). Liang's classification differs from the conventional classification of trade orientation in that it introduces five possible trade strategies followed by developing nations based on combinations of sectoral and market orientations. The conventional classification of trade orientation recognizes only two possible strategies (export oriented or import substituting) and two levels of each (strongly or moderately). However, both Liang's conceptual framework and that of the conventional theory of trade orientation focus on the overall policy atmosphere in a regime, which affects the development of specific industrial sectors and the trade pattern
of the regime.

Liang classifies trade strategies based on concepts of sectoral orientation and market orientation. He utilizes a two-by-two incentive matrix as depicted in Figure 1 to define alternative trade strategies, based on five mutually exclusive incentive structures. Table 3 depicts the difference between the conventional classification of trade strategies and Liang's new classification.

Sectoral orientation refers to a country's choice of a leading sector, i.e., a sector where production is promoted regardless of whether sales take place on the domestic market or on the export market. The choice of a leading sector is critical in determining the direction of industrial growth in a regime. An import substituting (IS) strategy encourages production in sectors in which the country has a comparative disadvantage, perhaps in capital and technology intensive goods. On the other hand, an export promoting (EP) strategy encourages the production of commodities in which the country has a comparative advantage, such as traditional labor intensive commodities intended for the export market. However, the sectors encouraged by an EP strategy are often those with limited growth potential, and the demand for the production of these sectors tends to be inelastic as well as sluggish in growth. In the long run, factor proportions are not fixed, and the sector that has momentary comparative advantage may or may not have long run comparative advantage. Thus, the sole promotion of the export sector which has comparative advantage in the present may lead to momentary gains but may not lead to long term gains. An EP strategy which focuses solely on the expansion of the traditional
Figure 1. Relationship Between Trade Incentives and Trade Strategies.

Table 3
Difference Between the Conventional Model and Liang's Model

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Note: The "$" sign stands for "incentives". "IS $" reads as "IS incentives, " and " EP $" as " EP incentives."

export sector may not always be the best choice for a developing country.

Market orientation refers to a country's choice of a target market, that is, whether the leading sector produces for the domestic market or for the world market. Liang suggests that a key difference between EP and IS regimes is their market orientation. IS regimes are characterized by an inward market orientation, whereby sales are intended for the domestic market. The limited size of the domestic market of most developing countries leads to firms operating below the minimum efficient size. If import barriers exist, domestic firms are shielded from foreign competition, thereby furthering inefficiencies. On the other hand, EP regimes are oriented towards the world market, where foreign competition and the large size of the market induces firms to function efficiently.

In the literature on trade orientation, it is often implicitly assumed that if a country encourages import substituting activities, then it will also be oriented towards sales on the domestic market. In reality, countries with the same sectoral orientation may have different market orientations. Many developing countries promote and protect their import competing industrial sectors; some aim only at replacing imports on the domestic market whereas others aim at developing the import competing sector into an exporting sector. Thus, the incentive structure in a regime is determined by a specific combination of sectoral and market orientations. Pack and Westphal (1986) also note the distinction between industrial bias (bias among alternative industries) and trade bias (bias among alternative sales destinations), which are similar to the concepts of sectoral and market
Liang's (1990; 1992) classification as shown in Figure 1 is as follows:

1. **Export Promotion (EP).** Quadrant 1 represents a "pure" version of export promotion (EP), where incentives for export activities are positive. Incentives for import substituting activities in sectors which have a comparative disadvantage are negative. In developing countries, sectors with a comparative disadvantage are usually those which are technology and capital intensive. The purpose of a pure EP strategy is to minimize resource costs, and to focus exclusively on the traditional export sector which has momentary comparative advantage. The key feature of this regime is a combination of positive export incentives for the traditional export sector and liberal import policy for capital and technology intensive imports; both the sectoral and the market orientation of this regime are outward.

2. **Import Substitution (IS).** An import substituting policy is represented by quadrant 4, where the incentive structure favors import substituting activities and discriminates against export promoting activities. The allocation of resources is biased towards the importable goods sector, and the exportable goods sector is taxed intentionally or unintentionally. This type of regime is characterized by widespread import restrictions and a strong anti-export bias. Both the sectoral and the market orientation of this regime are inward.

3. **Free Trade (FT).** The center point "E" in the matrix represents free trade in the sense of neutrality between the exportable goods and importable goods sectors. The trade strategy is biased toward neither IS nor EP incentives. The regime has no particular sectoral or market orientation. The direction of industrial growth and the pattern of trade is
dependent on world market forces.

4. Protected Export Promotion (PEP). In quadrant 2, both EP and IS incentives are positive, i.e., both the exportable and importable goods sectors are encouraged to expand beyond their free trade level. This balanced coexistence of IS and EP incentives characterizes the PEP strategy, which is not recognized by the conventional classification. Under the PEP strategy, domestic firms producing both traditional and non-traditional exports are protected from foreign competition, but are encouraged to export and to compete on the international market. Imports are restricted, though the absolute import volume may be quite high.

The central idea behind PEP is that protecting the domestic market helps domestic firms not only in the domestic market, but in export markets as well. The protected domestic market provides a cushion against the potential loss on the export market, thus actually serving as an export subsidy to the firm. If domestic firms earn extra profits on export markets, then such protection may be in the national interest. Krugman (1984) terms this "import protection as export promotion".

For infant exporter industries, there is a learning period during which they are not competitive on international markets, and a PEP strategy provides both temporary import protection as well as export incentives in such cases. A PEP regime is characterized by an inward sectoral orientation and an outward market orientation.

5. De Facto Import Promotion (DIP). Quadrant 4 represents another case which is not recognized in the conventional classification: a bias against both EP and IS, resulting in
soaring imports and stagnant or declining exports. A DIP strategy provides a maximum amount of resources for domestic investment and consumption. In this regime, exports are minimized and imports are maximized, either intentionally or unintentionally. It is termed "de facto" because many such regimes are the unintended outcomes of economic policies such as the inflationary financing of government budget deficits, or are the unforeseen consequences of a trade liberalization program. Although such a regime may experience an initial level of high growth, the strategy is not sustainable in the long run due to its balance of payments implications.

**Government Policy Incentives and Their Effects**

In the area of comparative analysis of development strategies, policy incentives have been defined by Balassa (1982) as "governmental measures that affect the allocation of resources among economic activities and their orientation between foreign and domestic markets. The application of incentive measures thus entails a departure from a neutral state of affairs in which there is no discrimination among economic activities or between foreign and domestic markets" (p.9). The incentive structure of a regime includes a complex set of interrelated policies and instruments which govern the economy's trade and industry. These may include the granting of preferential credit to favored industries, indirect tax exemptions, labor laws which help or hamper the development of a specific sector, and the subsidization or taxation of raw materials which affects the price of the
final goods. Policy measures indicated in the literature as influencing the incentive structure of South Korea and India are described in Chapters 5 and 6, which present an analysis of the South Korean and Indian textile/apparel industries. The Procedure chapter discusses the choice of the policy measures and other variables in the analysis.

To judge the overall policy atmosphere of a regime, it is necessary to analyze the effects of the various incentives. The quantification of the effects of all policy measures is impossible because, for example, measures differ from regime to regime, various ones are manifested simultaneously, and different time lags would need to be incorporated. Even if it were possible to isolate and quantify the effects of individual policy measures, it would not present an overall picture of the policy atmosphere in an economy. Non-quantifiable effects of policies also can be significant. Analysis of both quantitative and qualitative effects of policy incentives is needed to present an overall picture of the effects of the different policy measures.

Although it is difficult to quantify the effects of policy incentives, the following two variables do provide, to some extent, a quantitative indication of the effects of policy incentives: (1) nominal and effective rates of protection, or effective exchange rates for exports and imports and (2) the degree of exchange rate overvaluation.

Rates of Protection and Effective Exchange Rates

Nominal and effective rates of protection as presented by Balassa (1971) and the World Bank (1987) are defined as follows. The nominal rate of protection of a commodity
is the percentage increase in the domestic price over the world market price, caused by protective measures. If tariffs are the only protective measures, and if they are not high enough to exclude all imports, the domestic price of import competing commodities will equal the sum of the import price plus the tariff, and the nominal rate of protection will equal the ad valorem rate of the tariff, i.e., the tariff expressed as a percentage of the import value.

The effective rate of protection (ERP) can be defined as the difference between value added per unit of output in domestic prices and value added in world prices, expressed as a percentage of the latter, brought about by the imposition of tariffs as well as other protective measures on the commodity and its inputs. Thus, the ERP influences the producer's choice, and if the ERP is positive, production activities move towards the protected sector. If the ERP is negative, then production activities move away from the sector. Relatively low nominal protection may lead to high effective protection if value added is a small proportion of the product price. Similarly, a relatively low tariff on a material input required for producing an exportable may drastically diminish the value added margin for the producer of the exportable.

Similar results can be obtained through effective exchange rates (EERs). An effective exchange rate is the ratio of the units of domestic currency received for a unit dollar's worth of exports to the units of domestic currency paid for a unit dollar's worth of imports, evaluated on the basis of value added. It takes into account import duties, import premia, export subsidies, export taxes and other forms of import or export
incentives/disincentives.

The effective exchange rate for exports (EER_e) is the sum of domestic currency earned at parity for a dollar's worth of imports, including export subsidies, taxes and special credits. The effective exchange rate for imports (EER_m) is the sum of domestic currency paid at parity for a unit dollar's worth of imports, including import duties and import premia brought about by import restrictions such as tariffs and quotas. According to Bhagwati (1990), if the effective exchange rate for a country's exports (EER_e) is less than that for its imports (EER_m), then the country is said to be following import substitution policies. If EER_m = EER_e, there will be no bias against exports.

Liang (1990; 1992) remarks that it is possible for a country with high rates of protection to promote exports by allowing the free entry of imports used in the production of exportables. In this case, high rates of protection will not hamper export growth, and effective exchange rates for exports need not be lower than those for imports.

Exchange Rate Overvaluation

The concept of overvaluation is based on the movement of the real exchange rate of a country as compared to that of its major trading partners, or to major world currencies. There are several definitions of the real exchange rate. Basically, the real exchange rate can be defined as the ratio of the prices of domestic goods to the prices of foreign goods expressed in a common currency, i.e.,
\[ E_R = \frac{EP^*}{P} \]

where \( E_R \) is the real exchange rate, \( E \) is the nominal exchange rate, \( P^* \) is the price of foreign goods in foreign currency units, and \( P \) is the price of domestic goods in domestic currency units. A real appreciation is described as an increase in domestic prices relative to foreign prices (Dornbusch, 1988). Utilizing wholesale price indices, the real exchange rate can be defined as:

\[ E_R = \frac{EP^*}{P_w} \]

where \( P^*_w \) is the world wholesale price index\(^1\), and \( P_w \) is the domestic wholesale price index. Many variations of the measure of the real exchange rate are possible, such as using the index of domestic unit labor costs instead of the wholesale price index, or by looking at the ratio of the prices of nontraded goods to the prices of traded goods. It is also common to estimate the dollar prices of manufacturing in the domestic market with the dollar prices of manufacturing in the export markets.

If export price indices are used in the computation of real exchange rates, then the real exchange rate index will compare the relative prices of one country's exports with those of other countries. The index measures the external competitiveness of a country.

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\(^1\)The U.S. wholesale price index is commonly used as representative of the world wholesale price index, as it is heavily weighted with tradable goods.
and a rise in this index represents real appreciation or a loss in international competitiveness in exports. An exchange rate is considered overvalued when the real exchange rate of a country appreciates, and remains appreciated over a period of time long enough to cause a loss in external competitiveness (Dornbusch, 1988). As a result, a country's exports decrease, whereas imports, which become cheaper, increase.

In the case of many developing countries with fixed exchange rates which become overvalued, governments are often reluctant to devalue their currencies. They prefer to administer temporary "fixes" such as import quotas or tariffs (Dornbusch, 1988). Unless the imported raw materials are then subsidized, export competing industries which utilize these materials become even less competitive on world markets.

In summary, nominal and effective rates of protection and effective exchange rates for exports and imports indicate the degree of protection of the domestic market. An overvalued exchange rate hampers exports if it remains overvalued in the long run; it does not lend itself to precise quantification, but can be evaluated based on various indices such as domestic and world price indices. The qualitative variables influencing the incentive system are largely descriptive and do not lend themselves to quantification.

Research Hypotheses

The hypotheses associated with the aim of the study are as follows.
Both South Korea and India displayed a high level of government intervention in their textile/apparel industries. The indicators of policy intervention include a high degree of protection of the domestic textile and apparel industries, export incentives or disincentives for textile and apparel goods, and various forms of control over these domestic industries. Otherwise stated, policy intervention has included those measures affecting trade and industry which change the price of domestically produced goods (textile and apparel products), whether for sale on the domestic or the international market.

Hypothesis 2

Both South Korea and India showed the same sectoral orientation toward their textile/apparel industry, i.e., a protected import substituting orientation. Yet South Korea's textile/apparel industry was also export market oriented, while India's was domestic market oriented. South Korea followed a protected export promotion (PEP) strategy as regards its textile and apparel sector, whereas India followed an import substitution (IS) strategy as regards its textile/apparel sector.
Hypothesis 3

The policy intervention in South Korea had a positive effect on the growth of its textile and apparel exports, whereas the policy intervention in India had a negative effect on the growth of its textile and apparel exports.

Justification for the Hypotheses

The primary justification for the hypotheses is Liang's (1990; 1992) study, which identifies South Korea as following a PEP strategy. According to Liang, South Korea followed a dual policy of import protection and export promotion, whereby it protected and promoted industries identified as potentially large exporters. Although India was not included in Liang's study, there has been no controversy associated with its case; it has been universally identified as following a pure IS strategy.

There is considerable controversy in the sectoral literature contained in country and industry studies on South Korea. Balassa (1978), Westphal (1978) and Frank, Kim and Westphal (1975) maintain that the South Korean government's attitude towards all industrial sectors was non-interventionist except for limited import protection during the early 1960s. They also remark that South Korea's success as an exporter was largely a result of the government's non-interventionist policies, whereas India's exports suffered due to excessive government intervention in trade and industry. On the other hand,
Leudde-Neurath (1986), Liang (1990; 1992) and Kim (1980) point to instances of prolonged import protection and detailed government intervention in all sectors in South Korea throughout the period 1960-1980, and they associate this very intervention with South Korea's export success. The hypotheses of this study are based on the views of the latter school of thought and associate export success in textiles/apparel with the nature of government intervention.

During the 1970s and 1980s, South Korea emerged as a major exporter of textiles and apparel, while India experienced a substantial loss in world market share in textile exports. India's apparel exports during this period showed a low growth rate (Cline, 1990). Thus, this study hypothesizes that South Korea's policies positively affected its textile and apparel exports, whereas India's policies negatively affected its textile and apparel exports.

Limitations of This Research

Several variables which affect exports were not addressed in this study. The effects of world demand and of restrictive bilateral and unilateral arrangements entered into with importing countries were not within the scope of this study.

The research relied on secondary data and on the results of other researchers as regards the quantified variables associated with patterns of protection of the domestic industries, such as effective rates of protection and real exchange rates. No statistical
analysis was undertaken in this study. A lack of adequate data was a further limitation of this study. Detailed information at the sectoral level, including that of specific government policies affecting the textile/apparel sector in South Korea and in India, for the entire time period under study was not available. Thus, the accuracy of this work depends, to a large extent, on the quantity and quality of the available information.

The theory and empirical research on which this study is based have concerned the economy of a country as a whole. As this study was a sectoral analysis, it ran the risk of analyzing an unrepresentative sector which did not reflect the whole economy. Thus, conclusions should not be generalized from the analyzed sectors to others.
CHAPTER 4

PROCEDURE

The first section of this chapter describes the method of comparative analysis and the justification for the selection of this method. The second section states the variables examined in the study, the basis for the selection of the variables and the data sources. The operational definitions of the quantitative variables will be indicated in Chapters 5 and 6.

The Method of Comparative Analysis

The methodology utilized in this study is that of comparative analysis which seeks to fulfill the three criteria of comparison: description, explanation and evaluation (Andrain, 1983). The method is particularly important for policy analysis, and adopts a theoretical overview of systems, whether social, political or economic. Explicit variables are used to compare systems not only across geographic space but also across time, making a historical orientation essential in understanding the system (Andrain, 1983).

As any comparative study is largely descriptive, no absolute or precise limits can be stated as to what should or should not be included in the study (Hecksher, 1957). Very few methodological rules are universally applicable; a minimum requirement for comparison is that it should be based at least on a conceptual framework. Two elements are essential to the comparison: a fundamental similarity between the two systems to be
compared, and a description of differences between the similar elements in the system (Hecksher, 1957).

It is impossible to compare all aspects of two systems, and posing the "right questions" is vital to any comparative study, without which there is a danger of being sidetracked in a wilderness of factual minutiae (Andrain, 1983). Thus there arises the problem of criteria of relevance; it is necessary to make a clear selection of the variables to be examined. The data analysis can be based on a previously established theory or in the light of particular problems (Hecksher, 1957).

In comparative studies of any nature, a fundamental question of validity exists, as the results can only be very approximate in character. General tendencies can be observed and the variables influencing developments can be explored, but the weight and value of each of these variables cannot be empirically established, which makes prediction difficult (Hecksher, 1957). A further limitation of such studies is the existence of conflicting tendencies, which seems to make statements about the future unreliable.

In any event, prediction and absolute certainty are not the aims of comparative research (Brown, 1962). Theories or hypotheses involving any form of political behavior can never be fully verified because of the ever changing nature of the political universe. The purpose of posing problems and collecting evidence is to gain an understanding of the subject under investigation. In essence, comparative analysis provides just another way of looking at a system (Brown, 1962).
Justification for the Selected Method

This study follows the general, broad framework pertaining to comparative analysis. The method of comparative analysis was the most feasible procedure to meet the objective of this study. As the aim of the study was to examine textile/apparel export patterns and government intervention of South Korea and India, 1955-1985, the research is centered around policy analysis. The pattern of textile/apparel exports of both countries was determined by examining the changes in the US dollar values of both countries' textile/apparel exports throughout the period studied.

In order to fulfill the three criteria of comparative analysis, i.e., description, explanation and evaluation, the study contains descriptions of policy measures and explanations of the reasoning governing their implementation. An evaluation of the effects of each policy is provided. As required by the method of comparative analysis, the research question and the hypotheses are based on theories of international trade and in particular, on the body of theory pertaining to trade orientation as described in the review of literature. As the time period covered in the study is fairly broad (1955-1985), a historical orientation is also present.

The fundamental similarity in the South Korean and Indian systems as identified by this study is the policy of strong domestic market protection and import substitution. A major difference of interest between the two systems is that South Korea promoted exports as a means of economic development, whereas India's policies were governed by
export pessimism. The similarity and difference as applicable to the development and
exports of the textile/apparel sector of both countries are explored.

As Andrain (1983) notes, it is impossible to compare all aspects of two systems. In
many cases, certain aspects are not comparable at all, and can be unique to a country.
India's policy of protection of the handloom sector was a unique policy and cannot be
compared with the industrial regulation in South Korea. However, this unique Indian
policy was of great relevance to the pattern of development of the textile/apparel sector,
and cannot be excluded from this study on the basis of its being not directly comparable
with South Korean policies. Criteria of relevance in examining the data need to be
established; those criteria judged most relevant to the development and exports of each
country's textile/apparel sector are included. The following section lists the variables
included in the study, the reasons for the selection of the variables and the limitations
inherent in the data which do not permit the data to be directly comparable for South
Korea and India.

The Variables Examined in the Study

The variables examined in this study have been chosen to fulfill the three criteria of
comparative analysis, i.e., description, explanation and evaluation. The variables selected
are also identified by the theory as relevant to policy analysis, and were examined to
determine whether they provided evidence to support the hypotheses of the study.
Figure 2 outlines the variables examined in the study.

Qualitative Variables Associated with Import Protection and Export Promotion

For both South Korea and India, the type and degree of import protection granted to domestic industries including the textile/apparel industry were analyzed qualitatively. In the qualitative analysis, policy measures which restricted overall imports as well as textile/apparel imports are described. The effects of these measures on the domestic textile/apparel industry and its exports are examined. The policy measures were different for South Korea and India, as both countries followed different development strategies.

To qualitatively evaluate the type and degree of import protection in South Korea, the system of quantitative controls on imports known as the semiannual trade program, as well as the system of tariffs on imports are described and analyzed. According to the literature (Kim, 1981; Kim, 1991; Leudde-Neurath, 1986; Nam, 1981; Westphal & Kim, 1977), these two systems were the most important instruments of import protection in South Korea, and they determined both the type and the quantity of imports. The effects of these policies on South Korean textile/apparel exports were evaluated.

A qualitative evaluation of export promotion in South Korea consisted of

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\(^2\)Even in the case of countries following similar development strategies, individual policies are rarely the same.
Figure 2. Policy Measures (variables) Examined in the Study.
examining the roles of preferential credit allowed to exporters and of direct export incentives. Both these measures greatly impacted the profitability of exporting in South Korea, and it is noted in the literature that the South Korean textile industry was built on preferential credit granted by the government (Kim, 1980; World Bank, 1992). Direct export incentives included measures which are unique to the South Korean regime, such as wastage allowances for exporters on duty-free imports as well as export entitlement licenses, both of which translated into cash subsidies. The impact of these export promotion measures on South Korean textile/apparel exports is considered.

The qualitative evaluation of the import protection and export promotion measures serves to establish the policy atmosphere in South Korea; researchers have remarked that in policy analysis, the most important factor to consider is the overall policy atmosphere prevalent in a regime (Haggard, 1990; Kreuger, 1990; Liang, 1992; World Bank, 1987). It follows that individual policy measures in South Korea are not comparable to those in India, as direct counterparts for policy measures across regimes do not exist.

To provide a picture of the policy atmosphere prevalent in India, the systems of industrial regulation, protection of the small scale industries and capacity licensing regulations were analyzed in detail. These policies greatly affected the pattern of development of all industries and specially that of the textile/apparel sector, thereby influencing the pattern of textile/apparel exports (Ahuwalia, 1991; Anubhai, 1988; Bhagwati & Desai, 1970; World Bank, 1989). In terms of import protection, India's system of quantitative controls was analyzed, since it was effective in almost completely
sealing off imports. The role of the tariff structure in restricting imports was also examined; the effects of import protection on textile/apparel exports was analyzed. Indian export promotion measures such as cash assistance and import licenses to exporters were considered, to see if they influenced textile/apparel exports in any way.

Quantitative Variables Associated with Import Protection and Export Promotion

A quantitative evaluation of the levels of import protection and export promotion is possible through the computation of effective rates of protection (ERP) or effective exchange rates (EER) for a regime. As mentioned in the conceptual framework, effective rates of protection influence the producer's choice and direct economic activity towards the protected sector. It was outside the scope of this study to compute effective rates of protection for the textile/apparel industries of South Korea and India. Rather, computations by other researchers were used to evaluate the levels of import protection and export promotion for both countries. The methods utilized by the researchers to derive ERPs are indicated in Chapters 5 and 6. A major limitation of these data was that they were not directly comparable for South Korea and India, as different methods of computation were used by the researchers for each country. Although the data on ERPs were not directly comparable, they served as indicators of the trade regimes prevalent in both countries.
The computation of effective exchange rates (EERs) for exports and imports for South Korea and India was also outside the scope of this study, and other researchers' computations were used to evaluate whether the two countries promoted textile/apparel exports. A major limitation of the data was that different methods for computing EERs were used for each country. These methods are indicated in the data chapters. Further, the data on EERs were for all exports and not specifically for textile/apparel exports. An assumption was made that the data on EERs was applicable to each country's textile/apparel exports. The justification for this assumption is given in Chapters 5 and 6.

An inherent limitation in the methodology is that certain variables, which may have been relevant to the study, have been omitted. These variables include, among others, the effects of restrictive bilateral agreements entered into with the importing countries, the size and geographical location of the countries being studied, and the political relationships of the two countries with the importing nations. However, these variables are not directly associated with the theory base, and in a comparative study, one needs to proceed under the premise that the most important variables are those which are identified by the theory (Brown, 1962).

Data Sources

The US dollar values of South Korea's and India's textile/apparel exports from 1955 to 1985 were obtained from the Yearbook of International Trade Statistics (1956-
1990). Data on the qualitative and quantitative variables examined in the study were compiled from various sources including World Bank reports, Korean Development Institute reports, research journals and books.
CHAPTER 5

ANALYSIS OF THE SOUTH KOREAN TEXTILE
AND APPAREL INDUSTRY

In the years following the Korean war, the South Korean textile/apparel industry emerged as the country's single largest exporting sector, accounting for almost 40 percent of the total exports in the late 1960s and early 1970s. This chapter examines the key elements of South Korean government policy in the context of the roles they played in the development of the textile/apparel sector and its exports. The policies included those of trade and industry which fundamentally affected incentives across different branches of the economy, as well as financial policies which governed the allocation of capital.

The chapter consists of two sections. The first section presents a qualitative evaluation of the South Korean textile/apparel industry, beginning with a historical overview and then describing the policy atmosphere affecting the industry throughout the period 1955-1985. Thereafter, major policies and their impact on the industry are discussed chronologically in some detail. The second section contains quantitative evaluations of the policies using data computed by different researchers, the interpretation of these in association with South Korean textile/apparel exports, and the limitations inherent in these quantifications. Major South Korean government policies affecting overall trade and industry are summarized in Table 4. Westphal and Kim's (1977) microstudy of the South Korean incentive structure is discussed at length, as their analysis
### Table 4
#### South Korea: Summary of Government Policies

<table>
<thead>
<tr>
<th>Period</th>
<th>Style of Government</th>
<th>Policies</th>
</tr>
</thead>
</table>
| 1910-1945    | Japanese Colonial Rule | Promotion of raw silk fiber exports to Japan  
                |                      | Promotion of the cotton textile industry               |
| 1945-1950    | US Occupation       | -                                                       |
| 1950-1953    | Korean War          | -                                                       |
| 1953-1961    | Dictatorship        | Import substitution in light manufacturing sectors      |
|              |                     | Strict import controls                                  |
|              |                     | Multiple exchange rates                                 |
|              |                     | Overvalued currency                                     |
| 1961-1973    | Dictatorship        | Import substitution in light manufacturing sectors      |
|              |                     | Export promotion incentives in light manufacturing sectors |
|              |                     | Strict import controls                                  |
|              |                     | Exporters received free access to imported inputs       |
|              |                     | Preferential credit to exporters of light manufactures  |
|              |                     | Realistic exchange rate                                 |
| 1973-1979    | Dictatorship        | Import substitution in Heavy and Chemical Industries (HCI) |
|              |                     | Strict import controls                                  |
|              |                     | HCI received free access to imported inputs             |
|              |                     | Preferential credit to HCI                              |
|              |                     | Export incentives for HCI                               |
|              |                     | Overvalued exchange rate                                |
| 1979-1985    | Democracy           | Shift towards trade and industrial neutrality           |
|              |                     | Slow termination of support to HCI                      |
|              |                     | Realistic exchange rate                                 |
has been used extensively in the past to support the view that South Korea followed a non-interventionist policy. However, a closer examination of their study indicates that South Korea followed a highly interventionist policy.

Qualitative Evaluation of the Policy Atmosphere

Historical Overview

The Korean textile industry was established in the early 1900s under Japanese colonial rule. During the period 1910-1945, the Japanese contributed to the expansion and modernization of cotton textile production and raw silk fiber production in South Korea, most of which was exported to Japan. At the end of the Japanese occupation and the partition of the country, South Korea retained over 80 percent of the textile industry which, along with most other industries, was almost totally destroyed during the war with North Korea from 1950 to 1953 (Kim, 1980).

Following the end of the Korean war in 1953, the government attempted to reconstruct the economy largely through a policy of import substitution in the light manufacturing sectors, and through the maximization of foreign aid. The period 1953-1961 was characterized by import substitution in light manufacturing including the textile/apparel sector, under the shield of strict import controls. Foreign trade was almost nonexistent, and imports were strictly controlled through a complex system of quotas.
Nearly all imports were financed by grant aid, and a system of multiple exchange rates applied to all transactions. This system lasted until the military government of President Park took power in 1961 (Frank, Kim & Westphal, 1977).

Although the policies of the government during this period were not particularly conducive to stable economic growth, they did prove fairly beneficial for the reconstruction and development of certain industrial sectors, most notably the textile industry (Kim, 1980). The import substitution in textiles and apparel and other light manufacturing industries was achieved through import protection as well as large amounts of grant aid to finance the imports of raw materials and capital equipment. The textile and apparel sectors accounted for over 30 percent of the value added in manufacturing during 1953-1961 (Kim, 1980).

President Park's government introduced aggressive export promotion incentives concentrated on the light manufacturing industries, while simultaneously encouraging backward vertical linkages and import substitution in the exporting sectors. The most notable among the sectors chosen for export promotion was that of textiles/apparel (Kasai, 1984; Kim, 1980; Moon & Chang, 1989; World Bank, 1992). The government's favorable attitude towards the sector, evident since 1953, ended in 1973 when the policy emphasis moved away from export promotion in light manufacturing towards import substitution in the heavy and chemical industries (HCI).

Various export promotion measures which aided the textile/apparel industry in the 1960s were now granted to HCI industries. Following the assassination of President Park
in 1979, the civilian government initiated serious attempts to liberalize the economy, and slowly began to withdraw direct controls over trade and industry (World Bank, 1992). Thus, the policy atmosphere affecting the textile/apparel industry over the study period 1955-1985 can be divided into two distinct phases: the period of promotion until 1973, and the period of neglect thereafter. The major policies affecting the industry were of three general types: import protection measures including quantitative and tariff barriers, credit allocation by the government, and direct export subsidies.

**Policy Measures Affecting the Textile/Apparel Sector: 1955-1978**

**Import Protection**

Import protection in South Korea took the form of tariff and quantitative restrictions which were so stringent until 1961 that they effectively sealed off the protected domestic industries from foreign competition, and they remained high for designated sectors until 1979 (Nam, 1981; Suh, 1981; World Bank, 1992). The basic tenets of the system and its impact on the textile/apparel sectors are described below.

**Quantitative restrictions.** The government controlled both the types and quantity of imports through a complex system known as the semiannual trade program. This program was instituted in 1953 and existed through 1985. The program included three categories of imports: those automatically approved (AA); restricted goods which needed the
authority of the Ministry of Commerce and Industry (MCI) in order to be imported; and
goods which were prohibited for import (Frank, Kim & Westphal, 1975).

Restricted and prohibited items were luxuries, domestically produced items, or
goods prohibited for so-called reasons of public health or morals. AA items included
essential consumer goods not produced domestically, raw materials or certain capital
goods. Imports used for export production were on the whole freely importable,
irrespective of their classification (Frank, Kim & Westphal, 1975; Leudde-Neurath, 1986;
World Bank, 1992). In 1957, the list of prohibited items included cotton, woolen and
rayon woven and knitted textiles, on the grounds that these were domestically produced.
During the 1960s and 1970s, most textile and apparel items fell in the restricted category
(Balassa, 1977; Kim, 1981; Suh, 1981). It was only after 1985 that 100 percent of textile
and apparel finished goods became freely importable.

The system of quantitative restrictions was hardly straightforward and simple.
Although the number of prohibited items decreased, the number of restricted items rose,
and as Table 5 shows, there was overall little if any import liberalization through the 1960s
and 1970s (Nam, 1981). Applications for the import of restricted items were screened by
the MCI, another designated ministry or government agency, or by a producers'
association. Import applications were considered semi-annually on a case-by-case basis,
and the decision made by the designated agency was binding until a later application.

Import rules for restricted items, as published by the screening agency, specified
who was eligible to submit import applications and what conditions needed to be
Table 5
Numbers of Import Categories Affected by
Semiannual Trade Program: 1961-1983

<table>
<thead>
<tr>
<th>Period</th>
<th>Total Items (A)</th>
<th>Prohibited</th>
<th>Restricted</th>
<th>Automatic Approval (B)</th>
<th>Semi-annual Rate of Import Liberalization (B/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961 I</td>
<td>1886</td>
<td>305</td>
<td>35</td>
<td>1546</td>
<td>0.82</td>
</tr>
<tr>
<td>1961 II</td>
<td>1487</td>
<td>355</td>
<td>117</td>
<td>1015</td>
<td>0.68</td>
</tr>
<tr>
<td>1962 I</td>
<td>1680</td>
<td>366</td>
<td>119</td>
<td>1195</td>
<td>0.71</td>
</tr>
<tr>
<td>1962 II</td>
<td>1931</td>
<td>433</td>
<td>121</td>
<td>1377</td>
<td>0.71</td>
</tr>
<tr>
<td>1963 I</td>
<td>1931</td>
<td>442</td>
<td>713</td>
<td>776</td>
<td>0.40</td>
</tr>
<tr>
<td>1963 II</td>
<td>1447</td>
<td>414</td>
<td>924</td>
<td>109</td>
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<tr>
<td>1964 I</td>
<td>1741</td>
<td>617</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
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<td>1127</td>
<td>631</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1965 I</td>
<td>2182</td>
<td>624</td>
<td>111</td>
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<td>1965 II</td>
<td>2253</td>
<td>620</td>
<td>138</td>
<td>1495</td>
<td>0.66</td>
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<tr>
<td>1966 I</td>
<td>2823</td>
<td>583</td>
<td>136</td>
<td>2104</td>
<td>0.75</td>
</tr>
<tr>
<td>1966 II</td>
<td>2832</td>
<td>386</td>
<td>139</td>
<td>2307</td>
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<tr>
<td>1967 I</td>
<td>3444</td>
<td>362</td>
<td>132</td>
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<tr>
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<td>1312</td>
<td>118</td>
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<td>796</td>
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<td>713</td>
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<td>668</td>
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<th>Restricted</th>
<th>Automatic Approval (B)</th>
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<td>1312</td>
<td>73</td>
<td>570</td>
<td>669</td>
<td>0.51</td>
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<td>665</td>
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<td>592</td>
<td>649</td>
<td>0.49</td>
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<td>1979 II</td>
<td>1010</td>
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<tr>
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</tbody>
</table>

fulfilled. In certain cases, import rights were linked to the fixed percentage of consumption of domestic counterparts, or were permitted only if the price of the domestic counterpart exceeded the import price by a certain margin (Frank, Kim & Westphal, 1977; Leudde-Neurath, 1986).

The fact that the system of quantitative restrictions abetted the development and export expansion of the textile/apparel industry indicates that it was hardly haphazard or arbitrary, as has been the case with many developing countries. During the early period of development (1953-1961), all equipment and raw materials required for textile production were freely importable, whereas finished textile goods were restricted. Apart from raw silk, South Korea produces almost no natural fibers, and the government found it necessary to use the available agricultural land for the production of food grains.

The government allowed the unrestricted import of natural fibers and yarn until the 1960s, and the industry was encouraged to complete import substitution for the domestic market (Kim, 1980). South Korea's meager manufactured exports in the late 1950s were dominated by textile industry goods, and the sector was identified by the government in 1961 as a potentially large export earner. The system of import protection which at first had been established to expand domestic supply to the home market was now geared towards supplying the export market (Kim, 1980; Suh, 1981).

Beginning in 1961, unrestricted imports of raw materials and capital equipment

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3 Details of the conditions importers needed to fulfill are discussed later.
were only allowed to those who produced a substantial amount for the export market. As South Korea began developing its chemical fiber and yarn spinning industries in the mid-1960s, the imports of these were allowed solely to exporters. The infant chemical fiber industry grew through production for the totally protected domestic market (i.e., as a supplier for producers who sold textiles to domestic consumers), until it reached international price and quality competitiveness in the early 1970s (Kim, 1980; McDermott & Young, 1989). At that point, the government forced exporters to utilize a certain amount of domestic fiber in their production. It should be noted that the chemical fiber industry was identified as a future supplier to the export oriented textile industry, and received free access to capital equipment, plus the whole range of export incentives which are discussed later.

The yarn spinning, weaving and knitting industries were also identified as potentially large export earners, and no quantitative restrictions on raw materials applied to producers of exportables. Those selling to the domestic market were forced to buy domestically produced raw materials. The import of apparel was prohibited or severely restricted throughout the period under study (Leudde-Neurath, 1986; World Bank, 1992).

Tariff restrictions. The system of tariffs closely coupled with the system of quantitative restrictions. As indicated by Table 6, the tariff structure in South Korea was complex, with finished goods taxed far more than intermediate goods or raw materials. However, major export industries received full tariff exemptions on imports of raw
Table 6
Tariff Structure (percent of total value), 1953-1979

<table>
<thead>
<tr>
<th></th>
<th>Raw Material Stage</th>
<th>Intermediate Stage</th>
<th>Finished Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protected Items</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Protection</td>
<td>40 - 60</td>
<td>40</td>
<td>50 - 70</td>
</tr>
<tr>
<td>Low Protection</td>
<td>25 - 35</td>
<td>30</td>
<td>40 - 50</td>
</tr>
<tr>
<td>Restricted Items</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import Prohibited</td>
<td>60 - 80</td>
<td>100</td>
<td>80 - 100</td>
</tr>
<tr>
<td>Import Restricted</td>
<td>40 - 60</td>
<td>80</td>
<td>50 - 70</td>
</tr>
<tr>
<td>Items Not Produced Domestically</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Tariff</td>
<td>0 - 10</td>
<td>10</td>
<td>0 - 10</td>
</tr>
<tr>
<td>Capital Goods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Industrial Use</td>
</tr>
<tr>
<td></td>
<td>0 - 40</td>
<td>20</td>
<td>0 - 50</td>
</tr>
</tbody>
</table>

Source: Adapted from Suh (1981, p.18-19).
materials and machinery used for export production.

Textile and apparel industry related finished and intermediate goods were in the restricted category, where tariffs were exceedingly high. These tariffs on raw materials were completely waived when required in the production of exportables (Suh, 1981). The government allowed the tariff-free entry of natural fibers, yarn, and even fabric for apparel production when domestic production was not suitable in price or quality for export end usage.

In the 1950s and the 1960s the exporters of woven and knitted fabrics were granted tariff exemptions on imported natural and chemical fibers and yarns, as well as on all machinery. From 1965, all tariff exemptions were also extended to fabric producers which did not export directly but were suppliers to the exporting apparel companies. If exporting apparel manufacturers could prove the non-availability of domestic fabric supply at the required price/quality to remain competitive, they were granted total tariff exemptions on required fabric imports.

As the government began developing the man-made fiber industry and the yarn spinning industry in the 1960s, these industries were identified as potential domestic suppliers for the exporting textile industry and were granted full tariff exemptions on required imports (Nam, 1981). By the mid-1970s when the government decided that domestically produced man-made fibers had reached international standards and prices, it imposed tariff restrictions on imports of such fibers even if they were destined for export end usage (Nam, 1981; Suh, 1981).
Thus, a clear pattern of import protection emerges: one which fostered the development of backward vertical linkages, and the growth of new sectors through sales to the protected domestic market, until they developed into efficient suppliers for exporters.

**Foreign exchange controls, deposits and licenses.** The protection of the domestic market was further accentuated through foreign exchange controls. Each import transaction required a license, even in the case of AA items. Foreign exchange, in turn, could only be obtained through the government controlled foreign exchange banks. With banks to control foreign exchange outflows, it was possible to restrict any import type deemed necessary, simply by instructing banks to limit the issue of licenses for specified import types, whether AA or restricted (Leudde-Neurath, 1986).

Further, importers were required to make advance deposits worth 100 or more percent of the value of the imports. Deposits were usually made at the time when import applications were made, and were kept in non-interest bearing accounts until the bill of lading was released. In this system, advance deposits were much higher on items for domestic as opposed to export use and on goods with high tariffs.

Apart from these measures, there were innumerable insidious ways to restrict undesirable imports, which are far too complex and numerous to include in this study⁴. As a result, the semi-annual trade program and the import liberalization ratio, which were

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policy measures intended to liberalize imports, can be misleading. Items listed under AA were not in reality freely importable, and were often no less restricted than items listed as prohibited. In this scenario, industries requiring imported inputs were at the mercy of the government, and to be favored as a strategic sector was almost a prerequisite for export success.

The Role of Preferential Credit

The textile industry was built in the 1960s through easy access to credit provided by the government-run banking system. Not only was the industry favored in obtaining finance for investment and working capital, it was further supported at the marketing stage by export promotion loans made available to export activities (World Bank, 1992). The role of finance has been of crucial importance in South Korea, and preferential credit has been the most widely used incentive to assure private industry's close compliance with government plans regarding the direction of industrial development (World Bank, 1992).

The importance of obtaining credit at preferential rates lay in the difference between preferential interest rates and curb market interest rates; the latter were approximately 22-25 percent higher. Until the early 1980s, the financial system was strongly regulated by the government. Commercial banks as well as special banks were under almost complete control of the government, which was in fact the largest shareholder. In addition, foreign loans also required government authorization and their allocation was largely controlled by the government (Leudde-Neurath, 1986).
The government channelled support for exports through the state-controlled banking system, and rates charged for export activities were particularly low. Throughout the 1960s and the early 1970s, the textile/apparel industry benefitted from preferential credit facilities (World Bank, 1992).

The government provided two kinds of incentives for textile/apparel exporters\(^5\). First, the government increased the expected rate of return of investment by controlling the interest rate and allocation of bank loans. As Figure 3 indicates, the nominal interest rate for export credit dropped substantially from 1962 to 1965, and remained at a low rate from 1967 until 1973. The non-preferential bank rates were 26 percent from 1967 until 1973, and the curb market rates were in the range of 40-45 percent per annum\(^6\). At the same time, the amount of short term credit available to exporters rose from 78 percent of their financing requirement in 1965 to 94 percent by 1972.

The second type of incentive was that the government changed the perceived risk of investment by assuring a stable flow of loans to investing firms regardless of their financial performance, thus becoming a risk partner in costly and long term projects (World Bank, 1992). This feature was the major determinant of the development of the chemical fiber industry, which required almost a decade to reach international

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\(^5\) The major export industries which benefitted from preferential access to credit were textiles/apparel, footwear, plywood, electrical machinery and apparatus and others (Frank, Kim & Westphal, 1975).

\(^6\) The extremely high curb market rates were due to the scarcity of capital; most of the available capital was under government control (World Bank, 1992).
Figure 3. South Korea: Nominal Interest Rates of Export Financing

Source: Adapted from Kim (1981, p.8).
competitiveness. The government also encouraged foreign capital investment in the chemical fiber industry from the late 1960s (World Bank, 1992).

Direct Export Incentives

The structure of import restrictions and the system of preferential credit were in themselves major export incentives in South Korea, and were buttressed by various other incentives to promote exports or to discourage imports not required for export end usage. The major incentives which were applicable to the light manufacturing sectors are described below. The textile and apparel sectors benefitted from all these incentives which were granted to strategic exporting sectors (Frank, Kim & Westphal, 1975; Kim, 1981; Moon & Chang, 1989).

Wastage allowance subsidies. Exporters were allowed to import more than needed raw materials under the guise of "wastage" during production. Also, they were allowed to sell the excess to other industries or to industries producing for the domestic market at the domestic market rate. As those without import allowances had to pay high tariffs (quantitative restrictions further pushed up domestic market prices), efficient producers of exportables could make large profits through these sales.

Large rents could be earned in the textile/apparel sector from wastage allowances, since related raw materials were included in the import restricted category and tariffs on imports ranged from 40-80 percent for fibers and yarns, and 50-100 percent for textiles (Frank, Kim & Westphal, 1977; Leudde-Neurath, 1986). The main items which received
large wastage allowances in the 1960s were textile industry related raw materials (Leudde-Neurath, 1986).

**Export-import link system.** Under the export-import link system, holders of foreign exchange earned from exports were granted special licenses or export dollars, which allowed them to use a percentage (an average of 6 percent) of their export earnings for importing prohibited items. Holders of these so-called import entitlements were allowed to trade the license freely on the domestic market. Because of exporters' ability to secure prohibited goods, these export dollars were worth a high rate on the domestic market and constituted an effective cash subsidy (Frank, Kim & Westphal, 1977).

As Figure 4 shows, under South Korea's system of tightly controlled foreign exchange, the value of export dollars often exceeded the black market rate. The export-import link system remained until 1971, although data on the market rates of export dollars are only available until 1965. Exporters also received direct cash subsidies, reduced rates on public utilities, and indirect and direct tax exemptions (Nam, 1981).

**Importer registration conditional on export performance.** A method of encouraging exports and controlling imports was implicit in the system for licensing all traders. Permission to engage in foreign trade was restricted to those firms holding a trader's license. Trader licenses did not necessarily entail the right to import, and export obligations were higher for traders with import rights than for those without import rights.
Figure 4. South Korea: Nominal Exchange Rates of Won to US Dollar, 1955-1970

Source: Adapted from Frank, Kim & Westphal (1975, p.30-31).
(Leudde-Neurath, 1986) The minimum export obligations for importers increased from US$ 100,000 in 1966 to US$ 1 million in 1978, thereby ensuring that importers steadily increased export sales. Exporters also received full indirect tax exemptions and a 50 percent reduction in the business income tax (Suh, 1981).

Thus, throughout the period 1955-1972, the policy atmosphere was extremely conducive to exports of light manufactures in general, and specifically so for the textile/apparel sector. As Figure 5 indicates, textile/apparel exports increased from about five percent of total exports in 1958 to almost 40 percent of total exports in 1968, and remained as high as 30 percent in 1972. As a percent of manufactured exports (see Figure 6), textile/apparel exports grew from almost 40 percent in 1958 to over 80 percent in 1968. Although they dropped back to under 40 percent in 1972, they remained South Korea's single largest export throughout the 1970s and early 1980s (McDermott & Young, 1989).

**Policy Measures: 1973-1979**

In 1973, the government announced a major shift in policy away from export promotion in the light manufacturing sector to a sectoral development strategy focused on the heavy and chemical industries (HCI). The assumption was that South Korea was losing comparative advantage in light manufacturing, and needed to diversify its export base. The HCI drive represented a drastic policy change in favor of specific HCI targets,
* Apparel exports data not available for all years.

Figure 5. South Korean Textile/Apparel Exports as a Percent of Total Exports, 1958-1972

Figure 6. South Korean Textile/Apparel Exports as a Percent of Total Manufactured Exports, 1956-1972

Source: Adapted from United Nations (1956-1975).

*Apparel exports data not available for all years.
and a wide ranging commitment by the government to use trade and financial policies in order to steer resources towards HCI.

The choice of industries to benefit from incentives excluded textiles, apparel, footwear and other light industries, which accounted for over two-thirds of exports in the early 1970s (Balassa, 1976). The abrupt manner in which the switch was undertaken proved detrimental to the textile/apparel sector (Nam, 1981; Suh, 1981; World Bank, 1992), as described below.

Change in the Structure of Protection

The structure of import protection, which was extremely beneficial for textile/apparel exporters during the 1960s and early 1970s, was revamped by the government in 1973 to suit the new policy objectives. The earlier system allowed producers of exportables to earn large rents on the protected domestic market while procuring inputs for exportables at world market prices. Under the system introduced in 1973, there was a general plan to reduce protection of the light manufacturing sector. Thus, tariffs for intermediate and capital goods industries rose, while those for consumer goods decreased.

In its enthusiasm to establish a heavy industries base, the government declared the textile/apparel industry a "sunset" industry (Moon & Chang, 1989) and decided to slowly phase it out as an important export sector. Considering that textiles/apparel consisted of almost 40 percent of total manufactured exports in 1971 and 1972, the decision of the
government was arguably premature.

The government eliminated the automatic tariff exemptions on raw materials required in the production of textile/apparel exports. The aim was to increase the sales of domestic producers of chemical fibers, which was the only segment of the textile industry included in the HCI drive, mainly as it was linked to the petrochemical industry. Although imported inputs for export end usage were not subject to as high tariff rates as those for domestic end usage, these inputs were now included in a system of "limited tariff drawbacks". Under this system, only natural fibers (excluding silk) were fully exempt from tariffs. Drawback rates were determined on a product-by-product basis, and exporters had to finance the customs duties until rebates were paid (Balassa, 1976).

Quantitative restrictions on textile/apparel imports for the domestic market also loosened, as more and more items were removed from the restricted category and allowed into the AA category7. However, as noted earlier, the categorization of AA was subject to doubt; the only safe assumption is that exporters saw their domestic profits decrease as they paid tariffs on imported inputs. Further, export prices could not be raised in order to remain internationally competitive (the industry was almost totally dependent on exports), and the loss of scarcity rents on the domestic market further cut into profits.

In terms of capital equipment required in the production of exportables, producers

7 The literature is contradictory over this issue. The World Bank (1992, Volume I, Chapter 2) states that quantitative restrictions were relaxed for textile/apparel goods, whereas the same issue (Volume II, Chapter 7) says that these goods remained highly protected well into the 1980s. Nam (1981) and Leudde-Neurath (1986) also state that there were no significant import liberalizations.
were no longer allowed duty free imports. Exemptions were only granted to the import of capital goods which were not domestically produced or to industries included in the HCI sector, regardless of whether they produced for the export or for the domestic market (Kim, 1981). Imports of textile and apparel machinery were prohibited in an attempt to boost domestic machinery sales (World Bank, 1992).

**Change in Preferential Credit Financing**

As mentioned earlier, the government exercised heavy control of the entire credit system and provided favored industries preferential credit at subsidized rates. The abrupt shift to HCI promotion in 1973 was so massive that the textile industry was starved of funds (World Bank, 1992). Declining profitability due to the sudden and overall withdrawal of export incentives further aggravated the credit access problem. As Figures 7 and 8 indicate, loans and discounts of commercial banks to the textile industry declined, leading to a rise in the cost of capital (measured by the ratio of financial expenses to total borrowing), as firms were forced to borrow from the curb market. The apparel industry was not as badly affected as the textile industry by reduced finance, mainly due to its low capital requirements (World Bank, 1992).

**Export Incentives Reduction**

The promotion of HCI led to reductions or abolition of almost every export promotion incentive for the textile/apparel sector; the incentives earlier accorded to it
*Heavy and chemical industries

Figure 7. South Korea: Shares of Credit Allocation by Commercial Banks

Source: Adapted from World Bank (1992, p.156).
Figure 8. South Korea: The Cost of Borrowing as Ratio of Financial Expenses/Total Expenses
Source: Adapted from World Bank (1992, p.157).
were diverted to HCI. Thus, wastage allowances were reduced, the export-import link system was abolished (although this took place earlier, in 1971), and discounts on overheads (electricity, transport) were abolished (Suh, 1981).

The withdrawal of favored treatment was not the only problem which affected the textile/apparel sector. The massive diversion of resources to HCI and the structural transformation effected by it occurred too rapidly, resulting in substantial unused capacity as well as concentrated investment in the economy's most capital intensive industries. The high rate of capital formation, which was supported in part by rapid monetary growth, led to accelerated inflation. At the same time, to minimize the pressure on prices, the government held the nominal exchange rate constant. The result was a sharp appreciation of the won, and a resulting decrease in the competitiveness of exports (Haggard, 1991). The continuing inflation raised wages across the economy, and for a labor intensive and export dependent industry such as textiles/apparel, increased wage costs could instantly erode international competitiveness.

As Figure 9 indicates, the real growth rates of the textile industry decreased sharply in 1973-1974 and thereafter remained lower than when growth had outpaced the average for all manufacturing. Figures 10 and 11 show that the share of textile/apparel exports as a percent of total exports and as a percent of total manufactured exports

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8 As part of the promotion of the export sector in the 1960s, labor was strongly repressed in Korea by the government. Unions were almost banned, and the military government controlled wages in labor (Haggard, 1990).
Figure 9. South Korea: Real Growth Rates of the Textile Industry, Manufacturing Sector and GNP, 1968-1984
Source: Adapted from World Bank (1992, p.149).
Figure 10. South Korean Textile/Apparel Exports as a Percent of Total Exports, 1972-1984

Figure 11. South Korea: Textile/Apparel Exports as a Percent of Manufactured Exports, 1973-1985

decreased in this period. Yet the sector remained South Korea's overall largest export earner.

By 1979, the economy faced formidable problems. The HCI program absorbed too much of the economy's resources, capacity utilization in the HCI sector was low, inflation was high and the exchange rate was overvalued, leading to faltering exports. At the same time, there was great political instability in the wake of President Park's assassination. External causes such as the effects of the second oil shock and the world depression exacerbated the internal problems (Haggard, 1990).

Policy Measures: 1979-Onwards

The civilian government which came to power after Park's assassination announced a policy shift towards greater trade and industrial neutrality. The government began terminating the support granted to HCI, and introduced various restructuring programs for the light manufacturing sectors which had been major export earners. In an attempt towards liberalizing imports, the government announced its ultimate policy objective was to remove quantitative restrictions on 95 percent of imports by 1988. However, as Table 7 indicates, tariffs on textile/apparel imports for domestic use remained rather high, specially for apparel, affording a fair amount of protection to the industry (World Bank, 1992).

The loss of credit during the 1970s led to certain problems which only surfaced in the early 1980s, mainly that of machinery which was old by engineering standards.
Table 7
Import Liberalization Program

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Automatic Approval Process</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Proportion of Total Items Subject to Automatic Approval</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Items</strong></td>
<td>74.7</td>
<td>76.6</td>
<td>80.4</td>
<td>84.8</td>
<td>87.7</td>
<td>91.6</td>
<td>93.6</td>
<td>95.4</td>
</tr>
<tr>
<td><strong>Textile/Apparel Items</strong></td>
<td>65.4</td>
<td>68.4</td>
<td>79.9</td>
<td>90.3</td>
<td>93.1</td>
<td>96.1</td>
<td>96.9</td>
<td>98.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tariffs Collected</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collections as a Percentage of Total Imports for Domestic Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5.92</td>
<td>7.33</td>
<td>8.57</td>
<td>10.19</td>
</tr>
<tr>
<td><strong>Textiles</strong></td>
<td>11.65</td>
<td>18.10</td>
<td>15.48</td>
<td>16.77</td>
</tr>
<tr>
<td><strong>Apparel</strong></td>
<td>47.16</td>
<td>27.79</td>
<td>43.84</td>
<td>31.40</td>
</tr>
</tbody>
</table>

Source: Adapted from World Bank (1992, p.61-70).
Significant technical innovations in spinning and weaving took place in the OECD countries during the 1970s. These were a means of countering the labor cost advantage of the developing countries, whose imports were severely affecting developed country producers. The lack of credit availability during the 1970s manifested itself in the relatively outdated machinery in South Korean textile mills in the early 1980s. The problem was concentrated in textiles, as much less automation had occurred in the apparel sector. Outdated machinery coupled with high wage costs led to the erosion of South Korea's international market share in textiles, which was quickly absorbed by China (World Bank, 1992).

To restructure the industry, the government set up a Textile Modernization Fund in 1981, the purpose of which was to provide loans to modernize factories. The government planned to contribute an amount which the industry itself was to match, and specific targets for the purchase of new machinery were set. Unfortunately, neither the government nor the industry came up with even half the proposed amount, the former due to the tight fiscal policy followed in order to control inflation and the low priority given to the fund (Moon & Chang, 1989; World Bank, 1992).

The industry was once more provided with easier access to credit through export credit channels, although the applicable interest rates were the regular commercial bank rates. Although significantly lower than curb market rates, the declining prospects for the sector led to a fall in overall credit allocation for the industry measured as a percentage of bank portfolio. The new government policy to refrain from direct intervention in industry
and trade left the sector without any significant incentives in terms of special subsidies. Although textiles/apparel were still among South Korea's top export earners in 1985, it was clear that the sector was yielding its export market share to other developing countries.

Quantitative Evaluation of the Policy

Atmosphere: 1966-1978

Export Promotion as Evidenced Through

Effective Exchange Rates

This section addresses the relationship between the real effective exchange rate for exports and the growth rates of the textile/apparel industry in South Korea. According to economic theory, when the real exchange rate and the real effective exchange rate for exports appreciate, exports lose competitiveness. Since the textile/apparel industry in South Korea was largely dependent upon export earnings, it was affected by changes in the real effective exchange rates for exports.

After the 1964 exchange rate reform, South Korea maintained a realistic exchange rate until the early 1970s, i.e., the exchange rate was close to what it would have been under a floating exchange rate system. In addition, exporters received various export subsidies, which helped the real effective exchange rate for exports by increasing the
amount of won received per dollar of exports. Nam (1981) computed the change in the effective exchange rate for all exports caused by interest subsidies, tariff exemptions and direct and indirect tax exemptions for the period 1966-1978⁹, and the data on these are presented in Table 8.

A lack of time series data did not permit Nam to include subsidies provided by wastage allowances, the export-import link system nor preferential rates on electricity and transport. The author also notes that the interest subsidy was measured as the difference between rates of preferential credit and non-preferential bank lending rates. However, the non-preferential rates were under complete government control and were often set at unrealistically low rates, so much so that the free market rates were double the non-preferential bank rates. As a result, the interest subsidies measured in the study could represent a substantial underestimate.

Column A in Table 8 is the official exchange rate, and columns B to E quantify the four different types of subsidies in terms of won per dollar of exports. Adding all four types of subsidies to the official exchange rate gives the gross nominal effective exchange rate in column F. Considering that indirect tax and tariff exemptions simply balance out indirect payments and do not reflect genuine subsidies, the net nominal exchange rate

⁹Nam's analysis which is presented in Table 8 was for all exports, and this study assumes that the real effective exchange rates for exports were applicable to the textile/apparel sector. This assumption is based on the government policy which strongly promoted textile/apparel exports, and on the fact that textile/apparel exports were one of South Korea's largest export earners during the period of Nam's (1981) analysis.
Table 8  
Nominal and Effective Exchange Rates for All Exports, 1966-1978  
(Won per Dollar)

<table>
<thead>
<tr>
<th>Year</th>
<th>Official Exchange Rate A</th>
<th>Interest Subsidy B</th>
<th>Direct Tax Reduction C</th>
<th>Indirect Tax Exemption D</th>
<th>Tariff Exemption E</th>
<th>Nominal EER (Cross) F</th>
<th>Nominal EER (Net) G</th>
<th>PPP Index H</th>
<th>Real Exchange Rate I</th>
<th>Real EER (Cross) J</th>
<th>Real EER (Net) K</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>270.3</td>
<td>4.1</td>
<td>2.3</td>
<td>17.8</td>
<td>21.3</td>
<td>315.8</td>
<td>276.7</td>
<td>171.4</td>
<td>463.3</td>
<td>541.3</td>
<td>473.3</td>
</tr>
<tr>
<td>1967</td>
<td>268.3</td>
<td>7.8</td>
<td>5.2</td>
<td>18.9</td>
<td>25.7</td>
<td>325.9</td>
<td>281.3</td>
<td>162.1</td>
<td>434.9</td>
<td>528.3</td>
<td>456.0</td>
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<tr>
<td>1968</td>
<td>276.3</td>
<td>13.8</td>
<td>3.2</td>
<td>21.2</td>
<td>42.3</td>
<td>356.9</td>
<td>293.3</td>
<td>154.6</td>
<td>427.2</td>
<td>551.8</td>
<td>453.4</td>
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<tr>
<td>1969</td>
<td>288.4</td>
<td>14.1</td>
<td>3.9</td>
<td>29.0</td>
<td>36.2</td>
<td>371.7</td>
<td>306.4</td>
<td>150.3</td>
<td>433.5</td>
<td>558.7</td>
<td>460.5</td>
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<td>1970</td>
<td>310.4</td>
<td>16.6</td>
<td>3.6</td>
<td>28.5</td>
<td>42.6</td>
<td>401.8</td>
<td>330.7</td>
<td>140.9</td>
<td>437.4</td>
<td>566.1</td>
<td>466.0</td>
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<tr>
<td>1971</td>
<td>350.1</td>
<td>18.9</td>
<td>5.1</td>
<td>34.1</td>
<td>50.9</td>
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<td>374.1</td>
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<td>491.9</td>
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<td>-</td>
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<td>1977</td>
<td>484.0</td>
<td>9.4</td>
<td>-</td>
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<td>30.6</td>
<td>589.9</td>
<td>493.4</td>
<td>94.0</td>
<td>455.0</td>
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<td>463.8</td>
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<tr>
<td>1978</td>
<td>484.0</td>
<td>11.0</td>
<td>-</td>
<td>30.0</td>
<td>30.0</td>
<td>567.6</td>
<td>495.0</td>
<td>96.3</td>
<td>466.1</td>
<td>546.6</td>
<td>476.7</td>
</tr>
</tbody>
</table>

EER: Effective Exchange Rate  
PPP Index: Purchasing Power Parity Index  

(column G) was calculated excluding them. Column H is the purchasing power parity (PPP) index, obtained by dividing the wholesale price index of South Korea's major trading partners with that of South Korea's wholesale price index. Column I is the real exchange rate, obtained by multiplying the official exchange rate (column A) with the PPP index (column H). To obtain the gross real effective exchange rate for exports (column J), the gross nominal exchange rate (column G) is multiplied by the PPP index (column H).

The net real effective exchange rate (EER) for exports (column K) is derived by multiplying the net nominal exchange rate (column G) with the PPP index (column H).

The net real EER for exports (column K), which is the net amount of won received by South Korean exporters per dollar of exports, remained quite close to the real exchange rate (column I) from 1966 to 1978, indicating that the government maintained a realistic exchange rate throughout this period. The net real EER for exports fluctuated somewhat from 1966 to 1970. A major depreciation of the won occurred in 1970-1971, followed by further decline to reach its lowest value in 1973 for the period shown.

Thereafter, an appreciation of the won which began in 1974 lasted through 1978. The appreciation was a result of the combination of the oil shock in the mid-1970s and the government's abrupt switch to the promotion of HCI at the expense of light manufacturing.

As was indicated in Figure 8, the real growth rate of the textile industry was increasing and higher than that of the overall manufacturing growth rate from 1969 to 1973. The real growth rate of the textile industry reached a peak in 1973, which was also
the year when the won was at its lowest value in the period shown by Nam (1981). After
1973, the real growth rate of the textile industry decreased sharply, and followed an
erratic pattern thereafter.

According to Nam (1981), it is difficult to separate the effects of decreasing export
competitiveness due to an appreciation of the net real EER (Table 8, column K) from the
effects of the world recession following the 1973 oil shock. However, the textile industry's
low average real growth rate of 5 percent over 1979-1984, compared to the 20 percent
average over 1970-1978, points to a slow decline of the industry. Also, since the export
subsidies no longer applied to the sector after 1973, one can safely assume that the net real
EER for textile/apparel exports appreciated even more than the net real EER for all
exports.

Figure 12, which is compiled from columns A and K of Table 8, shows that the
nominal exchange rate followed a path similar to that of the net real EER for all exports
until 1973. Thereafter, although the nominal exchange rate registered a depreciation in
1974 and remained constant until 1978, the net real EER appreciated substantially in
1974. The latter reflects the effects of the 1973 oil shock and the government's policies of
import substitution in the HCI sectors, which led to excessive monetary expansion and
inflation. Had the government allowed the nominal exchange rate to depreciate enough to
counteract the external shock and the internal imbalance, the effects on the net effective
exchange rate would not have been so negative.
Figure 12. South Korea: Nominal and Net Effective Exchange Rates for all Exports, 1966-1978
Source: Adapted from Nam (1981, p.194).
Analysis of Protection: Westphal and Kim's (1977) Study

This section discusses Westphal and Kim's (1977) quantitative study on the structure of protection in South Korea. The authors concluded that the trade regime in South Korea was liberal and close to that of a free trade regime. A closer examination of Westphal and Kim's study shows that the trade regime in South Korea was highly protectionist and in favor of import substitution.

Significance of Westphal and Kim's Study

When the government of South Korea initiated efforts at strong export promotion in the early 1960s, import barriers in the form of tariffs and quantitative restrictions were high. In the mid-1960s, the government announced an import liberalization program, which culminated in the new semi-annual trade program as well as the tariff reform proposal of 1967. In the new semi-annual program, 60 percent of total imports were declared to be under the category of AA (freely importable), and a gradual reduction of tariffs on most imports was announced (Kim, 1991).

Based on these reforms, the proponents of the theory of trade orientation and in particular the World Bank assumed that South Korea had shifted from a policy of import substitution to export promotion, whereby importers and exporters operated under a virtually free trade regime. The World Bank (1987) remarks that "in addition to
maintaining relative neutrality in its trade policies, South Korea has kept its interventions limited" (p.70). As empirical evidence for these views, Westphal and Kim's (1977) extensive microstudy of South Korea's import regime for 1968 has been widely quoted (Balassa, 1971, 1978, 1991; Bhagwati, 1990; Kreuger, 1984; Nam, 1981; World Bank, 1987).

The Main Features of Westphal and Kim's Study

According to Westphal and Kim (1977), a fully adequate assessment of South Korea's import policy could not be undertaken based on legal tariff rates (tariff rates published by the government) nor on the basis of prevailing quantitative restrictions (QRs), as many of these were effectively waived by the government. Instead, the authors chose to rely on a direct price comparison survey of domestic and world prices for comparable commodities. In all, price comparisons were secured for 365 commodity groups, accounting for 70.8 percent of domestic sales and 78.2 percent of export sales.

Westphal and Kim (1977) calculated the nominal rates of protection\textsuperscript{10} and the effective rates of protection\textsuperscript{11} for each of the commodity groups, with the latter calculated

\textsuperscript{10} The nominal rate of protection was computed as being equal to the percentage excess of the actual domestic price over the domestic currency equivalent of the world price at the official exchange rate.

\textsuperscript{11} The effective rates of protection were estimated by deducting the value of intermediate inputs plus depreciation from sales receipts net of indirect taxes. Producer price value added was calculated in the prices actually received and paid by the producer, whereas world price value added was obtained by valuing output and intermediate inputs plus depreciation in the domestic currency equivalent (at the free market exchange rate) of world prices.
according to both the Balassa and the Corden conventions\textsuperscript{12}. Further, the authors computed the rates of effective subsidies for domestic and export sales\textsuperscript{13}, as the usual measures of protection exclude subsidies in the form of tax exemptions and preferential credits. Although these subsidies do not change value added at world market prices, they do affect the composition of value added after taxes, and provide particular sectors with substantial incentives (Westphal & Kim, 1977).

Of the 365 price comparisons, Westphal and Kim (1977) note that a number of commodities were found to have domestic prices below their world prices, yielding negative nominal rates of protection (NRPs). With various exceptions, the usual estimate assigned in such cases was zero nominal protection, as they assumed that such a result could only be ascribed to quality differences between domestic and imported products.

The 365 commodity groups were then aggregated into 11 major industrial sectors

\textsuperscript{12} The Corden method includes the value added of non-traded intermediate inputs with the value added of the industry, and assumes that non-traded inputs are protected to the same degree as the industry. The Balassa method assumes that non-traded inputs are supplied at constant costs and their prices vary only by the amount of changes in the cost of intermediate inputs used in their production. Thus, the Balassa method is preferable when one wants to measure incentives provided to particular industries, while the Corden method is useful when the effective rate of protection is estimated to measure the cost of protection to the economy (Balassa, 1971; Nam, 1991).

\textsuperscript{13} The total direct tax liabilities of all firms were reapportioned to each sector on the basis of its share in the total tax base, and the difference between the reapportioned tax liability and a sector's actual tax liability was the estimated tax subsidy. Interest subsidies were determined in a similar manner. Total direct tax and interest subsidies were added to value added in domestic prices.
as well as into four sectors according to trade categorization\(^{14}\); the estimated effective rates of protection (ERPs) in 1968 of these two groups are presented in Tables 9 and 10. Based on their aggregated calculations as shown in those two tables, the authors concluded that "whether measured in nominal or effective terms, protection in South Korea is quite low by international standards" (p.3-7) and "quantitative restrictions are in fact relatively unimportant" (p.2-19). They further assumed that tariffs were largely redundant, as the NRPs in most cases were below the legal tariff rates. The high rates of effective protection in some cases were said to result from the high protection of a single commodity group in the sector, and did not characterize the sector as a whole.

Finally, Westphal and Kim (1977) note that for more than half of domestic output, QRs on imports had the potential effect of raising nominal protection above the legal tariff rate. They also remark that tariffs on a number of commodities were prohibitive in the sense that imports were nil or negligible; in these cases the legal tariff rates were said to indicate potential rather than realized protection, as the NRPs and ERPs were below the

\(^{14}\)Textile/apparel industry items were present in all four trade groups, depending on an item's share of imports in total domestic supply or an item's share of exports in total domestic production (see Table 11).

Industries were divided into trade sectors according to the following criteria:
1. Export industries (X): industries with exports greater than 10 percent of total production.
2. Import competing industries (IC): industries with imports greater than 10 percent of total domestic supply.
3. Export and import competing industries (XIC): industries with exports greater than 10 percent of total production and imports greater than 10 percent of total domestic supply.
4. Non-import competing industries (NIC): all other sectors.
### Table 9

Effective Protection (percent) by Industry Group, 1968

<table>
<thead>
<tr>
<th>Industry</th>
<th>Balassa Measure</th>
<th>Corden Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Export</td>
<td>Domestic</td>
</tr>
<tr>
<td>Agriculture, Forestry, &amp; Fishing</td>
<td>-16.1</td>
<td>-18.5</td>
</tr>
<tr>
<td>Processed Food</td>
<td>-2.7</td>
<td>-18.2</td>
</tr>
<tr>
<td>Beverages &amp; Tobacco</td>
<td>-1.9</td>
<td>-19.3</td>
</tr>
<tr>
<td>Mining &amp; Energy</td>
<td>-1.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Construction Materials</td>
<td>-5.2</td>
<td>-11.5</td>
</tr>
<tr>
<td>Intermediate Products I</td>
<td>31.0</td>
<td>25.5</td>
</tr>
<tr>
<td>Intermediate Products II</td>
<td>-0.2</td>
<td>26.1</td>
</tr>
<tr>
<td>Nondurable Consumer Goods</td>
<td>-1.9</td>
<td>-10.5</td>
</tr>
<tr>
<td>Consumer Durables</td>
<td>-4.7</td>
<td>64.4</td>
</tr>
<tr>
<td>Machinery</td>
<td>-12.7</td>
<td>44.2</td>
</tr>
<tr>
<td>Transport Equipment</td>
<td>53.1</td>
<td>163.5</td>
</tr>
</tbody>
</table>

Source: Westphal & Kim (1977, p.3-9).
### Table 10
Effective Protection (percent) by Trade Category, 1968

<table>
<thead>
<tr>
<th>Trade Category</th>
<th>Balassa Measure</th>
<th></th>
<th>Corden Measure</th>
<th></th>
</tr>
</thead>
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<tr>
<td></td>
<td>Export</td>
<td>Domestic</td>
<td>Export</td>
<td>Domestic</td>
</tr>
<tr>
<td>Export Industries (X)</td>
<td>4.6</td>
<td>-18.0</td>
<td>3.4</td>
<td>-14.0</td>
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<tr>
<td>Import-competing Industries (IC)</td>
<td>-8.6</td>
<td>93.1</td>
<td>-3.9</td>
<td>51.1</td>
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<tr>
<td>Non-import-competing Industries (NIC)</td>
<td>-0.8</td>
<td>-16.4</td>
<td>-0.7</td>
<td>-12.6</td>
</tr>
<tr>
<td>Export &amp; Import Competing Industries (XIC)</td>
<td>-2.1</td>
<td>72.8</td>
<td>-1.4</td>
<td>46.1</td>
</tr>
<tr>
<td>All Manufacturing Industries</td>
<td>3.1</td>
<td>-1.4</td>
<td>2.2</td>
<td>-1.1</td>
</tr>
</tbody>
</table>

Source: Westphal & Kim (1977, p.3-12).
legal tariff rates. Otherwise stated, Westphal and Kim (1977) concluded that import protection in South Korea was marginal.

Shortcomings of Westphal and Kim's Study

As pointed out by Leudde-Neurath (1986), the study described above has several problems, beginning with the quality of data used. Westphal and Kim (1977) ascribed zero rates of protection to commodities which yielded negative NRPs on the basis that quality differentials were responsible for the result. Out of 365 price comparisons secured by Westphal and Kim (1977), 165 price comparisons (45.2 percent of the sample), showed negative NRPs, indicating that a large percent of the price comparisons were made with non-comparable items. In many developing countries, domestic substitutes for importable items may not exist, and in the case of quality or product specification differentials it would be more logical to conclude that the items in question are not comparable (Leudde-Neurath, 1986). In other words, nothing tangible about the levels of protection can be deduced from the price comparisons, specially if 45 percent of the sample yields negative price comparison results.

Leudde-Neurath (1986) further argues that disregarding legal tariffs in computing NRPs and ERPs was somewhat incorrect; the NRPs often reflected lower percentages than the legal tariff rates because only exporters were allowed to import, and they received tariff exemptions on these imports. The producer who produced purely for the domestic market had to contend with legal tariffs, along with a host of other quantitative
restrictions. Legal tariffs, in effect, completely seal off "unwanted" imports. However, Westphal and Kim (1977) conclude that the tariffs and quantitative restrictions represented potential rather than realized protection, which implies a lack of domestic demand or lack of competitiveness on the part of foreign producers. Such an assumption is acceptable only when imports are negligible in the absence of all trade restrictions.

In Westphal and Kim's study, 74.2 percent of the sample is labelled as subject to either high tariffs or quantitative restrictions, or both. Also, 61.5 percent of the sample showed zero or negligible import shares in domestic supply (Leudde-Neurath, 1986). Thus, the tariffs and quantitative restrictions appear to be fully realized, rather than potentially restrictive. According to Leudde-Neurath (1986), had the authors concluded that South Korea pursued a restrictive trade strategy, their data would strongly support the argument.

Conclusions Drawn from the Westphal and Kim Study and Evidence of Protection in the Textile/Apparel Sector

Table 11 presents that portion of Westphal and Kim's sample which relates to textile and apparel sector items. Of a total of 15 items, all were subject to high nominal tariffs; the lowest rate was 40 percent for cotton yarns. All fabric and apparel had tariff rates between 100 and 154 percent. In comparison, the actual tariffs collected were relatively low; this is not surprising as 13 of the 15 items were either prohibited or restricted, and imports were only allowed to exporters. Furthermore, 11 of the 15 items
had negligible import shares (less than 10 percent of domestic supply, by Westphal and Kim's own definition). In comparison, the export shares of nine of the 15 items were much larger than the import shares. In the authors' calculations of ERPs for export sales, most of the items take on negative or low values, and the ERPs for domestic sales vary widely. It would be more logical in this case to observe the legal tariff and type of quantitative restriction, and judge the effectiveness of these by the share of imports in total domestic supply. Since the share of imports in total domestic supply of seven out of the 11 textile/apparel industry items included in Westphal and Kim's study was extremely low or non-existent, one concludes that the import restrictions were effective in sealing out imports.

As noted by Balassa (1971, 1978) and by Bhagwati and Srinivasan (1975), in countries where the import regime is extremely complex, a quantitative analysis often provides an inadequate if not misleading picture. Although Westphal and Kim (1977) concluded on the basis of their quantitative analysis that South Korea operated under a free trade regime, a closer examination of their study provides evidence of a highly protectionist regime in South Korea. The protection evident in the textile/apparel sector, coupled with the strong export promotion incentives received by this sector (as described in earlier sections) indicates that South Korea followed a protected export promotion policy as regards its textile/apparel sector.

To summarize the chapter, the South Korean textile/apparel sector was included among the group of industries identified by the government in the early 1960s as
<table>
<thead>
<tr>
<th>Product</th>
<th>Category</th>
<th>Nominal Tariff (1)</th>
<th>Actual Tariff (2)</th>
<th>NRP (3)</th>
<th>Import Control (4)</th>
<th>Import Share (5)</th>
<th>Export Share (6)</th>
<th>ERP Exports (Balassa) (7)</th>
<th>ERP Domestic (Balassa) (8)</th>
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</thead>
<tbody>
<tr>
<td>Cotton Yarn</td>
<td>NIC</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>R</td>
<td>1.0</td>
<td>0</td>
<td>19.0</td>
<td>-19.4</td>
</tr>
<tr>
<td>Silk Yarn</td>
<td>X</td>
<td>60</td>
<td>0</td>
<td>0</td>
<td>AA</td>
<td>0</td>
<td>77.2</td>
<td>-2.4</td>
<td>-3.2</td>
</tr>
<tr>
<td>Woolen Yarn</td>
<td>NIC</td>
<td>81</td>
<td>1</td>
<td>80.1</td>
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<td>4.3</td>
<td>1.8</td>
<td>-113.1</td>
<td>1787.1</td>
</tr>
<tr>
<td>Hemp, Flax Yarn</td>
<td>NIC</td>
<td>80</td>
<td>1</td>
<td>39.9</td>
<td>PR</td>
<td>0</td>
<td>0.5</td>
<td>-6.5</td>
<td>124.4</td>
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<td>Other Yarn (Synthetic)</td>
<td>XIC</td>
<td>59</td>
<td>6</td>
<td>34.5</td>
<td>AA</td>
<td>25.9</td>
<td>12.8</td>
<td>7.4</td>
<td>19.7</td>
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<tr>
<td>Synthetic Resins &amp; Fibers</td>
<td>NIC</td>
<td>62</td>
<td>52</td>
<td>36.8</td>
<td>R</td>
<td>2.5</td>
<td>0</td>
<td>-0.7</td>
<td>53.0</td>
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<td>X</td>
<td>100</td>
<td>0</td>
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<td>23.8</td>
<td>-32.6</td>
<td>284.6</td>
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<td>Silk Fabric</td>
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<td>150</td>
<td>1</td>
<td>74</td>
<td>R</td>
<td>28.6</td>
<td>8.7</td>
<td>12.7</td>
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<tr>
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<td>9</td>
<td>47.7</td>
<td>R</td>
<td>0</td>
<td>9.0</td>
<td>-3.1</td>
<td>19.8</td>
</tr>
<tr>
<td>Hemp Fabric</td>
<td>IC</td>
<td>100</td>
<td>1</td>
<td>24.6</td>
<td>PR</td>
<td>19.4</td>
<td>1.0</td>
<td>-3.2</td>
<td>4.1</td>
</tr>
<tr>
<td>Rayon Fabric</td>
<td>XIC</td>
<td>100</td>
<td>0</td>
<td>3.3</td>
<td>R</td>
<td>22.6</td>
<td>36.8</td>
<td>3.2</td>
<td>-36.8</td>
</tr>
<tr>
<td>Other Fabric (Synthetic)</td>
<td>X</td>
<td>106</td>
<td>0</td>
<td>42.7</td>
<td>R</td>
<td>0</td>
<td>16.5</td>
<td>5.7</td>
<td>23.6</td>
</tr>
<tr>
<td>Knitted Products</td>
<td>X</td>
<td>150</td>
<td>31</td>
<td>28.7</td>
<td>PR</td>
<td>0.1</td>
<td>28.7</td>
<td>-3.2</td>
<td>39.8</td>
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<tr>
<td>Apparel</td>
<td>X</td>
<td>154</td>
<td>5</td>
<td>11.8</td>
<td>PR</td>
<td>0.1</td>
<td>16.3</td>
<td>-1.1</td>
<td>-30.7</td>
</tr>
<tr>
<td>Other Textile Products</td>
<td>X</td>
<td>100</td>
<td>14</td>
<td>0</td>
<td>PR</td>
<td>1.9</td>
<td>42.5</td>
<td>-4.2</td>
<td>-47.1</td>
</tr>
</tbody>
</table>

(4) The actual tariff rate is equal to tariff collections divided by the cif value of imports
(5) NRP: Nominal rate of protection
(6) Import Control: R = restricted, PR = prohibited, AA = automatic approval
(7) Import Share: the share of imports in total domestic supply
(8) Export Share: the share of exports in total domestic production
(9) ERP: effective rate of protection for exports calculated by the Balassa method
(10) ERP: effective rate of protection for domestic sales calculated by the Balassa method

potentially large export earners. The industry had access to cheap credit and duty-free imported inputs, provided that it fulfilled export obligations. The man-made fiber industry was promoted, as were imports of new technology. However, the domestic market was protected, and it became highly lucrative to produce for both the domestic and the foreign markets. Although export incentives were withdrawn in 1973, the South Korean textile/apparel sector had emerged as the country's largest export earner, a position it retained until the mid-1980s. As seen in Figure 13, South Korean textile exports grew from US$ 1.4 million in 1959 to US$ 492 million in 1974, and in 1985 they were US$ 2.5 billion; apparel exports grew from approximately US$ 1 billion in 1974 to US$ 4.4 billion in 1985.
Figure 13. South Korea: Value of Textile and Apparel Exports in US $1000, 1959-1985

Source: Adapted from United Nations (1956-1987).
CHAPTER 6

ANALYSIS OF THE INDIAN TEXTILE AND
APPAREL INDUSTRY

Before the implementation of planned industrial development in India, Indian textile exports contributed to 11 percent of world textile exports. The export share decreased steadily over the years, reaching two percent in the 1980s. This chapter examines the major elements of Indian development policy which directly contributed to the unimpressive performance of Indian textile/apparel exports after independence. The chapter presents a qualitative evaluation of the Indian textile/apparel industry, beginning with a historical overview and then describing the policy atmosphere affecting the industry throughout the period 1955-1985. Thereafter, major policies influencing the growth and export pattern of the industry are discussed in some detail. The policies include those of industrial regulation, the protection of small scale textile units and import protection measures. Of these, the policy of protection of small scale textile units is discussed in the greatest detail, as it had by far the greatest impact on the industry. Table 12 summarizes the major Indian government policies affecting trade and industry. The chapter concludes with a brief description of export incentives and a quantitative assessment of the effects of

\[15\text{The discussion concentrates on the cotton textile/apparel industry, as cotton was the dominant fiber used in India. Until 1988 only 18 percent of the Indian fiber requirements were met by man-made sources (Anson & Simpson, 1988).}\]
<table>
<thead>
<tr>
<th>Period</th>
<th>Style of Government</th>
<th>Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1800s-1947</td>
<td>British Colonial Rule</td>
<td>Promotion of natural fiber exports to Britain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promotion of textile exports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promotion of cotton textile mills</td>
</tr>
<tr>
<td>1947-1950</td>
<td>Democracy</td>
<td></td>
</tr>
<tr>
<td>1950-1985</td>
<td>Democracy</td>
<td>Import substitution in heavy industries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strict import controls</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Protection of small scale industries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No export promotion incentives in light manufacturing sectors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strict capacity licensing in all sectors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exporters did not receive free access to imported inputs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overvalued exchange rate</td>
</tr>
</tbody>
</table>
the Indian trade regime on incentives across sectors.

Qualitative Evaluation of the Policy Atmosphere

Historical Overview

India's textile industry at the time of independence consisted of two cotton textile sectors: the small scale handloom sector which consisted of small weaving units equipped with throw-shuttle looms, and the mill sector which utilized British-made semi-automatic looms. The virtual ban on imports of cloth during World War II contributed to substantial growth in both sectors, and in 1947 handlooms produced one fourth of all available fabric in India. During the first few years of independence, both sectors benefitted from the continuation of the ban on fabric imports. By 1948-1950, India accounted for more than 11 percent of world trade in cotton textiles (Singh, 1960).

In the early 1950s, the government implemented policies of regulated industrial growth, based on the Soviet model of a large, closed economy, and aimed at achieving the basic goals of economic growth, self-reliance and social justice. These three goals translated into four main policy themes: 1) the promotion of heavy industry with an emphasis on the public sector; 2) a desire for self-reliance based on export pessimism, resulting in broad efforts at import substitution and restrictions on all imports; 3) subsidies to and protection of the small scale sector, which aimed at encouraging labor intensive
manufacturing in the private sector; and 4) balanced regional development (World Bank, 1989).

With a firm belief in export pessimism, a complex regulatory structure was established in order to direct resources in the desired pattern, and the structure remained largely unchanged until the mid-1980s. In light manufacturing, the policies granted protection to small scale industries and discriminated against large mills. The textile industry was subject to capacity licensing of the larger mills, whereas the handloom industry was promoted. However, export production was largely a feature of the former, and correspondingly India's textile exports suffered (Mazumdar, 1991).

The small scale textile units grew to satisfy domestic demand in a highly protected market, and lacked both the quality and inclination to pursue exports. Government textile policy led to a fragmented industry, and the severe restriction on the development and the import of synthetic fibers, combined with restrictions on imports of capital goods for the industry, led to high-cost low-quality growth (Mazumdar, 1984).

Faced with a deteriorating balance of payments situation in the mid-1960s, the government introduced some export promotion measures, including relatively freer access to raw materials required by exporters, and cash incentives to neutralize the effects of higher costs caused by domestic industry protection. The industrial regulation policies remained unchanged and most of the export incentives were granted to non-traditional exports such as engineering goods; textile exports continued to flounder (Bhagwati & Srinivasan, 1975).
The apparel sector fared better, mainly as the industry is naturally small scale and there was low domestic demand. The lack of availability of superior quality fabric kept apparel exports at the lowest value added range of the export market.

Thus, Indian textile policy has had far reaching impacts on the structure of the industry and on the nature of its products, thereby directly influencing export growth. The major policies affecting the industry have been divided into two main areas: 1) industrial regulatory policies and protection of the small scale industries, and 2) import protection measures. Export incentives are discussed briefly, as most of them either did not apply to the textile/apparel sector or contributed only marginally to export profitability.

**Policy Measures Affecting the Textile/Apparel Sector: 1955-1985**

**Industrial Regulatory Policies**

The industrial policies of the government were implemented through the Industries Development and Regulation Act (IDRA) of 1951. Under the IDRA, approval by the licensing authorities was required to establish a new manufacturing unit, to expand output by more than 5 percent a year, to manufacture a new product in an existing plant, or to relocate a plant. The only units exempt from registration were those employing less than 50 workers and using electrical power or those employing less than 100 workers and not using electrical power, i.e., the small scale sector. The IDRA thus laid the basis for control
through licensing requirements of all industrial units beyond a certain size (Bhagwati & Desai, 1970).

The licensing system was supposed to ensure that the actual choice of plants, technologies, locations etc. was carried out in a manner which would guarantee social, as distinct from private, profitability. Thus, clear economic criteria were absent in the awarding of industrial licenses. The procedure used by the licensing committee was in general a first-come-first-served basis, and reflected to some extent an ad-hoc philosophy of "fairness" in allocating licenses. This practice, combined with overall output ceilings in most cases, resulted in a host of inefficiencies such as the denial of expansion capacity to efficient producers, and an unnecessary fragmentation of industries (Bhagwati & Desai, 1970).

The policy of "balanced regional development", which meant that each state was assured a minimum level of economic development, i.e., a share of licenses, without any particular considerations of optimal size or location, added to further fragmentation and to units of sub-optimal size. There was a great scramble for industrial licenses, accompanied by political pressure for dividing industrial growth among as many states as possible (World Bank, 1989).

Along with the industrial regulatory policies which covered all private sector enterprise, the government established the policy of protection of small scale industries (SSI). The policy, unique to India, reserved certain goods for exclusive production in SSI, and resulted in the number of reserved categories of goods increasing from 66 in 1951 to
over 800 in the 1980s (World Bank, 1989). The implicit assumption was that SSI were labor intensive, and protecting them would discourage investment in the large scale production of consumer goods, thereby securing more resources for capital goods industries (Mazumdar, 1984).

The policy aimed at "fair" competition between the large and the small industries in cases when both manufactured the same product. In such cases, a "common production program" was to be developed, which would entail the reservation of spheres of production for the smaller units, non-expansion of large scale mills' capacity and the imposition of special excise taxes on large industries. Additional duties were to be levied on mills in order to raise funds for the development of the small scale units (Kabra, 1988). Since the cotton textile industry was the most significant case of co-existence and competition between the large scale and the small scale sectors, the industry was constantly influenced by the policy towards the small scale sector. Thus, the handloom sector received protection from competition with large domestic textile mills and with imports; small units could not grow if they wished to continue the production of reserved items (Mazumdar, 1984, 1991).

SSI were granted concessional credit from the banking system, preferential sales tax and excise tax rates, exemption from most labor regulations, and preferential access to raw materials. In the system of SSI protection, no other industry was as deeply affected as the textile/apparel industry. A majority of the protected items belonged to this industry, and the policy was established in the early 1950s when textiles were India's most important
manufactured export.

When the SSI policy was enacted in 1951, mill-made fabric constituted almost 80 percent of the total supply of fabric. The policy led to an immediate restriction on the output of the mills, and excise duties were imposed on mill-made cloth. By 1956, the government banned the installation of new looms by mills, except for replacement purposes. As Figure 14 indicates, the share of mill-made cotton cloth in the total supply of cotton cloth decreased steadily. The government also levied taxes on a variety of inputs, including raw fibers, yarn, chemicals, fuels and other inputs used by both mills and SSI (Anubhai, 1988).

In its policy of protecting handloom production, the government overlooked the continuing growth of the so-called powerloom units, which, along with the handlooms, came to be known as the "decentralized" sector. The portion of the decentralized sector utilizing powerlooms consisted of small units with secondhand looms bought from large mills and initially installed by handloom workers themselves to improve their earnings. After 1951, powerloom units rapidly increased in number under the ownership of outsiders. Legally, powerloom units were distinguished from mills because they enjoyed the same privileges as the handloom units, provided the number of looms did not exceed four per unit. However, the maximum limit was widely violated; although the number of looms in a powerloom enterprise was generally much less than in a mill, a few powerloom units had a similar capacity in terms of loom size as small mills. Throughout the 1960s and 1970s, most of the additional production in the decentralized sector came from the
Figure 14. India: Percentage Shares of Cotton Cloth Production in the Mill and Decentralized Sectors

Source: Adapted from Mazumdar (1984, p. 36).
powerlooms; Figure 15 suggests that these unauthorized units were the greatest beneficiaries of government policy (Mazumdar, 1984).

The total protection of the domestic market and the curb on mill output expansion, combined with taxes on inputs, led to an increase in the price of coarse cloth which was intended for the poorer consumers and was produced primarily by the decentralized sector. To counter the problem, the government introduced another important instrument of textile policy: the direction to the mill sector that a certain proportion of mill output should consist of coarse cloth which had to be sold at or below a controlled maximum price. Composite spinning and weaving mills were also required to manufacture hank yarn in specified quantities and at fixed prices for supply to the handloom sector (Kabra, 1988). The quantities of controlled coarse cloth to be supplied by the mills varied considerably. In 1965 it was 50 percent of the total production of cotton mills, but was reduced to 25 percent in 1968, and in 1971 an absolute minimum amount of 400 million meters was specified.

Although the prices of controlled cloth were raised by 30 percent in 1974 in the face of a much higher increase in the cost of production, the quantity to be supplied was doubled (Kabra, 1988). Since the large production of the coarse controlled cloth required short and medium staple cotton, which was the primary input for India's textile exports, it led to a slackening of textile exports. Furthermore, it has been suggested that the controlled cloth, in spite of its low price, faced very low demand. This led to unsold inventories and further escalated the problems of the large mills (Kabra, 1988).
Government regulation preventing the closure of unprofitable units was a major drain on private resources, and reduced Indian mills' adaptability to changing markets (World Bank, 1989). The most binding regulation on actual plant closure was related to the retrenchment of labor. Any unit which employed more than 100 workers required government permission to close down and dismiss workers. "Financial difficulty" was explicitly excluded as a legitimate reason to dismiss workers⁹ (World Bank, 1989). Owners were faced with three choices: continuing loss-making operations; breaking the law and closing down; or negotiating an agreement for closure with worker compensation, which could run into years of litigation (Kabra, 1988).

The compounding of the various government policies imposed a serious financial burden on the weaker mills, and in 1972 a large number of mills went bankrupt at regular intervals. The immediate concern of the government was the large scale unemployment consequences; the industry employed almost 20 percent¹⁰ of all industrial labor. A decision was made to revitalize the sick mills through access to a large amount of cheap credit, based on the assumption that this would suffice to pull them through the crisis. However, with no change in policy as regards the protection of the small scale sector and discrimination against mills, the mill owners were unwilling to make any new investments.

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⁹One wonders what other reason apart from financial difficulties would lead a mill owner to cease operations.

¹⁰The employment figure includes both the decentralized and the mill sector (Anson & Simpson, 1988).
As Kabra (1988) remarks, "when the basic market conditions do not give positive signals, plentiful and low-cost availability of public funds would neither attract much demand nor prevent industrial sickness" (p.550).

Finally the government decided to take over the bankrupt mills under the Nationalization Act of 1974 and to subsidize them to produce the bulk of coarse cloth. The action received hardly any opposition from the owners, who in fact had proposed the idea to the government (Kabra, 1988). The enormity of the sick mills syndrome can be illustrated by the fact that the nationalized mills constituted one-fourth of the output of the mill sector (Kabra, 1988; Mazumdar, 1984). Inadvertently, the action ran somewhat counter to the policy of SSI protection, as the government-owned mills began to supply a large percent of coarse cloth at prices way below cost and thus competed with the SSI for market share.

As the output of the mill sector began to decrease in the late 1960s, so did the competitiveness of textile exports. The coarse cloth produced by the decentralized sector was not suitable for the export market; the international demand for handloom fabric was extremely limited, and mill-made fabric was no longer price competitive. A government committee remarked that, with a few minor exceptions, there appeared to be no variety of fabric which the handloom sector could produce in better quality or at a lower price as compared to the mill sector (Kabra, 1988).

As man-made fibers made great strides in the international market during the 1960s and 1970s, the Indian government sought to discourage their growth in India,
specially that of polyester. The motivation was the desire to protect the agricultural sector producing raw cotton. The production of viscose rayon was not so strongly restricted, as the required raw material was based on forestry products which were also cheaper than the petroleum required for polyester. However, polyester has some important crease-resistant and durability properties not shared by viscose rayon, and it was polyester which became vastly popular in world markets (Mazumdar, 1984).

Strict capacity licensing constraints in India for rayon and synthetic fiber and yarn plants led to extremely uneconomical production. Although the technology was known to be capital intensive with economies of scale, plants in India were allowed capacity which was one-fifth that of the average plant in Korea or Taiwan, as seen in Figure 16. As in the cotton industry, all attempts were made to encourage small units within the synthetic weaving sectors. These units were sectorally demarcated, i.e., the production of 100 percent synthetic fabrics was left almost entirely to the decentralized sector, and was further enforced by loom permits allowing the use of only one type of fiber (cotton, viscose, silk, polyester or wool) in each plant. Mills were effectively excluded from 100 percent synthetic fabric production, but both mills and the decentralized sector were allowed to produce blended fabrics. As far as excise duties were concerned, the structure of duties was transferred from fabrics to yarn in 1974-1975, so that both the mills and the decentralized sector were equally affected. However, at the fabric stage, there were additional duties to be paid by the mills (Mazumdar, 1984, 1991).

The policy of protection of SSI was directed mostly at the weaving sector of the
* PET = Polyester

Figure 16. Selected Synthetic Fibers and Yarns: Comparative Plant Sizes

Source: Adapted from World Bank (1989, p.100).
textile industry, as described earlier. The large spinning mills were expected to supply yarn for both the decentralized and the mill sectors. There was liberal licensing of capacity in the spinning industry, as opposed to the freeze in capacity in the weaving industry. However, the capacity licensing was liberal only when compared to that of the weaving industry, and most of the expansion in spinning came from an increase in the number of spinning mills rather than an increase in the number of spindles per mill (Mazumdar, 1984). As seen in Table 11, the growth in the Indian textile industry was concentrated in the decentralized sector and in the spinning units which supplied the decentralized weaving units.

The industrial regulatory policies and the protection of SSI led to excessive fragmentation in the textile industry, and diseconomies of scale resulted in constant price increases. For Indian textile exports, the two main problems have been the low quality-high cost nature of its output. As Table 12 shows, productivity indices such as output per loom and output per spindle had negative overall growth rates from 1950 to 1980, and the price index of cotton cloth rose continuously. The growth of real fixed capital was negligible; the freeze on output and capacity expansion as well as the taxation policies hardly made the textile industry an attractive investment sector. As seen in Figure 17, the profitability ratios of the cotton textile industry were consistently lower than those of all manufacturing.

The cost and quality of fabric also had an adverse effect on the apparel sector, as imported fabric was prohibited. The only reason for the better performance of the apparel
### Table 13
Production of Selected Industries

<table>
<thead>
<tr>
<th>Year</th>
<th>Jute Textiles (1000 tons)</th>
<th>Cotton Yarn (million kg)</th>
<th>Cotton Cloth (billion meters)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mill Sector</td>
</tr>
<tr>
<td>1950-51</td>
<td>837</td>
<td>534</td>
<td>3.4</td>
</tr>
<tr>
<td>1960-61</td>
<td>1302</td>
<td>907</td>
<td>4.4</td>
</tr>
<tr>
<td>1970-71</td>
<td>1060</td>
<td>929</td>
<td>4.1</td>
</tr>
<tr>
<td>1975-76</td>
<td>1302</td>
<td>1002</td>
<td>4.0</td>
</tr>
<tr>
<td>1977-78</td>
<td>1178</td>
<td>843</td>
<td>3.1</td>
</tr>
<tr>
<td>1978-79</td>
<td>1047</td>
<td>947</td>
<td>3.3</td>
</tr>
<tr>
<td>1980-81</td>
<td>1392</td>
<td>1067</td>
<td>3.4</td>
</tr>
<tr>
<td>1981-82</td>
<td>1334</td>
<td>989</td>
<td>2.9</td>
</tr>
<tr>
<td>1982-83</td>
<td>1338</td>
<td>999</td>
<td>2.4</td>
</tr>
<tr>
<td>1983-84</td>
<td>1089</td>
<td>1112</td>
<td>2.7</td>
</tr>
<tr>
<td>1984-85</td>
<td>1370</td>
<td>1183</td>
<td>2.6</td>
</tr>
<tr>
<td>1985-86</td>
<td>1351</td>
<td>1134</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Source: Adapted from World Bank (1989, p.297).
Table 14
Trend Growth Rates of the Indian Textile Industry

<table>
<thead>
<tr>
<th></th>
<th>1950-60</th>
<th>1961-70</th>
<th>1971-80</th>
<th>1950-80</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Cloth Output</td>
<td>2.64</td>
<td>-1.66</td>
<td>-0.15</td>
<td>-0.11</td>
</tr>
<tr>
<td>2 Yarn Output</td>
<td>3.64</td>
<td>1.05</td>
<td>4.12</td>
<td>2.28</td>
</tr>
<tr>
<td>3 Real Value Added</td>
<td>0.03</td>
<td>0.01</td>
<td>-</td>
<td>0.081</td>
</tr>
<tr>
<td>4 Real Fixed Capital</td>
<td>0.03</td>
<td>0.04</td>
<td>-</td>
<td>0.042</td>
</tr>
<tr>
<td>5 Output per Loom</td>
<td>2.27</td>
<td>-2.25</td>
<td>0.15</td>
<td>-0.30</td>
</tr>
<tr>
<td>6 Output per Spindle</td>
<td>1.23</td>
<td>-2.21</td>
<td>2.32</td>
<td>-0.07</td>
</tr>
<tr>
<td>7 Cloth Output per Worker</td>
<td>0.60</td>
<td>-0.09</td>
<td>-1.31</td>
<td>-0.23</td>
</tr>
<tr>
<td>8 Yarn Output per Worker</td>
<td>2.50</td>
<td>2.42</td>
<td>1.90</td>
<td>2.18</td>
</tr>
<tr>
<td>9 Domestic per capita Consumption of Mill Cloth</td>
<td>-1.40</td>
<td>-4.25</td>
<td>-1.67</td>
<td>2.403</td>
</tr>
<tr>
<td>10 Price Index of Cotton Textiles</td>
<td>2.40</td>
<td>4.35</td>
<td>7.11</td>
<td>5.00</td>
</tr>
<tr>
<td>11 Price Index of Raw Cotton</td>
<td>-0.35</td>
<td>7.80</td>
<td>7.63</td>
<td>5.74</td>
</tr>
</tbody>
</table>

1 relates to 1950-70
2 relates to 1951-60
3 relates to 1951-80

Source: Adapted from Kabra (1988, p.531).
industry was its extremely labor intensive nature. There is not much difference in productivity even with superior machinery, and India clearly had a labor cost advantage. However, due to the low quality of both fabric and tailoring, Indian apparel exports remained at the bottom rung in terms of price and value added (Khanna, 1992). Exporters had very small profit margins, and fluctuations in fabric prices were a major impediment. Apparel exports were aided by direct cash subsidies (described later) and by the fact that domestic demand for ready to wear apparel in India only made itself felt in the 1990s. Thus there was no large domestic market for apparel, as there was for textiles. The import policies of the government, which are discussed next, exacerbated the situation and left the domestic market as the only viable outlet for textile products.

**Import Protection**

*Quantitative restrictions.* The major means of import restriction in India has always been non-tariff controls. The import policy aimed at direct control over foreign exchange utilization, and administrative decisions on the allocation of foreign exchange had to be made for practically all uses in the economy (Bhagwati & Srinivasan, 1977). Most of the available foreign exchange was allocated for public sector imports, and the rest was allocated to the private sector through a maze of regulations. The system of non-tariff controls included the import licensing system, the "actual user" policy, and the "canalization" of certain imports.

The import licensing system which was established in 1950 divided imports into three broad categories: consumer goods, capital goods, and intermediates. Imports of
consumer goods were banned, except for certain essentials like kerosene and medicines. Capital goods were divided into a "restricted" category and an "Open General License" (OGL) category. Capital goods under OGL could be imported without a license only if two conditions were met: the importing firm was the actual user of the equipment, and the resulting increase in capacity would not exceed the limit prescribed by capacity licensing (Bhagwati & Srinivasan, 1975).

An import license was required for all items on the restricted list and for items not on the OGL list. Finally, intermediates were divided into banned, restricted, permitted and OGL categories. Items not on the first three lists could supposedly be imported without a license, but the restricted category included many broad catch-all groups such as "all synthetic textiles", "all electronics", etc. (World Bank, 1989). In effect, hardly any item was freely importable. Before an import license would be issued, the importer needed to prove that the good was an essential input or piece of equipment for production, and that it was indigenously unavailable.

The twin principles of essentiality and indigenous non-availability led to great inflexibility in import licensing. If the good had an indigenous counterpart, it was banned for import, regardless of the difference in cost or quality between the domestic and the imported product. The protection to domestic firms was guaranteed as soon as the producer made the fact of his/her production known to the relevant authorities, irrespective of the quality or amount the producer was able to supply. If the license was finally obtained, it was not legally transferrable among different industries, or even among
units in the same industry. No import license could be legally sold (Bhagwati & Desai, 1970).

In the case of absolute essentials, import licenses were distributed on a "fair-share" basis among rival firms in an industry. As each firm was entitled to its share of actual user licenses and no more, the more efficient producers could not legally enlarge output by competing away imports from less efficient firms. The result was that protection was automatically extended to all industries regardless of cost efficiency; licenses were fixed and, along with capacity restrictions, eliminated the growth of the more efficient firms (Bhagwati & Desai, 1970; World Bank, 1989).

An important side-effect of the import licensing system was that exportable items were often manufactured from inferior quality domestically produced inputs and capital equipment, and they encountered great difficulty in competing on the export market. Industries which needed flexibility in production to obtain and deliver large foreign orders were badly handicapped (World Bank, 1989).

Certain public and private sector imports were channelled through government organizations known as "canalizing" agencies. These agencies were the sole importers of the item, and policies on the importing, pricing and distribution of canalized imports were determined and supervised by the agencies, the concerned ministries and the Chief Controller of Imports (World Bank, 1989).

**Tariffs.** The tariff structure in India consisted of three main parts: basic customs duties (mostly ad valorem) applied to the c.i.f. price of the import; an auxiliary duty
applied to the c.i.f. price; and an additional "countervailing" duty equivalent to excise taxes imposed on locally produced items, which was applied to the c.i.f. price plus the basic customs duty and auxiliary duty (World Bank, 1989).

In many cases, the tariffs were set to keep the landed price of imports above domestic prices. This system, known as "water in the tariff", ensured that imports took place as a last resort and that domestic producers could engage in import substitution without fear of import competition, even if the item produced was a permissible import. The high tariffs on many intermediate and capital goods increased the production costs of user industries substantially (Aksoy & Attori, 1992); for exporting industries the consequences were even more severe.

There was no overall fixed tariff schedule in most instances, as exemptions were granted to many public sector enterprises. The tariff rates differed for all three components of the tariff schedule, i.e., ad valorem customs duties, auxiliary duties and countervailing duties. The rates of duty were modified, whenever deemed necessary, by the Ministry of Finance, and these modifications were treated on a case-by-case basis (World Bank, 1989).

However, the general level of duties was excessively high, with an average of about 60 percent of imports subject to tariffs of 120-140 percent, and 10 percent of imports subject to tariffs of over 200 percent (World Bank, 1989). In fact, among all developing countries, India has consistently had the highest tariff rates, with the mean Indian tariff for intermediates being about 25 percent above that of the country with the
next highest tariffs. In spite of this, tariffs played a secondary role in the import protection system, because quantitative controls almost totally sealed off imports (Panchamukhi, 1978).

The effects of the import restrictions led to additional problems for the textile/apparel sector. The priority given to public sector imports and the inflexibility of the import regime had immediate effects on cotton textile exports. Soon after cotton textile exports reached their peak in the early 1950s, the prices of domestic raw cotton began to rise. Two severe droughts in the 1960s caused major shortfalls in the supply of raw cotton, and the restriction on raw cotton imports led to an even greater price increase (Nayyar, 1973). India's share of world cotton textile exports fell drastically, and was taken over by South Korea and Taiwan. As Figure 18 shows, while raw cotton prices registered a downward trend in South Korea and Taiwan (reflective of world prices), they rose sharply in India. Table 15, which presents indices of domestic and export prices of cotton textile products, clearly indicates that the export market was no longer viable for Indian textile producers. The unit prices of Indian textile exports also registered a decline, as quality deteriorated. Table 16 shows that the prices of the output of all three production sectors registered a decline.

Meanwhile, the price of cotton textiles rose considerably for domestic consumers, and the government finally allowed raw cotton imports though only through canalizing agencies. The handloom industries were supplied on a priority basis, and the remainder was sold to mills with the addition of tariff duties. Tables 17 and 18 present the range of
Figure 18. Indices of the cost of raw cotton (1960 = 100).

Source: Adapted from Nayar (1973, p. 7).
### Table 15
Indices of Domestic and Export Prices of Some Cotton Textile Products, 1966-1967

<table>
<thead>
<tr>
<th>Product</th>
<th>Domestic Price (India)</th>
<th>FOB Export Price</th>
<th>Percent Differential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poplin (White)</td>
<td>100</td>
<td>79</td>
<td>21</td>
</tr>
<tr>
<td>Poplin (Dyed)</td>
<td>100</td>
<td>71</td>
<td>29</td>
</tr>
<tr>
<td>Grey Sheeting</td>
<td>100</td>
<td>84</td>
<td>16</td>
</tr>
<tr>
<td>Printed Dress Fabric</td>
<td>100</td>
<td>81</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: Adapted from Nayyar (1973, p.11).
Table 16

Export Prices (Rupees per meter) of Cotton Textiles in Three Indian Sectors, 1961-1979

<table>
<thead>
<tr>
<th>Year</th>
<th>Handloom Cloth</th>
<th>Powerloom Cloth</th>
<th>Mill-made Cloth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>5.42</td>
<td>-</td>
<td>11.37</td>
</tr>
<tr>
<td>1965</td>
<td>4.16</td>
<td>6.43</td>
<td>10.72</td>
</tr>
<tr>
<td>1970</td>
<td>3.70</td>
<td>7.47</td>
<td>6.29</td>
</tr>
<tr>
<td>1975</td>
<td>1.50</td>
<td>3.92</td>
<td>3.31</td>
</tr>
<tr>
<td>1979</td>
<td>1.07</td>
<td>2.72</td>
<td>2.12</td>
</tr>
</tbody>
</table>

Source: Adapted from Mazumdar (1984, p. 66).
Table 17
India: Average Range of Nominal Tariffs (percent) for Selected Commodity Groups, 1963 and 1968

<table>
<thead>
<tr>
<th>Commodity Group</th>
<th>1963</th>
<th>1968</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Cotton</td>
<td>26.32</td>
<td>1.62</td>
</tr>
<tr>
<td>Raw Silk</td>
<td>47.01</td>
<td>40.00</td>
</tr>
<tr>
<td>Cotton Yarn</td>
<td>6.25</td>
<td>60.00</td>
</tr>
<tr>
<td>Woolen Yarn</td>
<td>35.00</td>
<td>60.00</td>
</tr>
<tr>
<td>Synthetic Yarn</td>
<td>50.55</td>
<td>75.00</td>
</tr>
<tr>
<td>Cotton Textiles</td>
<td>61.04</td>
<td>81.00</td>
</tr>
<tr>
<td>Woolen Textiles</td>
<td>80.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Silk Textiles</td>
<td>120.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Jute Textiles</td>
<td>35.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Synthetic Textiles</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Adapted from Panchamukhi (1978, p.49).
Table 18
India: Nominal Tariff Rates and Effective Rates of Protection (percent) for Selected Commodities

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Nominal Tariff Rate</th>
<th>Effective Rate of Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1963-65</td>
<td>1963-69</td>
</tr>
<tr>
<td>Cotton (Raw)</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Cotton Yarn</td>
<td>10</td>
<td>70</td>
</tr>
<tr>
<td>Cotton Textiles</td>
<td>61</td>
<td>100</td>
</tr>
<tr>
<td>Jute (Raw)</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>Jute Textiles</td>
<td>66</td>
<td>110</td>
</tr>
<tr>
<td>Woolen Yarn</td>
<td>40</td>
<td>70</td>
</tr>
<tr>
<td>Woolen Textiles</td>
<td>100</td>
<td>110</td>
</tr>
<tr>
<td>Silk (Raw)</td>
<td>609</td>
<td>40</td>
</tr>
<tr>
<td>Silk Textiles</td>
<td>609</td>
<td>100</td>
</tr>
<tr>
<td>Synthetic Fibers</td>
<td>609</td>
<td>590</td>
</tr>
<tr>
<td>Cellulose Fibers</td>
<td>609</td>
<td>110</td>
</tr>
<tr>
<td>Other Textiles</td>
<td>136</td>
<td>110</td>
</tr>
</tbody>
</table>

legal tariffs and the effective rates of protection of selected textile industry items. The government was in complete control of fiber and yarn supply, distribution and price, initially for cotton and later on for synthetic fibers (Kabra, 1988; Mazumdar, 1984). Since priority in supply went to the non-exporting decentralized sector, whereas mills received smaller amounts at higher prices, the government’s export pessimism was self-fulfilling.

The import of machinery for the textile industry was restricted, as the government promoted domestic capital goods industries. However, even if machinery imports were permitted, there would have been almost no incentive to do so on the part of domestic producers. The decentralized sector did not have the resources to import machinery, and it produced on too small a scale to invest in new technology. Since mills were allowed new looms only for replacement, it is possible that they would have been induced to invest in new technology and improve quality. However, apart from capacity licensing being a major obstacle, mills were not allowed to retrench labor; they had to guarantee that employment would be maintained at the same level before they received permission to import textile machinery11 (Kabra, 1988). In this situation, the effects on exports could be nothing but negative; any further explanation would be redundant. Figure 19 shows that the percent of automatic looms to total installed looms in India hardly changed from 1960

---

11 The Indian textile industry, due to its size, has been regarded as a major vote bank by politicians, who, along with strong labor unions, have created a tough situation for the textile mills. Wages have been far higher than in other industries, although productivity and value added remained low.
Figure 19. Percent of Automatic Looms to Total Installed Looms

Source: Compiled from Nayyar (1984, p.9) and Anubhai (1988, p.149).
to 1979, whereas other textile exporting countries rapidly automated their industries.

The apparel sector suffered indirectly; the price and quality of cloth were both out of line with the export market. In certain types of low grade apparel, the high costs of fabric were compensated by extremely low labor costs\(^{13}\), and apparel exports in those segments were fairly competitive.

**Export Promotion Measures**

By the mid-1960s, India's neglect of exports and the continuing imports of heavy capital goods necessary to sustain the large public sector enterprises led to severe balance of payments problems. To promote exports, the government implemented export promotion schemes, which were mostly aimed at non-traditional exports such as engineering goods (Wolf, 1982).

The most important export incentive was cash assistance, which was provided to offset domestic excise duties. As Table 19 indicates, between 36 and 50 percent of the total amount available for cash incentives was allocated to engineering goods in 1970-1980. Woven apparel received between 2.5 and 5.8 percent in 1976-1980, and although cotton textiles were allocated approximately 14 percent in 1970-1975, the cash went to the Indian Cotton Mills Federation for export development assistance\(^{13}\) (Wolf, 1982).

---

\(^{12}\)Unionization has not been a problem in the apparel industry, and wages have remained very low.

\(^{13}\)The money to the Federation was intended to provide marketing services overseas, and unlike the case of engineering goods, did not result in direct cash subsidies to exporters.
Table 19
India: Percentage Shares of the Total Cash Assistance
to Exporters of Selected Goods, 1970-1980

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Goods</td>
<td>40.6</td>
<td>36.4</td>
<td>41.4</td>
<td>49.7</td>
<td>44.0</td>
<td>41.9</td>
</tr>
<tr>
<td>Silk Fabrics, Garments</td>
<td>-</td>
<td>0.1</td>
<td>0.2</td>
<td>2.6</td>
<td>4.0</td>
<td>5.8</td>
</tr>
<tr>
<td>Knitwear</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Rayon and Synthetics</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>*Cotton Mills Federation</td>
<td>13.5</td>
<td>12.5</td>
<td>14.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*The Indian Cotton Mills Federation received export development assistance to market abroad, but no direct cash assistance.

Apparel producers did benefit directly from cash assistance. Considering the very low value added they worked with, the assistance provided a substantial subsidy.

Recognizing the problem of scarcity of intermediate inputs required for export production, the government introduced Import Replenishment Licenses (REPs). The REPs allowed exporters to import certain restricted raw materials and components up to a certain percent. Normal customs duties had to be paid, which were later refunded under a duty drawback scheme after the goods were exported. A problem with imports under REPs was that, given the high levels of customs duties, the exporter tied up considerable working capital (World Bank, 1989). The duty drawbacks were computed at a specific rupee value and not an ad valorem percentage rate, in order to avoid an increase in payments caused by inflation. The original duty charged was computed at an ad valorem percentage rate, and exporters often ended up without a full duty refund when the prices of inputs rose rapidly, as after the oil shocks in the 1970s (Wolf, 1982).

Afraid of the high premiums the REPs could generate for scarce inputs, no wastage allowances were provided; if the imported input produced any physical amount or value of exports less than had been indicated while applying for a REP, the producer was not given a refund on the estimated "unused" input. REPs could be transferred under very limited conditions, and only to firms within the same industry group. In many cases, REPs were not provided for items domestically produced (Wolf, 1982). Table 20 shows the shares in import replenishment licenses of textile/apparel items during 1973-1980.

The government's policy on export promotion as regards the textile/apparel sector
Table 20
India: Percentage Shares in Import Replenishment Licenses of Textile/Apparel Industry Exports

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Woolen and Mixed Textiles, Hosiery</td>
<td>0.4</td>
<td>0.4</td>
<td>0.2</td>
<td>0.3</td>
<td>0.5</td>
<td>6.4</td>
<td>0.9</td>
</tr>
<tr>
<td>Cotton Textiles</td>
<td>3.7</td>
<td>3.4</td>
<td>4.1</td>
<td>2.8</td>
<td>2.4</td>
<td>1.7</td>
<td>2.1</td>
</tr>
<tr>
<td>Apparel</td>
<td>2.3</td>
<td>2.9</td>
<td>4.3</td>
<td>4.5</td>
<td>6.8</td>
<td>8.6</td>
<td>11.1</td>
</tr>
<tr>
<td>Silk Fabrics and Apparel</td>
<td>1.3</td>
<td>1.0</td>
<td>0.9</td>
<td>0.6</td>
<td>0.5</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Cellulosic Products</td>
<td>0.2</td>
<td>0.3</td>
<td>0.7</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Total for Textiles/Apparel</td>
<td>7.90</td>
<td>8.00</td>
<td>10.20</td>
<td>8.40</td>
<td>10.30</td>
<td>11.40</td>
<td>14.90</td>
</tr>
</tbody>
</table>

was in keeping with its overall attitude towards the industry; it was never considered as a potentially large export earner. The mill sector, which had the potential of exporting, was discriminated against, and the decentralized sector was promoted although its production was unsuitable for exports. In a system where exports themselves were considered unimportant, the industry was subject to double discrimination.

Quantitative Evaluation of Indian Trade Policies

The complexity of the Indian system of import restrictions and export incentives makes even a generalized quantitative evaluation difficult (Bhagwati & Srinivasan, 1975; Wolf, 1982). However, summary measures of the incentives were attempted by Wolf (1982) in terms of effective exchange rates (Figure 20). A drawback of these data is that the effective exchange rates were computed for all imports and exports, and not specifically for textile/apparel imports and exports. As a result, only very general conclusions can be drawn from the data on effective exchange rates.

Wolf (1982) notes that the real effective exchange rates for imports were consistently higher than the real effective exchange rates for exports, making import substitution a more profitable activity than exporting. However, as Wolf remarks, the data are only suggestive. His calculations of the import exchange rates include only import duties, and do not include the large premiums generated by quantitative restrictions on imports. This is a serious drawback, as quantitative controls were much more important
Figure 20. India: Purchasing Power Parity Effective Exchange Rates, 1950-1980

Source: Adapted from Wolf (1982, p.61-62).
than tariffs in India (Bhagwati & Srinivasan, 1975; World Bank, 1989).

Wolf's (1982) calculations for export exchange rates were made by allocating a more or less arbitrary export subsidy rate, based on the subsidies given to non-traditional exports. However, there were wide variances in both import duties and export subsidies across industries, with capital goods receiving the maximum subsidies. No specific industry was designated as an export industry, and incentives varied among different products of the same industry. Moreover, in the case of textiles/apparel, the industrial structure itself affected export profitability to a large extent.

Thus, one can safely assume that textile/apparel exports were subject to far lower effective exchange rates for exports than depicted in Figure 20; an attempt to draw any more conclusions from the data might be fallacious. Figure 21 shows that there was a fairly steady decrease in the share of textile/apparel exports as a percent of total exports from 1965 to 1985. In 1965, textile/apparel exports constituted almost 40 percent of total exports and this figure dropped to about 21 percent in 1985.

To summarize the chapter, the pattern of Indian textile/apparel exports was deeply affected by the industrial regulatory policies of the government. The hostile policy atmosphere towards the large scale sector consisted of discriminatory fiscal burdens, a freeze on weaving capacity, unintended government support of the unregistered powerloom sector, and import policies which drove up the prices of raw materials. The restrictions on man-made fiber development and on technology imports hindered the modernization of the industry, and the textile sector developed into a fragmented high-
cost, low-quality producer of goods intended for sale in the protected domestic market.

As Figure 21 indicates, textile/apparel exports were a large percent of the total exports of India in the early 1960s and even increased from 1962 to 1965, before registering a steady decline.
Figure 21. India: Exports of Textiles and Apparel as a Percent of Total Exports
CHAPTER 7
CROSS-COUNTRY COMPARISON AND DISCUSSION

This chapter discusses the dissimilarities and the similarities between the government policies affecting the export patterns of the South Korean and Indian textile/apparel sectors from 1955 to 1985. The chapter begins by comparing the background to the policies, i.e., an outline of the philosophies governing the policies of both countries. The subsequent section provides arguments in support of the hypotheses of the study; as all the hypotheses are interconnected, the discussion will be an integrated one.

A Comparison of the South Korean and Indian Government Policies Towards the Textile/Apparel Sector

South Korean and Indian government policies as regards the textile/apparel sector were directed by the overall economic development strategies followed by both countries. However, as Haggard (1990) remarks, "[the term] strategies implies a purposiveness of state action that may or may not exist; imputing a central design requires caution. Strategies emerge by default, trial-and error, and compromise; take years to crystallize; and are often plagued by internal inconsistency" (p.23).

Haggard's point seems particularly applicable to the Indian development strategy,
which had the central aim of promoting self-sufficiency through the development of a capital goods sector. Attempting to resolve the problem of unemployment in a country with a huge population, the Indian government decided to protect small scale industries and the labor they employed. The textile/apparel industry became an unwitting victim of a laudable but impractical aspiration; to harm the industry was hardly preplanned by the government. The industry was viewed as a capitalist sector whose duty it was to provide employment and support the development of the small scale sector, while simultaneously refraining from any form of growth which would potentially threaten the existence of the small scale sector. The government's socialist viewpoint of a capitalist owned and controlled industry proved to be disastrous; the lack of any clear economic criteria in policy implementation was evident.

In contrast, the South Korean development strategy was not driven by overriding intentions of social justice. The primary goal was to revitalize an economy destroyed by war, and the exports of light manufactures, which earned quick foreign exchange through minimum levels of investment, were identified as a viable solution. The textile/apparel sector benefitted from its being viewed as a potential earner of foreign exchange throughout the 1960s and until the early 1970s. Despite the two contrasting philosophies of South Korea and India, the policies enacted by both governments show certain similarities. The strategies of "protected export promotion" and "import substitution" followed by South Korea and India respectively, required the protection of the domestic market from imports, as discussed in detail in the review of literature and the theoretical
framework. The similarities in South Korean and Indian trade and industrialization policies affecting the textile/apparel sector and the end results of these will now be discussed in relation to the hypotheses of the study restated below. As evidenced in the following discussion, the data presented in this study indicate that the three hypotheses are supported.

Hypothesis 1: Both South Korea and India displayed a high level of government intervention in their textile/apparel industries. The indicators of policy intervention include a high degree of protection of the domestic textile and apparel industries, export incentives or disincentives for textile and apparel goods, and various forms of control over these domestic industries. Otherwise stated, policy intervention has included those measures affecting trade and industry which change the price of domestically produced goods (textile and apparel products), whether for sale on the domestic or the international market.

Hypothesis 2: Both South Korea and India showed the same sectoral orientation towards their textile/apparel industry, i.e., a protected import substituting orientation. Yet South Korea's textile/apparel industry was also export market oriented, while India's was domestic market oriented. South Korea followed a protected export promotion (PEP) strategy as regards its textile/apparel sector, whereas India followed an import substitution (IS) strategy as regards its textile/apparel sector.

Hypothesis 3: The policy intervention in South Korea had a positive effect on the growth of its textile/apparel exports, whereas the policy intervention in India had a negative effect on the growth of its textile/apparel exports.

Discussion

Both the South Korean and Indian textile/apparel sectors were subject to
extensive government intervention through trade and industrial policies. Table 21 presents a synopsis of the similarities in the two countries' policies. The system of quantitative restrictions employed by each was elaborate and comprehensive, and succeeded in effectively blocking imports of textile/apparel goods, among other items. The import licensing system of South Korea was deceptive: although items were technically importable, a myriad of regulations prevented them from entering the country.

Throughout the period under study, textile/apparel items were subject to quantitative restrictions, which were somewhat reduced during the early 1980s in South Korea. In India, most imports, including those of textiles/apparel, were simply forbidden as all foreign exchange usage was controlled by the government. High tariff restrictions supported the quantitative restrictions. As Table 22 indicates, most textile/apparel industry related items (raw materials, intermediates and finished goods) were subject to prohibitive tariffs ranging from 40 percent to over 100 percent. Although these rates are for 1968, the literature indicates that they remained largely unchanged over the years (World Bank, 1989; 1992). The protected domestic market of both countries encouraged import substitution in the textile/apparel sector, as the profitability of domestic sales was enhanced by the lack of import competition.

Although import substitution was encouraged in both countries, a fundamental distinction was that import substitution in South Korea was aimed at producing goods destined for the export market, whereas in India it was aimed at satisfying domestic demand. Embodied policy differences are summarized in Table 23.
Table 21
Textiles and Apparel: Similarities in Trade and Industrial Policies, South Korea and India

**Import Protection**

- Quantitative restrictions on textile/apparel products and industry inputs throughout the period 1955-1985
  - Imports of textile/apparel products and industry inputs were restricted or prohibited
  - Government clearance or import licenses were required to import raw materials and machinery

- Tariffs on textile/apparel products and industry inputs throughout the period 1955-1985
  - Nominal tariff rates on textile/apparel products and industry inputs were in the range from 40 - 154% in South Korea and 60-100% in India

**Controls Over Domestic Industry**

- The government controlled the entry and exit of firms

- All firms were subject to licensing regulations

- Investments were controlled and directed by the government

**Encouragement of Import Substitution**

- Sales were enhanced by the protection given to the domestic market

- Domestic manufacturing of intermediates was encouraged
Table 22
Nominal Tariffs (percent): 1968

<table>
<thead>
<tr>
<th>Item</th>
<th>South Korea</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton Yarn</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Woolen Yarn</td>
<td>81</td>
<td>60</td>
</tr>
<tr>
<td>Synthetic Yarn</td>
<td>59</td>
<td>75</td>
</tr>
<tr>
<td>Cotton Fabric</td>
<td>100</td>
<td>81</td>
</tr>
<tr>
<td>Woolen Fabric</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Silk Fabric</td>
<td>150</td>
<td>100</td>
</tr>
<tr>
<td>Synthetic Fabric</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>Apparel</td>
<td>154</td>
<td>na</td>
</tr>
</tbody>
</table>

Source: Compiled from Tables 10 and 15
### Table 23
**Textiles and Apparel: Differences in Trade and Industrial Policies**
**South Korea and India**

<table>
<thead>
<tr>
<th>South Korea</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exporters received free access to imported raw materials and capital goods at world market prices.</td>
<td>Exporters were subject to quantitative and tariff restrictions on imported raw materials and capital goods.</td>
</tr>
<tr>
<td>For exporters, if a domestically produced input was above world level price or below world level quality, imports were permitted.</td>
<td>For exporters, if any required input was domestically produced, regardless of its price or quality, imports were prohibited.</td>
</tr>
<tr>
<td>Only exporters received preferential credit, and the government shared investment risks by guaranteeing loans.</td>
<td>Only small scale units producing for the domestic market received preferential credit, and the discrimination policy towards mills led to increased investment risks.</td>
</tr>
<tr>
<td>The development of the man-made fiber industry was encouraged through large investments financed by the government.</td>
<td>The development of the man-made fiber industry was restricted, and uneconomical capacity licenses were issued.</td>
</tr>
<tr>
<td>Exporters received generous wastage allowances.</td>
<td>Exporters received no wastage allowances; genuine wastage was taxed.</td>
</tr>
<tr>
<td>Suppliers of intermediates to exporters were given incentives to improve price and quality.</td>
<td>Suppliers of intermediates to exporters were given total protection and no incentives to improve price or quality.</td>
</tr>
<tr>
<td>Considering the rents available on the domestic market and the benefits received by exporters, the government encouraged both import substitution and export promotion.</td>
<td>As domestic prices were higher than export prices and no export benefits were available, the government encouraged only import substitution.</td>
</tr>
</tbody>
</table>
Producers in South Korea who exported their goods received free access to imported raw materials and machinery; producers who supplied just the domestic market had to reckon with prohibitive quantitative restrictions and tariffs on required imported inputs. Thus, domestic suppliers of intermediates were forced to achieve levels of international price and quality if they wished to supply exporters. As producers of exportables were much larger buyers of intermediates than were producers who supplied the domestic market, suppliers of intermediates could benefit from improving quality in order to supply producers of exportables. Since exporters were allowed large wastage allowances on imported raw materials, they could effectively sell a part of their finished product domestically at the prevailing market price which was higher than the international price. Even during the mid-1970s when the promotion of light exportables was discontinued, exporters received relatively easy access to required imports (excluding machinery).

In contrast, the only Indian producers who received preferential access to scarce domestic raw materials were the small scale units, which primarily supplied the domestic market. The large mills which exported were subject to the same quantitative restrictions and high tariffs on intermediate inputs and machinery as were those who produced for the domestic market. As domestic market prices for the finished goods of mills were naturally higher than the export market prices, there was no motivation to produce for the export market. As neither the small units nor the mills were allowed to import raw materials or machinery, the suppliers of these intermediates had no motivation to improve their quality or lower their prices through increased efficiency. Even in cases when imported
intermediates were allowed in an effort to boost exports, the system of acquiring them required capital to be held up, as refunds on duties took long periods to process. No wastage allowances were given, and in genuine cases of wastage, producers were required to pay tariffs on the "unused" input.

At the industry level, the entry and the level of profitability of individual firms were very much influenced by government policies in both South Korea and India. Investments were controlled through credit control in South Korea and through capacity licensing in India, although South Korea allowed exporting firms to make greater profits whereas India corroded the profits of its large textile firms. In South Korea, where very high interest rates on scarce credit prevailed, the guaranteed loans at low interest rates given to textile/apparel exporters until the mid-1970s increased their profit margins and attracted investment in the industry. By the time the credit facilities were withdrawn, the South Korean industry had already emerged as a major contender on the international market. The Indian system of restricting mill capacity and taxing mills indiscriminately led to a flight of capital from the industry; profitability in textiles was lower than that in all manufacturing. The resulting fragmentation of the industry led to diseconomies of scale and benefitted only the unauthorized powerloom sector. The apparel industry was indirectly affected, as the price and quality of fabric was unsuitable for export end-usage.

The approach towards the development of the man-made fiber industry also differed drastically in both countries. The South Korean government supplied cheap credit to invest in large scale synthetic fiber plants, and guaranteed their profitability by allowing
them import protection until they attained international competitiveness. However, exporters who required synthetic fibers as raw materials were allowed to import these until the domestic industry became competitive. In this way, the domestic synthetic industry was encouraged without harming the interests of exporters.

The Indian approach was to view synthetic fibers with suspicion due to the potential harm to the interests of cotton farmers. Imports were restricted and subject to high tariffs, and when permission to produce them was given, the capacity allowed was so small that prices in India were four or five times the international prices.

The South Korean policy package resulted in the textile/apparel industry emerging as the country's largest exporting sector in the late 1960s, a position it retained until the early 1980s. Meanwhile, the Indian policy package nearly stagnated textile/apparel exports from the 1950s onwards, and the country's share of the world market was taken over by South Korea, China and Taiwan, among others. Figures 22, 23 and 24 depict the contrast in the value of exports of South Korea and India. Figure 22 shows that South Korea's total exports grew from US$ 19 million in 1959 to US$ 30.2 billion in 1985, whereas India's total exports, which were as high as US$ 1.2 billion in 1959, grew to only US$ 8.9 billion by 1985. As seen in Figure 23, South Korea's textile exports grew from a mere US$ 1.4 million in 1959 to US$ 2.5 billion in 1985, ranking the country among the world's top textile/apparel exporters. Figure 23 also shows the stagnation of India's textile
exports, which grew from US$ 425.7 million to only US$ 1 billion in 1985. India's apparel exports fared better than its textile exports and grew from US$ 13.3 million in 1965 to US$ 914.2 million in 1985 (Figure 24). In the same period, South Korean apparel exports grew from US$ 20.7 million to US$ 4.4 billion. This study contends that the differences in the performances of textile and apparel exports of both countries were largely a result of the atmosphere created by government policies.

The following chapter summarizes the study and presents the major conclusions as well as suggestions for future research.
Figure 22. South Korea and India: Total Exports in US$ 1000
Figure 23. South Korea and India: Exports of Textiles in US$ 1000
Source: Adapted from United Nations (1953-1990).
Figure 24. South Korea and India: Exports of Apparel in US$ 1000

Source: Adapted from United Nations (1953-1990).
CHAPTER 8
SUMMARY, CONCLUSIONS AND SUGGESTIONS
FOR FUTURE RESEARCH

A summary of the study is presented in this chapter. Conclusions and suggestions for future research are included.

Summary of the Study

The purpose of this research was to examine the textile and apparel export patterns and government intervention of South Korea and India, 1955-1985, through comparative historical analysis. The sectoral study proceeded under Liang's (1992) premise that a prime determinant of export success is the nature of government intervention. The focus of the study was on the overall policy atmosphere in the two countries examined, which affected the development of the textile/apparel sectors and their trade patterns.

Previous research has sought to explain the patterns and determinants of international textile and apparel trade through the theory of comparative advantage. Although the natural endowments of a country help explain patterns of trade, these patterns can vary widely if similarly endowed countries pursue different trade strategies (Haggard, 1990).

During the last four decades, economists who developed the theory of trade
orientation purported the merits of an export promoting (EP) strategy over that of an import substituting (IS) strategy in aiding economic development through successful exporting (World Bank, 1987). In the theory, the two strategies have been depicted as polar opposites which cannot coexist simultaneously. An EP strategy is one which is non-interventionist in trade and industry, whereas an IS strategy is highly interventionist and promotes import substitution through the protection of domestic industries.

Recently, the bipolar classification of trade orientation has been disputed by researchers who argue that dual policies of export promotion and import substitution can coexist simultaneously, and can be instrumental in a country's export growth (Krugman, 1986; Rodrick, 1992). Liang (1992) redefined trade strategies according to the nature of government intervention, rather than the degree of government intervention as defined by the bipolar classification.

Textile and apparel trade policy remains a contentious issue in the US as well as in other advanced economies whose domestic industries have experienced tremendous competition from developing country exports. As the east Asian exporters advance and move away from textile and apparel exports, it will be of interest to policy makers in the West to predict the new generation of exporters. No previous studies containing an analysis of trade orientation and policy regarding the textile and apparel sectors of South Korea and India were found.

The method of study and the choice of the two countries were based on several factors. Considering that government policies critically influence the exports of countries,
and that exports are not entirely governed by factor endowments, the method of comparative analysis permits an in depth examination of policies and exposes the mechanisms that link variables (Haggard, 1990). The method stresses the importance of policy analysis, and explicit variables are used to compare systems across geographic space and time (Hecksher, 1957). Countries with similar growth paths should exhibit some crucial similarities and those which follow alternative paths can be compared on the basis of critical differences (Haggard, 1990).

As textile and apparel exporters, India and South Korea have had comparable features in terms of government policies. India and South Korea each began the process of development in the 1950s after a period of colonial rule and chaos resulting from the partition of territories. Unlike South Korea, India was historically involved with textile trade. In spite of India being a major producer of raw materials used in the manufacture of textiles, its enormous market share of the 1950s eroded. In comparison, South Korea established itself as a major contender in world trade with almost no historic base and with very low levels of raw material production. Since both countries began implementing development policies in the early 1950s, the year 1955 was chosen as the first year under study. Policies which affected the later development of the textile/apparel sectors of both countries but were implemented before 1955 were also included. The last year under study was 1985, as in following years there was a shift in the composition of South Korea's exports from mostly light manufactures exemplified by textiles and apparel, to more capital and technology intensive manufactures.
The conceptual framework of this study was based on Liang's (1992) classification of trade regimes. Liang proposed an alternative classification of trade orientation and introduced five possible trade strategies followed by developing nations, based on combinations of sectoral and market orientations. There is a focus on the overall policy atmosphere in a regime, which affects the development of specific industrial sectors and the trade pattern of a regime.

The procedure utilized in this study followed the general, broad framework pertaining to comparative analysis. To judge the overall policy atmosphere of South Korea and India, the effects of various government incentives were analyzed. The study contained descriptions of policy measures and explanations of the reasoning governing their implementation. An evaluation of the effects of each policy, as well as the overall effect of the combined policies was provided. The variables chosen were identified by the theory as relevant to policy analysis, and were examined to determine whether they provided evidence to support the hypotheses of this study.

For both countries, qualitative and quantitative variables associated with import protection and export promotion were analyzed. To qualitatively evaluate the type and degree of import protection in South Korea, the system of quantitative controls on imports known as the semiannual trade program, as well as the system of tariffs on imports were described and analyzed. A qualitative evaluation of export promotion in South Korea consisted of examining the roles of preferential credit allowed to exporters and of direct export incentives.
To provide a picture of the policy atmosphere prevalent in India, the systems of industrial regulation, protection of the small scale industries and capacity licensing regulations were analyzed in detail. In terms of import protection, India's system of quantitative controls as well as the role of the tariff structure were analyzed. Indian export promotion measures such as cash assistance and import licenses to exporters were considered.

A quantitative evaluation of the levels of import protection and export promotion in South Korea and India was undertaken by comparing the effective rates of protection (ERP) or effective exchange rates (EER) for both regimes. It was outside the scope of this study to compute effective rates of protection or effective exchange rates for the textile/apparel industries of South Korea and India, and computations by other researchers were used.

This study was limited in that it relied on secondary data and no statistical analysis was undertaken. Several variables affecting exports were not addressed, e.g., the effects of world demand and of restrictive arrangements entered into with importing countries. The theory and empirical research on which this study was based have concerned the economy of a country as a whole. As this study was a sectoral analysis, it ran the risk of analyzing an unrepresentative sector which did not reflect the whole economy.

The final stage of the analysis consisted of a cross-country comparison, where the dissimilarities and the similarities between the government policies affecting the export patterns of the South Korean and Indian textile/apparel sectors from 1955 to 1985 were
discussed. Arguments were provided in support of the hypotheses. The analysis showed that both the South Korean and Indian textile/apparel sectors were subject to extensive government intervention through trade and industrial policies. The method of comparative analysis permitted an in-depth view of various individual policies affecting the textile/apparel sectors of both countries. The system of import protection in South Korea was deceptive: although items were technically importable, a myriad of regulations prevented them from entering the country. Import protection for textile/apparel sector items was specially high. A macro level study would not have permitted a detailed view of South Korea's import protection system.

An important difference between the system of import protection in both countries, which was revealed by comparative analysis, was that import substitution in South Korea was aimed at producing goods destined for the export market, whereas in India it was aimed at satisfying domestic demand.

At the industry level, the entry and the level of profitability of individual firms were very much influenced by government policies in both South Korea and India. Investments were controlled through credit control in South Korea and through capacity licensing in India, although South Korea allowed exporting firms to make greater profits. On the other hand, India corroded the profits of its large textile firms.

The South Korean policy package resulted in the textile/apparel industry emerging as the country's largest exporting sector in the late 1960s, a position it retained until the early 1980s. Meanwhile, the Indian policy package nearly stagnated textile/apparel exports
from the 1950s onwards, and the country's share of the world market was taken over by South Korea, China and Taiwan, among others.

Conclusions Drawn from the Study

This study was the first attempt to apply the theory of trade orientation to a two-country comparison on a sectoral level. Previous research in the area of trade orientation has focused on the application of the theory to intercountry comparisons on a macroeconomic level. This study was based on the premise that government policies critically influence the exports of countries, and that exports are not entirely governed by factor endowments.

In the case of South Korea and India, factor endowments played an insignificant role in the pattern of both countries' textile/apparel exports. India was historically known to be an exporter of textiles, and possessed an abundance of raw materials required for textile/apparel exports, such as large supplies of raw cotton and raw silk, as well as cheap labor. South Korea had to import all its requirements of raw materials for the textile/apparel industry, and had to rebuild the industry after the destruction caused by the Korean war. The subsequent success of South Korea as an exporter of textiles/apparel and the stagnation of India's textile/apparel exports were largely a result of the policy atmosphere affecting the textile/apparel sectors.

According to the conventional theory of trade orientation, South Korea was
classified as an outward oriented regime, which displayed low or non-existent levels of government control over trade and industry. On the other hand, India was classified as an inward oriented economy, characterized by high levels of government control over trade and industry. This study found that the above mentioned classification was valid for India but not for South Korea at the sectoral level of the textile/apparel industry. The data presented revealed that both South Korea and India displayed high levels of government intervention in industry and trade as related to their respective textile/apparel sectors.

This sectoral study revealed certain aspects of the trade regimes which would have been excluded in a macro level study. Indian industrial policies such as the protection of the small scale sector have played an important role in determining the pattern of Indian textile/apparel exports. This policy was largely limited to the textile/apparel sector, and a macro level study would not have been able to give it due importance.

The conventional theory of trade orientation generalizes that government intervention in trade and industry, such as the protection of domestic markets in developing countries, hampers those countries' exports. This study showed that the above argument is not always applicable on a sectoral level. An important finding was that both South Korea and India protected their domestic textile/apparel industries, but only India's textile/apparel exports were hampered by the protection of the domestic industry. The evidence of South Korea's success as an exporter of textiles/apparel provides support on a sectoral level for Liang's (1990; 1992) argument that a prime determinant of export success is the nature of government intervention.
How far is the South Korean example applicable to India and to other developing countries? There are certain examples from South Korea which are worth emulating. Coordinated policies, such as granting exporters easy access to imported intermediates required in the production of exportables and incentives to domestic producers of intermediates to improve quality, undoubtedly promote exports. In the case of the South Korean textile/apparel industry, a set of coordinated policies such as preferential credit financing, direct export incentives and government support of the development of the man-made fiber industry were major contributors to the industry's export success. India's set of policies regarding the textile/apparel sector were uncoordinated and contradictory. The total restriction of imports including imported intermediates required in the production of exportables, the protection of small scale units and capacity restrictions in the mill sector as well as in the man-made fiber industry seriously hampered the competitiveness of exports. In this scenario, direct export incentives which were occasionally given during balance of payments crises had no effect in promoting exports.

However, South Korea's textile/apparel industry was also aided by a complex system of import controls. It would be a misinterpretation of the South Korean experience to conclude that only when the South Korean industry achieved international competitiveness, were import controls lifted (World Bank, 1989). The policy structure was such that, despite import controls, exporting was more profitable than producing for the domestic market, and exporters had access to imported inputs.

The success of this system depended to an extent on the authoritarian nature of the
government, and the clear economic criteria on which the policy structure was based. In the case of India, where trade policies are used for objectives other than economic efficiency, the complex system of import controls in no way helps exports. The presence of strong state governments and intense lobbying pressures from interest groups often leads to import protection being used for a variety of objectives other than infant industry protection. In large developing countries, the government is often not authoritarian or stable enough to permit the emulation of the South Korean import control system.

Implications of the Study and Suggestions for Future Research

The findings of this study have several important implications, leading to suggestions for future research. Firstly, the findings imply that in order to determine the export patterns of a specific sector, a detailed comparative analysis of the policy atmosphere augments intercountry studies which examine the effects of general trade and industrial policies on aggregated industrial sectors. This is specially true for developing countries where government intervention can take complex forms, and the incentive structure varies across industrial sectors.

In the case of India, import control in the form of quantitative restrictions and high tariffs were established indiscriminately and with no time limits set for their removal. Import protection such as India's encourages unproductive rent seeking activities, resource misallocation, and the loss of international competitiveness as was the case with
Indian cotton textiles. For India to emerge as a major textile/apparel exporter in the future, a drastic change in government policies would be required. In June 1985, the Indian government announced a new textile policy, which was announced as a dramatic break from past policies. The aim of the policy was to resurrect the mill sector of the textile industry and promote exports in both the textile and apparel sectors. According to the 1985 textile policy, the textile mill sector would be released from capacity restrictions, excise duties on mill-made cloth and on synthetic cloth would be substantially reduced, and imports of machinery would be made available at low tariff rates as well as access to cheap credit. Non-viable units would be given permission to close down and the level of protection to the small scale sector was to be considerably reduced (Jain, 1986).

However, the policy execution was slow and unsatisfactory. Whereas the central government permitted the closure of non-viable units, the state governments stepped in to prevent their closure. Unsure of the government’s commitment to revitalize the industry, mill owners were cautious of using the available credit to modernize their plants. The unauthorized powerloom sector continued to grow and expand production, and by 1987 it was obvious that the new textile policy had achieved nothing, reflected by the stagnation of textile exports to the level of 1980, whereas apparel exports improved marginally. In June 1991, under intense pressure from the World Bank, the Indian government announced serious intentions to liberalize the economy and deregulate industry. A part of the credit also goes to the new government elected in 1991, which concentrated on economic rather than on social issues. By December 1993, liberalization had made slow
but steady progress, with import barriers substantially reduced, and increasing foreign capital entering the country (Upadhyay & Khanna, 1993). Although bureaucratic regulations still enmesh the economy, there is renewed hope among exporters. It remains to be seen how successful the new liberalization is and how Indian textile/apparel exports fare against those of such new competitors as Turkey, Indonesia and Pakistan.

Meanwhile, the future of South Korean textile/apparel exports remains uncertain. Wages in South Korea are much higher than those of its competitors such as Turkey and China. The experience of Japan and the US indicates that South Korea will soon become a net importer of textiles/apparel, as its economy advances towards the production of technology intensive goods (Glasse, 1992). The effects of future bilateral and unilateral trade agreements also need to be analyzed. As South Korea is now classified as a Newly Industrialized Country (NIC), it no longer has all the privileges accorded to developing countries in trade agreements with the importing countries. Meanwhile, the implementation of the NAFTA will affect the competitiveness of South Korean textile/apparel exports to the US; not only are wage rates lower in Mexico, but tariff restrictions on Mexican imports will soon be removed.

The NAFTA also has implications for Indian textile/apparel exports to the US. Although wage rates are lower in India, the low quality of Indian textile/apparel exports has led to unutilized quotas in the past. As the NAFTA spurs further competition in the area of textile/apparel exports, India needs to improve quality rather than bargain for higher quotas during trade negotiations.
Considering the economic and political importance of textiles/apparel in international trade, further research of the policy atmosphere affecting the major textile/apparel exporters as well as the potential exporters would aid in predicting the future direction of textile/apparel trade. Little is known about the policy atmosphere in China, which is one of the largest textile/apparel exporters at present. Further, a quantitative study which examines rates of protection and effective exchange rates in specific sectors rather than in aggregate industry, may reveal new and valuable information regarding the sectors and countries examined. Such a study may provide further justification for the argument that dual policies of import protection and export promotion exist simultaneously in regimes.

In South Korea, government policies led to changes in relative factor endowments; policies which attracted and accumulated scarce capital led to a change in the country's capital labor ratio. A comparative statics analysis which examines changes in factor endowments and their relationship with policies can provide a more detailed picture of the direction of trade than that provided by a purely quantitative or qualitative study.
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