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ERNST & YOUNG

Industry, Science & Technology Canada

A Study of the Competitiveness of
the Mexican Textile and Apparel
Industries in a North American
Free Trade Context

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Executive Summary and Conclusions

General

Neither Canada's textile or apparel industry are likely to be affected in a significant way by the conclusion and implementation of a North American free trade accord ("NAFTA"). Mexico's efficiency and competitiveness are too low, for that country's manufacturers significantly to affect Canadian production and consumption, at least for several years. Mexico's apparel industry will likely have a greater impact on Canadian production and consumption than Mexico's textile industry.

For purposes of this report, we assume that NAFTA would include the following rules governing trade in textile and apparel products among Canada, the US and Mexico:

- a. origin rules similar to those in found in the Canada-United States Free Trade Agreement ("FTA"), to determine whether or not particular products originate in North America;
- b. tariff elimination over a period of several years for products that qualify as being of North American origin;
- c. quota elimination for North-American originating products;
- d. tariff elimination for specified volumes of apparel products made from fabrics that originate in a country other than Canada, Mexico or the US, on a basis similar to that found in FTA; and
- e. the elimination of drawbacks or other relief from customs duties imposed by any NAFTA member country, on goods imported into that country and subsequently exported to another member country, either in the same form or incorporated into other goods.

Textiles

The Canadian textile industry would not be negatively affected overall by a NAFTA. Although import penetration by Mexican exporters could increase, especially in some primary fibres, Canadian producers would for their part have an opportunity to increase shipments to Mexico. With regard to other textile products, the competitiveness of Mexican products

in Canada is generally low. Canadian export opportunities in Mexico could be more valuable than the dollar value of increased Mexican exports to the Canadian market.

Our conclusions would not change materially if the elimination of both tariffs and quotas were to occur on an accelerated basis in the textile sector. Our expectation is that NAFTA's main impact on the Canadian economy would occur in the apparel sector more than in the textile sector, since Mexico has no significant comparative advantage over Canada in most sub-sectors of the textile industry.

Apparel

The Canadian apparel industry could experience moderate increases in the penetration of the domestic market by Mexican products, especially for long-run, undifferentiated products. Apparel made in production-sharing arrangements - that is, Mexican assembly for foreign producer-distributors - would in many cases be a more effective competitor for Canadian market share than Mexican domestic producers. Mexico's domestic industry remains weak in many areas, including management capability, quality control, price-competitiveness and marketing.

The Canadian industry could also encounter additional Mexican competition for a share of the US market. However, this effect will not be pronounced, since production-sharing arrangements already have substantially open access to the US market. Moreover, Mexican apparel exports made under these programs still constitute only a small fraction of US garment consumption. The most competitive Mexican products are generally down-market - that is, in market segments where Canadian producers tend increasingly not to compete.

Conversely, rapid penetration of the Mexican market by foreign - mainly US - products, suggests that at least for successful niche products. Canadian exporters could find a meaningful market in Mexico.

The possibility that some types of Mexican production, whether from domestic plants or production-sharing operations, could quickly penetrate the Canadian market in the absence of tariffs and quantitative restrictions may make it advisable to reduce this country's trade barriers in the apparel sector over several years.

Chapter 1 - Introduction

1.1 Organization

This report on the organization and operation of Mexico's textile and apparel industries has been organized into six main sections. Section One is an Introduction, which describes the report's organization and sources. Section Two reviews Mexican public policy relating to production and trade in textile and apparel products. Section Three examines general commercial characteristics that affect production, consumption, trade and investment in both the textile and apparel sectors, including the cost of labour, capital, plant/equipment, utilities, taxation and so on.

Sections Four and Five analyze key aspects of Mexico's textile industry. With regard to this industry, we have divided our analysis into two subsectors - the so-called chemical-fibre subsector and the general-textile subsector. This division conforms to the way the Mexican private sector and government generally segregate association membership and information-gathering in the overall textile sector. As there is no effective way to combine most of the available data describing each subsector, we have followed the distinction for purposes of this study.

Section Six of this report analyzes key aspects of Mexico's apparel industry.

Each section of the report includes a summary of our overall findings, conclusions and recommendations relating to the particular sector, as well as answers to the questions to be addressed as part of our analysis.

1.2 Sources

We have primarily relied on the following main sources for the information contained in the report:

a. Mexican Sources

Where possible, we used domestic reports on the nature and quality of Mexican production in these sectors, domestic statistical information and interviews with officials of industry associations and government. As well, we met with representatives from selected individual companies.

b. US Sources

We relied on government-sourced statistical information, as well as interviews with industry experts and individual company managers.

c. Canadian Sources

We relied on government and industry-sourced statistical information, as well as interviews with association managers and managers of individual producing and importing operations.

It should be noted that in relation to both the textile and apparel sectors, record-keeping in Mexico by both governmental and private-sector entities is less exhaustive, less detailed and often less recent than comparable Canadian documentation.

2.1 Summary and Conclusions

In this section of the report, we address a number of industrial policy issues applicable to Mexico. Our review in this area responds to specific questions that were raised by Industry, Science and Technology Canada regarding the way in which such policy factors play a part in Mexico's textile and apparel industries.

With one exception – the pricing of petrochemical inputs for the chemical fibre sector – no special government support exists for Mexico's textile and apparel industries, either in relation to production or exportation. There is no direct or indirect public-sector investment in either industry, nor does government play any significant role in guiding industrial strategy in these sectors. The Mexican government does not view the textile or apparel industry as a priority, in the sense of allocating resources to it that are not allocated to other economic sectors, or of planning investments directly in either the textile or apparel industry.

Concerns expressed by US apparel-makers over Mexican standards, especially in relation to the labelling of imported products, have recently been resolved through joint agreement. With respect to intellectual property rights, expectations are that a proposed tightening of Mexican rules in this area will provide more effective protection for trademark owners.

Mexico has no major fiscal programs that provide support for the textile or apparel industries, nor are there major horizontally-provided programs available generally to domestic manufacturers. A government-supported lending program generates about 1% of reduction in commercially-available lending rates, on approved loans for plant modernization. This program is available mainly to the automotive and apparel/textile industries, although other sectors are also permitted to draw on it. A similar reduction in commercial interest rates is made available through government intervention, to support export financing by domestic producers in all industries.

Mexican maquiladoras operations, as such, play a minor role in Mexican textile and apparel production. The legal concept of the maquiladora will become an anachronism under NAFTA, for products originating in the continental free trade area. More important than maquiladoras, which are formally constituted operations that have in the past provided owners with liberalized investment rights and relief from some onerous Mexican trade and tax rules, are production-sharing operations. These are contractual arrangements, whereby a foreign producer/importer sources products from a Mexican manufacturer. This type of arrangement has shown export growth in the US market, especially in apparel, and could have an impact on Canadian production and consumption under NAFTA.

Maquiladora or shared-production arrangements, generally involving a US and a Mexican entity, have no special application to textile or apparel production. No special tax factors exist that favor Mexico's textile or apparel industries. Nor does Mexico have industrial development or export support programs that target these sectors. For convenience, we have included in Section 2 of this report general commercial and trade information relating to maquiladora and production-sharing operations generally.

2.2 Background

The role of the Mexican government in influencing decisions of domestic textile and apparel producers is small, for several reasons. The current administration is philosophically opposed to an interventionist model of government-business relations, which it considers to be inefficient. More specifically, the current Mexican government does not believe it should introduce policies that favor certain types of industrial production over others, instead preferring to let the market make these choices.

This situation is aggravated by serious budgetary constraints, caused by high demand for basic government-subsidized services - education, health, housing, etc. - and by competition for revenues with high costs of servicing government debt, especially foreign debt.

The Mexican government also opposes interventionist strategies that have no direct fiscal cost - for example, an import substitution strategy - as it feels that these approaches have harmed Mexican production and competitiveness in the past. Rather, the Salinas administration believes in the importance of exposing Mexican producers to international competition. In this regard, Mexico has actively followed a policy of unilateral reduction of barriers to the importation of goods and services and to foreign investment, since the Salinas government took office in November 1988.

These unilateral measures include the elimination of quantitative restrictions on 80% of all products imported into Mexico (including all textile and apparel products), the reduction of the country's top tariff rate to 20% from 100%, and the waiver of restrictions on foreign control of Mexican business operations in many industrial sectors, including textile and apparel.

Given the political difficulties associated with further unilateral reduction of domestic barriers to foreign goods, capital and services, Mexico City is seeking to carry on the trade liberalization process through a free trade agreement with the United States and Canada. Such additional measures could include - apart from tariff and quota elimination - further liberalization of direct foreign investment (for example, in financial services, forestry and petrochemicals) and liberalized trade in services (including rights of establishment plus mobility rights for service providers, along the lines provided for professional service providers in FTA).

As distinct from Canada, in which jurisdiction over industrial and commercial operations is divided between the federal and provincial levels of government, in Mexico virtually all authority over these areas together with fiscal policy is controlled by the central government.

The politics of Mexican trade and investment business will likely continue along the same path at least until 1994, when the Salinas administration's term of office ends. To the extent that these policies are successful, they

may be continued by a subsequent administration. Success will be measured in two ways - overall economic growth and distribution of gains.

With respect to the former method of measurement, the first three years (1988-91) of the Salinas administration have shown a steady recovery in macro-economic terms, with annual real GDP increases of about 3%. Measuring wealth-distribution is a much more complex issue, including such factors as the structure, rate and incidence of taxation; delivery of social services and so on.

However, as a broad measure of popular approval, current (June 1991) poll results indicate that the Salinas administration is likely to improve its standing in the legislature following mid-term elections, to be held in mid-August of this year. The issue of the government's popularity is relevant for Canada, insofar as it bears on the Mexican government's ability to retain the legislative authority to conclude NAFTA.

2.3 Priorities

The Mexican government does not view the textile or apparel sectors as priorities, in the sense that, with one exception, it does not currently allocate nor is it likely to allocate significant resources - in the form of direct grants, indirect benefits (such as personnel training or export-market development programs), tax relief or other support measures - to these sectors that it does not allocate to other sectors.

The exception to this general rule involves pricing policies for petrochemical feedstocks supplied by Mexico's nationalized oil company to Mexican producers of primary synthetic fibres. This factor is discussed in greater detail in section 2.9 of this report, below.

Neither the textile nor the apparel sector receives indirect support, in the form of domestic tariffs that are higher than those applicable to other Mexican industries.

As far as being sources of foreign exchange, the textile and apparel sectors are not seen as having prospectively greater significance than many other industries, especially the automotive and electrical-electronic sectors.

2.4 Investment Plans

The Mexican government has no direct investment in these sectors, nor does it have any plans to make such investments.

2.5 Market Niche Strategy

The Mexican government is not encouraging the textile or apparel sectors to occupy any particular niche in either foreign markets, including the markets of the US and Canada, or in the domestic market.

2.6 Subsidization

The Mexican government does not have support programs that are targeted specifically at the textile or apparel sector.

2.7 Standards, Regulations and NAFTA

A principal recent concern of US textile and apparel makers has been newly-enacted labelling legislation in Mexico. These new rules purport to protect domestic importers and consumers, by requiring most textile and apparel goods imported into the country to be labelled, according to the provisions of the new law. As well, the new law aims to impose a level playing field in the domestic market. According to representatives of Mexico's textile and apparel industries, labelling obligations were previously imposed on Mexican producers, while goods imported into Mexico were not subject to these requirements.

However, US apparel industry representatives advise that similar rules have been formally in existence for several years, but were not enforced with respect to either domestically-made or imported textile or apparel goods. Since the Mexican market was effectively closed to imports, due to high tariffs and an extensive system of quotas, the issue of enforcement in relation to imported articles was academic. According to these US sources, problems arose when Mexico liberalized its import rules, and import volumes rose quickly in response to these market-opening measures. Allegedly to protect domestic producers, the current labelling legislation was introduced, without a reasonable phase-in period, to give domestic manufacturers a breathing space, before foreign exporters made the necessary adjustments to conform to the new rules.

The legislation came into force on October 24, 1990, except for one article and parts of two other articles, which came into force July 1, 1991. A copy of this legislation is enclosed as Appendix A of this report, in both the original version published in the Mexican government's *Diario Oficial*, and in an English translation.

In summary, the legislation applies to textiles, including yarns and fabrics; clothing made of fabric or plastic; ornamental accessories; and other textile products, including carpets, sheets and bedspreads, and tablecloths. In each case, the article must include a label that contains the name of the producer, the country of origin, a listing of material contents as prescribed, and - if the article is in a non-transparent container - a product description. In the case of clothing, the article must include a label containing these items of information, plus size and instructions for washing, drying, ironing and bleaching.

Appendix A also contains an unpublished Memorandum of Understanding (the "MOU"), effective as of July 1, 1991, which was agreed by the governments of the US and Mexico, following several months of negotiations. The MOU essentially introduces greater flexibility for importers, with regard to the specific types of labelling requirements imposed by the new legislation. Importantly, it also postpones the

operative date of the new legislation to October 1, 1991. With respect to both the flexibility and the postponement issues, it would appear that this relief from the provisions of the new legislation apply only to the importation of products originating in the US. Remaining concerns regarding the impact of the new legislation include the question of the range of goods to which the rules apply - e.g., does it apply to bulk textiles?

As of mid-August, 1991, no discussions have occurred among Canadian textile or apparel industry representatives with their US and Mexican counterparts on this issue.

Other standards issues related to NAFTA include discussions currently going forward between the apparel group within the American National Standards Association and its Mexican counterpart association, to try to reach agreement on harmonized labelling standards. Such harmonized standards could then be incorporated into NAFTA. Canadian apparel-maker representatives are not yet part of these discussions.

2.8 Petrochemical Policies

According to information provided by senior management of the National Association of the Chemical Industries (Asociación Nacional de las Industrias Químicas), prices paid for petrochemical feedstocks by Mexican producers of primary synthetic fibres are in some cases below those conventionally offered by North American petrochemical producers.

Prices for products shipped by privately-held companies are said to be determined by market conditions. These conditions include competition from foreign products, which generally enter the Mexican market at a duty rate of 10%.

On the other hand, products for petrochemical products offered by Mexico's government-owned monopoly petroleum/petrochemical company, Pemex (all the shares of which are held by the Mexican

government), are discounted. The discount level tries to approximate the transfer prices that would be payable by an integrated manufacturer of primary synthetic fibres for such products, purchased from a petrochemical-producing subsidiary controlled by such a manufacturer. Actual price lists showing the value of Pemex discounts are unavailable.

A list of major inputs of the Mexican primary synthetic-fibre industry is included in Appendix B of this report, and indicates those products which the industry sources from Pemex, as well as those sourced from other Mexican producers.

2.9 Intellectual Property Rights

Mexico has intellectual property ("IP") protection rules that apply to the textile and apparel sectors. Adverse publicity which Mexico has received in the area of patent and trademark protection may stem from the absence of effective IP protection in certain sectors of the Mexican market, especially computer software, musical lyrics and pharmaceuticals. Anticipated changes to Mexican IP rules will improve matters in respect of these sectors.

With regard to other sectors, formal legal protection exists for IP. In the textile and apparel industries, the main concern of Canadian producers would seem to be trademark piracy in relation to Canadian apparel products exported to Mexico. Mexico has a system of trademark protection and registration, which would be available to Canadian products distributed in that country. Effective enforcement of a Mexican judgement may be difficult. For practical purposes, however, this should not be a significant issue for Canadian exporters. Piracy generally does not occur until a brand has achieved a high degree of popular recognition. This is not likely to happen for many years, in respect of Canadian branded-product exports to Mexico.

Notwithstanding concerns that foreign IP owners may have over Mexican trademark infringement, moreover, domestic producers apparently

function effectively under existing levels of protection. Several Mexican manufacturers are licensees of foreign designers - St. Laurent, Armani and Valentino, for example, are all made and distributed in Mexico - and are willing to pay for these licensing rights.

2.10 Other Public Programs

2.10.1 Domestic Financing

The Mexican government offers financing at preferential rates to qualifying companies in several related programs. However, the impact of the programs appears moderate overall, mainly because rate reductions are not significant. None of the programs is specific to either the textile or apparel sectors. The Secretariat of Commerce and Industrial Development ("SECOFI") advises us that it is unable to determine annual amounts of lending under any of the programs, which are as follows:

PROFIRI

PROFIRI (Programa de Financiamiento para Reconversión Industrial Program for Industrial Reconversion) mainly provides funds for companies in three sectors - textile/apparel, automotive parts and cut flowers - although operations in other industries can borrow using this program, depending on availability funds.

Lending programs are carried out by NAFINSA (Nacional Financiera S.A.), the equivalent of a crown corporation, which is controlled by the Department of Commerce.

PROFIRI offers funds to borrowers for plant modernization, through acquisition of machinery. The interest rate for funds obtained through the program is approximately 1% below the rate at which the borrower would be able to obtain funds commercially.

PROFIRI does not generally result in lending to buyers who would otherwise be unable to secure commercial loans. This is because

NAFINSA does not lend directly. Rather, qualifying companies borrow from commercial banks, who conduct assessments of the borrower, as they would do in regular lending arrangements. Only if they are satisfied as to the borrower's ability to repay will they enter into an agreement. NAFINSA in turn will repay to the bank the spread (about 1%) between the bank's commercial rate and the NAFINSA discount rate.

The commercial bank remains at risk, insofar as a default by a borrower will not be repaid by the NAFINSA program.

NAFINSA

The NAFINSA general financing program operates in the same way as PROFIRI . However, it is aimed at other borrowers, namely small and medium-size businesses in all sectors. Given the program's focus, it does not appear that it would be of practical value to Mexican textile and apparel companies capable of exporting, since these will generally not fall within the qualifying categories, which are of two types:

- a. funding is available for small companies - i.e. not more than 200 employees located outside the Federal District; and
- b. small business in the federal District

Funding is available for small companies which have no toxic emissions or effluents.

2.10.2 Export Support

The Mexican government itself offers no regular programs that provide support to exporters, which are either unavailable from commercial sources, or which are offered on terms better than those offered by commercial sources.

Subsidized export financing arrangements are made available by the Banco Nacional del Comercio Exterior ("Bancomext"), through the so-called "FOMEX" program. Bancomext is a crown corporation-equivalent, controlled by the government of Mexico.

The effect of FOMEX is to reduce the cost of export financing by a Mexican exporter, by an amount which on average currently is approximately 1% lower than the rate that would be charged for export financing based on commercial costs of money, plus the commercial risk involved in the particular transaction.

Mexican bankers and Bancomext officials advise that this preferential spread is narrowing, and that within the next year or two the FOMEX subsidy will be phased out.

In relation to exports to Canada, the primary concern of a Mexican seller will usually be obtaining two types of financing: pre-export and receivables.

In relation to pre-export financing, a Mexican producer in most sectors, including textile and apparel, who receives an export order, can borrow amounts needed to buy inputs. The maximum term for such borrowing is 60 days, and requires evidence of an export order.

In relation to receivables financing, a textile or apparel producer requests financing can receive export loans with terms of up to 180 days. Special arrangements can be made for longer terms, but this issue seldom arises in export contracts, other than those involving capital goods.

Financing arrangements work in the same way for both pre-export and receivables financing. Funding is made available through a commercial bank, which is borrowing on international money markets. Current rates typically available to such a bank would be approximately 8.5%. The bank will then provide funds for a particular export transaction to Bancomext, which on-lends to the exporter at a rate that currently is approximately 9.5%. When the loan is paid by the exporter, Bancomext repays the commercial bank at a rate that is currently around 10.5%. The 1% cost to Bancomext represents an export subsidy.

Exporters can receive both pre-export and receivables financing in relation to the same contract. Both pre-export and receivables financing

are available in pesos or US dollars. US dollar loans are generally preferred, since their cost is usually lower than high Mexican domestic financing costs.

The FOMEX program does not insure the exporter against the risk of a buyer's default. Where an export transaction is not supported by a letter of credit, FOMEX financing will be available only where the exporter obtains credit insurance. This insurance is available from Comesec, a subsidiary of Bancomext. Comesec will assess an importer's credit-worthiness. Where the risk is acceptable, Comesec will insure the exporter's receivable. Comesec's insurance fees range from 1 - 1.5%.

The only other government support provided by Bancomext is the so-called "ALTEX" program, which streamlines Mexican customs reporting and other administrative functions for active exporters. The program includes no element of financial support. Several programs previously available to support Mexican export transactions have been phased out since the Salinas administration took office in 1988.

2.10.3 Other

Senior Mexican government officials advise that no major programs exist to support the textile or apparel industries in particular or manufacturing industries in general. However, to ascertain whether modest policies or programs of general application exist (e.g., is there official support for industrial-effluent reduction practices and could this apply to the textile sector?; what benefits flow from low petroleum prices for all users; at both the industrial and consumer level?) or what impact of such policies or programs might be, is beyond the scope of this study.

2.11 Maquiladoras

2.11.1 General

Maquiladoras as specific legal entities play only a small part in current North American trade operations in the textile and apparel sectors, nor do

these types of entities appear likely to play an important trade role under NAFTA.

More important in terms of their potential effect on Canadian textile and apparel production and consumption under NAFTA are production-sharing arrangements. These arrangements accomplish virtually all the practical objectives of maquiladoras without the formalities of the maquiladora regime.

Neither production-sharing arrangements nor maquiladora operations as such will have any significant impact on Canadian competition for US market share under NAFTA, since Mexican producers already have substantially free access to the US market for many types of textile and apparel products.

In terms of investment appeal, Mexican tax arrangements applicable to maquiladoras could make them attractive to Canadian investors, particularly to Quebec-resident companies. Maquiladora and production/sharing arrangements in the textile and apparel sectors have performed well in recent years, in terms of exporting to the US. The impact of the apparel sector has been more significant, with this sector accounting for nearly 70% of shipments by maquiladora/production-sharing operations by value. Given the greater importance of maquiladora operations in the apparel sector relative to the textile sector, sections 2.12.5 - 2.12.11 of this report focus on the impact of such apparel operations on North American apparel production and trade.

This type of production could have a potential impact on some types of Canadian production under NAFTA. For this to happen, current US users of this system would have to develop Canadian distribution channels, or else potential Canadian buyers would have to conform their purchasing programs to Mexican producers. To the extent this type of production has a meaningful impact on Canadian production under NAFTA, this impact would tend to be concentrated in relatively undifferentiated, low-cost products.

Apart from import-export statistics for products of maquiladora/production-sharing operations, no meaningful data has been collected regarding the way in which these operations function. The information in this report was collected from US analysts in this area and from US customers of products made by Mexican production-sharing operations.

2.11.2 Structure/Function

The maquiladora concept is essentially a form of free trade zone not limited to any particular geographic area. This legal regime has existed in Mexico since 1965, with the object of promoting export-oriented investment.

Maquiladoras accomplish this objective in two ways. First, they let producers import duty-free into Mexico foreign-sourced materials and components used to make products for export, together with equipment used in the production of such goods, as long as at least 80% (in most cases) of the final products made with the imported materials and components are re-exported. Second, they also provide certain tax benefits for investors, which are not available to non-maquiladora investors.

For many years, an exception to the right of non-Mexicans to establish and control maquiladora operations was the textile-apparel sector, which was restricted to Mexican control. However, since 1989, these restrictions have been lifted and foreigners can today control 100% of a maquiladora operation.

2.11.3 Impact of NAFTA

The impact of maquiladora operations as such on US production and consumption in the textile and apparel sectors has been low, partly because non-Mexican producers in these industries could not use the maquiladora system until 1989.

But even though such foreign ownership is now permitted, interviews we conducted with US experts in the area indicate that no extensive direct investment has occurred by US or other producers.

This low level of direct foreign investment has been linked by some analysts to concern over Mexico's instability as an investment destination. However, the establishment of some 1,500 maquiladora plants in other industry sectors during the period 1982-90 suggests that other reasons exist for the absence of direct investment in this sector.

A better explanation may be that US producer/importers see no special attraction in Mexico as a textile and/or apparel-producing location. Mexico may be seen as a useful source of garment imports, along with many other competing countries. Several Caribbean countries in particular offer competitive opportunities for shared-production arrangements with US producer/importers. Rather than investing in production facilities in countries around the world, a more viable approach for such producer/importers may be to sub-contract from suitable producers in Mexico and other source countries.

2.11.4 Impact of Production-Sharing Arrangements

A more important type of operation involving joint foreign (mainly US) and Mexican participation involves production-sharing arrangements. These currently have an impact on the US market, and could affect competition for the Canadian market under NAFTA.

Production-sharing arrangements offer participants essentially the same trade benefits as maquiladoras, without involving ownership by a foreign producer/importer of a Mexican plant.

Basically, a production-sharing arrangement involves a foreign buyer - typically US - which contracts with one or more Mexican manufacturers for the production of specific goods made to the buyer's specifications.

This arrangement solves many of the major weaknesses of the Mexican textile and apparel industry - from poor-quality fabric to weak financing

to the absence of North American distribution capability - without tying up any of the buyer's capital in Mexican assets.

Apart from legal formalities, another difference between maquiladoras and production-sharing operations in Mexico is that the latter would have to pay duties on imported materials and components. However, these duties would be refunded once the finished product using them is exported. This difference involves a cash-flow delay, while an importer/producer waits for the refund to be made. However, the impact of this timing difference would generally be modest.

2.11.5 Maquiladoras, Production-Sharing and North American Trade

From a trade perspective, the key issue is that both production-sharing and maquiladora operations have the same opportunity to receive liberal access to the US market, if they use US inputs, or 3d-country inputs which have been further processed in the US.

Specifically, such operations can take advantage of the US' so-called 807 tariff item or the so-called Special Regime. (Technically, the name of the 807 tariff item has been changed to tariff item 9802, since the introduction in the US of the Harmonized System of tariff classification. However, this regime is still commonly referred to as "807" and we use that designation in this report).

The Special Regime lets Mexican-made textiles and apparel enter the US essentially without quantitative restrictions, as long as the goods in question are made of 100% US materials and components, including - in the case of apparel - fabric originating and cut in the US. The finished goods re-enter the US, with duty payable only on Mexican value added.

Under the 807 program, fabric may be imported from third countries or may originate in the US and be cut in the US and sewn in Mexico. Such finished apparel is then exported to the US and may be subject to quantitative restrictions. But as in the case of the Special Regime, the US charges duty only on value provided or added outside the US.

In recent years, US producer/importers have increasingly relied on Mexican assembly of foreign inputs, including US-sourced and cut fabric (Special Regime) or US-cut fabric sourced in 3d-countries (807 program). In volume terms, the following table shows US apparel import (covered by the multi-fibre agreement) volumes (in millions of square meters) from Mexico for the period 1987-1990, and the percent increase over the 4-year period:

<i>Product</i>	<i>1987</i>	<i>1988</i>	<i>1989</i>	<i>1990</i>	<i>%</i>
Total MFA apparel	134	158	176	174	30
807 Apparel	105	126	152	145	38

Source: U.S. Department of Commerce

It is too early to tell whether the decline in 1990 Mexican shipments over 1989 shipments reflects a slowdown in the rate of growth of this type of production, or whether it is due to a temporary weaknesses in US retail sales.

Effective US duties on Mexican value added in production-sharing arrangements are generally in the range of 5% of the total value of the finished product.

2.11.6 Production Location

Shared-production facilities are located throughout the Mexican border region. However, relatively high costs and employee turnover rates in locations close to the border have caused production increasingly to move south, especially to such centers as Saltillo, Torreon, Gomez Palacio and Chihuahua. Production of this type also occurs in more distant locations such as Guadalajara and even Merida.

2.11.7 Mexican Producers

Most Mexican producers engaged in production-sharing are relatively small. Major US customers will typically divide orders among several producers. Mexican producers engaged in these operations typically will not have significant management or marketing/sales capability, since there is little demand for these skills.

2.11.8 US Customers

The main users of this system are major US producer/importers, such as Britannia, JC Penney and Sears.

2.11.9 Production-Sharing Arrangements

US customers generally perform all design functions, carry out cut-planning (and either do their own cutting or subcontract to US cutters) and deliver all patterns, markers, fabric, findings and trim to the Mexican producers. The customers will typically contract with US-owned companies (so called "807 companies") located on the US side of the Mexican borders, to provide preparatory, liaison and supervisory services to the buyers.

In many cases, an 807 company will carry out contract fabric-cutting for the buyer. In almost all cases, they coordinate pick-up of cut fabric and other materials by a Mexican apparel-maker. As well, 807 companies often determine which Mexican producer gets an apparel-making contract. A key function of the 807 companies is protection of the US buyer through quality control, often using random statistical analysis, of Mexican apparel-producers' shipments. For example, in a shipment of 2,000 units, a random analysis might be made of 50 units for stitching quality and conformity to measurements, with a failure rate of 10% resulting in rejection of the shipment, 807 companies often also manage all US and Mexican customs administration, for goods moving both ways across the border.

2.11.10 Product Types

These operations tend to focus on basic, long-run products with relatively high direct labor costs. Denim jeans are a significant item, along with casual pants and shorts.

2.11.11 Labor Costs

Current fully-fringed hourly wage costs for sewing machine operators in major Mexican border locations such as Juarez and Tijuana are about US\$1.50. High employee turnover rates - as much as 100% annually - can occur in border plants. In the tier of locations south of the border area, this wage cost drops to around US\$1.25, while turnover will likely be a fifth to a third of border-region turnover.

2.11.12 Implications for Canada

Production-sharing arrangements currently have almost no impact on the Canadian domestic market. For them to have a significant impact on Canada under NAFTA, at least one of several developments would have to occur.

First, major customers of Mexican products would have to develop North American distribution arrangements. To the extent that Canadian and US retailing structures remain substantially segmented, the products of production-sharing operations delivered to the US market would not flow through to Canada to a significant degree.

Second, Canadian producer/importers would have to establish relationships with Mexican producers. In order for this to happen, several other factors would have to come into being. Volumes commonly sought by Canadian importers would likely have to increase. At low volumes, it is questionable whether or not Mexican producers can be price-competitive. Mexican producers accustomed to large orders from US buyers might not accept Canadian orders. The transaction costs for small Canadian buyers seeking to establish a presence among Mexican producers would be high.

Also, the poor financial condition of most Mexican shared-production operations means that a Canadian partner in such an arrangement would be required to deliver all inputs, including cut fabric, to Mexican producers. While this would not be an obstacle for some Canadian producers, others which have not previously subcontracted in this way might resist the complexities involved.

Major Canadian retailers do not generally enter into sourcing relationships, in which they must take responsibility for supplying inputs. To the extent Canadian retailers continue to reject such relationships, any potential inflow into Canada of Mexican products would be slowed.

2.11.13 NAFTA Impact on 3d-Country Sourcing

Once NAFTA is fully implemented, the maquiladora concept will be irrelevant, in relation to production involving North American inputs. Under NAFTA, a textile or apparel Mexican operation - regardless of whether or not it is a maquiladora - would be able to import fabric and other components duty and quota-free from Canada or the US. The finished product could in turn be exported from Mexico to the US or Canada without tariffs or quotas.

In relation to production involving goods that are not considered under NAFTA to originate in North America, maquiladoras would simply play the same role they play today. Thus, a maquiladora that, under NAFTA, makes garments from fabric produced and cut in a third country would continue to receive the benefit of entering its materials duty-free into Mexico. But final product exported to Canada or the US would be not be considered to originate in North America and would accordingly be subject to full existing duties and any existing quota.

2.11.14 Fiscal Issues

For some foreign producers who want to establish Mexican operations, the maquiladora system may offer tax benefits, by allowing profits and thus taxes to be paid in the parent company's jurisdiction. These benefits were

potentially significant to producers from many foreign jurisdictions, when Mexico had top corporate tax rates of 60% and high rates of withholding.

Now that Mexico has lowered its corporate tax rates and eliminated withholding on after-tax dividends, the maquiladora benefit affects relatively few potential investors. In the case of Canada, only Quebec-resident companies would benefit from a maquiladora arrangement, as opposed to a conventional Mexican corporate structure.

This is because Quebec's combined federal-provincial corporate tax rate is 35.1%, while Mexico's effective corporate tax rate is 45%. Under current tax-treaty arrangements between Canada and Mexico, this means essentially that a Mexican subsidiary of a Quebec company would pay Mexican tax at the 45% rate, without being able to recover the difference between this rate and the Quebec rate.

The maquiladora concept would solve the unrecoverable-tax problem for a Quebec investor. This is because Mexico lets maquiladoras operate as cost centers, allocating all profits to the foreign parents. Since there is no profit, there can be no tax in Mexico, and no unrecoverable taxes paid there.

By contrast, the combined rate of federal-provincial corporate tax on active, non-small business income in all other Canadian jurisdictions is within 2% of Mexico's rate. Companies from such jurisdictions would be generally indifferent as to whether they pay tax in Mexico or in Canada. For them, a maquiladora essentially offers no tax benefits, compared to an ordinary Mexican subsidiary.

2.12 Mexican Trade Policy and Canadian Export Opportunities

As discussed, the Salinas administration has during the past three years significantly lowered Mexico's barriers to the importation of products in numerous sectors, including textile and apparel goods. In the textile sector, quotas have been eliminated. Most quotas on apparel imports have

also been lifted. However, prospective exporters of apparel to Mexico would have to review each product type to determine whether quantitative restrictions still apply.

Mexican tariffs have fallen considerably in these sectors, from top rates for imported textile and apparel products which had previously been 100%. Appendix C of this report itemizes current Mexican tariffs in the textile and apparel sectors. All items are classified according to the Harmonized System of classification. As the appendix shows, most tariffs in the textile sector are currently either 10% or 15%, with a small number of exempt categories. In the apparel sector, virtually all items are dutiable at 20%.

The following sections of this report, dealing with production and trade characteristics in Mexico's textile and apparel sectors, indicate the extent to which foreign-made - mainly US - products have penetrated the Mexican market since the latter was substantially opened to external competition in 1988 and subsequent years.

In terms of market demand, total Mexican consumption of textile and apparel goods as of 1988 was 456.5 million kilos. This compares to total Canadian consumption of 520 million kilos. In other words, total Mexican market size for textile and apparel products was almost as big as Canadian market size in 1988. A more rapid rate of economic recovery in Mexico since 1988, following the crisis years of the mid-1980s, can be expected to stimulate additional demand in these sectors. Thus, while Mexican market possibilities for many products may lag Canadian demand, the textile and apparel sectors could offer scope for Canadian exporters with appropriate products.

Chapter 3 - Production Factors

3.1. Summary and Conclusions

Mexican producers generally have an advantage over their Canadian competitors, in terms of wage costs. However, this advantage is eroded by considerations such as low training levels, high turnover rates in many areas of Mexico and high severance, which make it difficult to terminate unproductive employees. Income tax costs of Mexican industrial producers are generally comparable to those payable in most Canadian jurisdictions. Higher building/property taxes may be offset by enriched depreciation allowances, depending on the structure and operation of particular firms. Mexican utility costs appear to be generally lower than those in Ontario, higher than in Quebec. Mexican manufacturers generally are prejudiced by poor infrastructure development, which imposes high telecom and transportation costs, as well as poor servicing of industrial land.

3.2 Wages/Benefits

Wages are set by annual negotiations among labor, management and government, under the terms of a tripartite anti-inflation agreement. However, real wages in the textile and apparel industries, as in most other Mexican industries, are generally well above minimum wage. In addition, Mexican employers are responsible for numerous fringe benefits. Also, several other factors discussed below offset producer advantages gained in the area of wages. Actual wages paid in Mexico's textile and apparel sectors are discussed in the relevant sections of this report.

3.3 Other Employment-Related Factors

Severance

This is a high potential cost for Mexican employers. Requirements are 4 months of fully-fringed salary for basic severance. In addition, compensation for 32 days of fully-fringed salary is payable for each year worked. In these circumstances, Mexican employers in both the textile and

apparel industry advise that it is in practice difficult to discharge personnel, due to the high cost of doing so. They felt that these severance arrangements in turn made it easy for employees to be unproductive, since their fear of losing jobs was relatively low.

Training

Mexico generally offers insufficient training facilities for trainees, with the result that employers must provide extensive on-site training. When training time is taken into account, the effective cost of employee compensation rises.

Turnover

Both the textile and apparel sectors suffer from a high degree of employee turnover, depending on location and size of urban centres. The causes of this turnover include a long-standing tendency on the part of many employees in Mexico to alternate periods of employment and unemployment. In smaller locales, turnover rates tend to be on the order of 10%, which would more closely approximate Canadian rates. Given the expense and productivity loss caused by the need to train new staff, the rates of turnover in major centres impose substantial costs on producers. However, no producer, industry association or governmental agency has apparently tried to quantify the impact of such turnover.

3.4 Taxation

Particular characteristics associated with the way in which an individual company operates can affect its tax liability. As well, comparing different jurisdictions' tax rates without analyzing the nature and extent of available deductions can be misleading.

But at least on the basis of rate comparisons, the corporate tax burden on Mexican producers in all industries appears high, compared to tax liabilities in most other North American jurisdictions, when all elements of Mexico's fiscal burden are taken into account.

Corporate Tax

The rate of Mexican federal corporate tax is 35% for all net income over \$4,000. However, corporations must also pay 10% of pre-tax profits in the form of a so-called profit-sharing tax, the revenues from which underwrite various employee benefit programs. The combined effect of these two basic taxes is a 45% rate. The Mexican states do not impose corporate tax or other, similar charges.

This 45% rate is comparable to the combined federal-provincial corporate income tax rate payable in most Canadian provinces, except Quebec, which is lower. Canadian tax rates are discussed in greater detail in Section 2.12.14 of this report, above.

Payroll Taxes

As discussed in the section on wages/benefits, above, Mexican employers must pay a variety of charges for employee benefits. These costs are shown as part of the calculations include in Appendix BB. As with any payroll-based tax, the impact is proportionately greater in labor-intensive operations. Accordingly, apparel and to some extent textile producers in Mexico - as is the case in some Canadian jurisdictions (e.g. Ontario's employer health levy) - bear the brunt of the latter taxes.

Consumption Tax

An additional fiscal factor in terms of production costs relates to Mexico's national consumption tax, or IVA (short for Impuesto sobre Valor Agregado - value-added tax), which operates in a manner similar to Canada's GST. Producer IVA costs (15% except 21% on designated so-called luxury items) are passed on to the next stage until final consumption.

Exports are theoretically zero-rated and therefore are not supposed to carry any IVA burden. However, Mexico's IVA apparently does not let producers fully recover all consumption tax paid on inputs. For example, producers are required to pay a telecom tax amounting to 50% of the cost

of all telephone calls and faxes, both domestic and international, but these amounts cannot be deducted from IVA. Additional analysis would be needed to determine with greater precision the extent of unrecovered IVA typically included in Mexican textile and apparel exports.

Drawback Delays

Another fiscal penalty affecting Mexican producers generally is slow recovery of drawbacks on duty paid for imported inputs and equipment. Although duties are recoverable with respect to qualifying importations, the payback period can be as long as a year, as a result of which importers lose interest for fairly lengthy periods.

Building/Property Taxes

Annual building and property taxes are calculated on the basis of 25% of a nominal amount, which is considerably lower than market value. Generally, this tax can be as much as 5% of the property's real market value, according to our interviewees. In the case of a hypothetical 50,000 square foot plant costing C\$250,000 yearly for occupancy on the basis of a C\$5 per square foot lease, and having a market value of C\$2,500,000, a tax at that rate would amount to C\$125,000 yearly, or 50% of the lease cost.

Depreciation Allowance

Apart from maquiladora-related tax issues, Mexican fiscal policy is not an instrument which materially affects the domestic textile or apparel sectors, specifically. Mexico offers no investment tax credits to producers in any sector, nor does any other special treatment apply to textile or apparel producers for training programs, process or product research or any other aspect of their operations.

Mexican tax rules allow accelerated depreciation for most types of new machinery and equipment in virtually every industrial sector. Machinery and equipment used in the textile and apparel sectors can generally benefit from such depreciation. Goods subject to such depreciation include

machinery and equipment used in the manufacture of clothing and textiles, including dying and printing operations. It is difficult to generalize about the effects of tax arrangements in different countries on business operations, because many different factors are involved, including tax rates and the base on which tax is calculated. However, it would appear that considerably more rapid depreciation allowed by Mexico for textile and apparel-making equipment compared to either Canada or the US will in most cases provide taxable Mexican producers with a comparative advantage. Rapid depreciation postpones taxes, thereby giving the taxpayer an advantage equal to the income that can be earned on such amounts of postponed tax.

Depreciation is calculated as follows in respect of textile and apparel-making equipment in each of Mexico, Canada and the US as follows:

Mexico

- a. year 1 79%
- b. years 2 + 0
- c. in year of disposition terminal loss (equal to the difference between sale price and depreciated cost, where the latter exceeds the former) or capital gain

Used equipment is depreciated on a 10% straight-line basis.

Canada

20% annually on a declining-balance basis, except 10% in the year in which the equipment is acquired. Terminal loss is earned (or capital gain is payable) on the undepreciated balance of the equipment in the year of disposition.

United States (all calculations on the basis of declining balance)

- 1. apparel and knit-wear-making equipment:
 - a. year 1 20%
 - b. each of years 2-4 40% "

- c. year 5 67%"
- d. year 6 100% of undepreciated balance
- 2. yarn, thread and woven fabric-making equipment:
 - a. year 1 14.3%
 - b. each of years 2-5 28.6%
 - c. year 6 40%
 - d. year 7 67%
 - e. year 8 100% of undepreciated balance

3.5 Plant/Land Costs

Land costs depend on the region, while plant costs reflect the age, location, quality and design characteristics of the particular plant. Generally, for operations located in or around the Federal District, including the State of Mexico, the cost for land and plant (whether on a lease basis or as the annual cost of an acquisition amortized over 20 years) ranges from C\$4.50 - 6.72 per square foot per year.

These costs compare to current lease costs in the Metro Toronto region ranging from C\$3.75 - 6.00. Lease costs in southern Ontario generally are often higher, due to shorter supply compared to Metro Toronto, where the market has been soft for the past 12-18 months.

From other experience we have had analyzing Mexican commercial operations in other major centers, including the cities of Puebla and Guadalajara, we believe that plant costs there are not substantially different from those prevailing in the Federal District and environs. Lease costs in small centers are often in the range of C\$2.00 - 2.50.

3.6 Services

Additional outlays may be necessary to provide water. If the plant has its own well with a sufficient water supply, the amortized cost of the well and

pumping systems will generally be minimal. However, serviced water can increase overall production cost by as much as 5%.

3.7 Utilities

Electricity costs for a plant with 1,500 KW of demand and 360,000 KW-hours per month are about US\$0.04 (C\$0.0448 at an exchange rate of C\$1.12 per US\$1) per KW-hour for 1990. Canadian 1990 figures for industrial users with 5,000 KW demand and 3,100,000 KW-hour monthly consumption were C\$0.057 in Ontario and C\$0.0347 in Quebec.

3.8 Transportation

Internal transport costs are high. The cost of delivering products from the Federal District to the US border is greater than the cost of exporting from Hong Kong to New York. For example, several member companies of Mexico's National Textile Institute reported costs of shipping dyes from Yokohama to Acapulco as C\$.58 per kilo. Road delivery from Acapulco to the Federal District was reported as C\$1.32 per kilo.

High transport costs are aggravated by long delivery periods, with shipments from west-coast ports to the Federal District sometimes taking 4-6 weeks. These delays have several causes, including lack of port loading-unloading facilities, customs delays and truck shortages. Transportation from central Mexico to the Texas border (about 1,000 kms depending on the crossing point) averages about 7 days, compared to 3 days from the border to such centers as Chicago and New York.

3.9 Telecommunications

Mexican telecom costs are high, due to a combination of telecom taxes, discussed previously in this section, poor equipment, and Mexican telecom policy of using long-distance rates to subsidize local service.

Mexican producers report costs for a 10-minute Mexico City - Toronto telephone call to be US\$50, or approximately C\$56. Current Bell Canada rates for a 10-minute call from Toronto to Mexico City are C\$18.60, which is one-third the reported Mexican price. If this cost ratio is generally valid as an indicator of Mexican long-distance telecom costs, a Mexican producer would have triple the telecom expenses of its Canadian counterpart.

3.10 Capital

Mexican manufacturers in most cases face higher borrowing costs than their Canadian counterparts. Higher capital costs tend to increase the cost of the final product. It is difficult to generalize as to the cost of capital to a Mexican versus a Canadian borrower, since this cost will be affected by numerous factors, including the borrower's access to non-bank lenders (typically through the issue of its own securities or - in the case of integrated corporations - through intercorporate borrowing), the borrower's own financial health and prospects, and the extent to which a corporation is able to borrow outside Mexico. Generally speaking, smaller, non-integrated Mexican firms typically must borrow from conventional domestic lenders. Currently, this kind of lending tends - depending on the individual borrower - to attract interest rates between 1% and 2.5% higher than the rate that comparable Canadian companies would expect to pay. This difference between Mexican and Canadian borrowing costs is mainly caused by the following factors: a relatively small banking community, with oligopolistic pricing policies; inefficient administration and operation of Mexican banks, resulting in higher prices; and few alternatives to bank lending.

Chapter 4 - Mexican Textile Industry (Chemical Fibre)

4.1 Summary and Conclusions

Mexico's chemical fibre subsector poses no significant threat to Canadian production. Although production in the subsector is quite highly concentrated in a small number of companies, there is little domestic integration between this subsector and other sectors, either upstream or downstream. Nor, with some exceptions, is the subsector integrated with offshore producers, although licensing agreements exist.

During the late 1980s, Mexico's chemical-fibre industry showed meaningful growth in installed capacity, employment and production. However, domestic consumption growth exceeded growth in domestic production, and this excess demand was for the most part met by imported products, as reflected by trade figures for the subsector. Prices charged by producers in this subsector appear to have been higher than those charged by US producers, at least for several products during the mid-1980s. The subsector appears to use technology comparable to that employed by producers in advanced countries, but capacity utilization rates have been low. Levels of new investment in the subsector are high, indicating that production may increase in future years.

While the subsector derives benefits from secure domestic supplies of most of raw materials used by its producers, coupled with preferential prices charged for various products supplied by Pemex, it must contend with several weaknesses. These include relatively small plant size, poor infrastructure, shortages of trained personnel and inadequate foreign marketing/sales operations. Some products also disclose quality problems.

Mexican producers in this subsector are concerned about their ability to face North American competition in a post-NAFTA environment, although they are generally optimistic about long-term potential and gains from rationalization. The organization of production in the industry is unlikely to change in the near future, regardless of whether or not NAFTA is implemented. Canadian and US producers likewise expect to

benefit from rationalization and improved access to the Mexican market; however they do not in general terms appear to have any established intention to invest in Mexican production at this time.

4.2 Definition of the Industry

For Mexican official purposes, this subsector is referred to as: "La Industria de Fibras Artificiales y Sintéticas" (The Artificial and Synthetic Fibre Industry). In customary usage, the subsector is referred to as the chemical-fibre industry, and this is the way we refer to it in this report. The subsector's principal products are filament and staple for textile applications, as well as filament for industrial use. A detailed list of the products made by this subsector is provided in Appendix D of this report.

4.3 Organization of the Industry

Mexico's chemical fibre subsector is highly concentrated, with eight major companies accounting for some 95% of total production in this subsector by value. A list of these firms is included in Appendix E of this report. In addition, smaller producers include Lanera Moderna, Polifil, Politap and Corporacion Textil de Mexico.

The major companies operate in a total of 13 locations dispersed throughout Mexico. Appendix F of this report identifies the location of each operation and the product(s) made in each location.

4.4 Ownership

Until 1989, foreign ownership in this subsector was restricted to a 40% share. These restrictions have now been relaxed by administrative amendment of Mexico's foreign investment control legislation, such that non-Mexicans may (through trust arrangements) acquire 100% control of operations in the textile and apparel sectors generally, subject to

requirements for job creation and technology transfer. However, no significant new foreign investments have taken place in the artificial and synthetic fibre sector, since these amendments were made.

Ownership in the plants listed in Appendix F are 100% Mexican-owned, other than the following, each of which is 40% owned by the foreign company indicated, and 60% Mexican owned:

Mexican Firm	Foreign Shareholder	% Foreign Ownership
Celanese	Hoechst (Germany)	40
Akra (Chemical Fibres)	Akzo N.V. (Netherlands)	40
Akra (Nylon de Mexico)	E.I. Dupont de Nemours (US)	40

In addition, various firms have licensing and royalty agreements with foreign companies.

4.5 Integration

There is very limited integration between the chemical fibre subsector and upstream producers of raw material. The exceptions are Fibras Sinteticas and Celulosa y Derivados, which are integrated with raw material suppliers Crisol S.A. and Derivados Acrilicos, respectively. However, the latter firms are not significant suppliers of raw materials for use in chemical fibre production.

Sourcing of most raw materials in this subsector is from domestic suppliers. As mentioned above, appendix B identifies the major inputs used in the Mexican chemical-fibre industry, together with the main suppliers.

The industry sources alfa-cellulose for the production of rayon and acetate yarn from foreign suppliers, as no domestic suppliers exist for these products, nor is any such domestic production planned.

The industry also sources polypropylene from foreign suppliers, as no domestic supplier exists for this product. However, Pemex is installing a plant in Poza Rica, in the state of Veracruz, with an expected annual output of 100,000 tonnes. Start-up of this plant is expected in 1992 or 1993.

There is no significant integration of chemical fibre producers with downstream users.

4.6 Industry Leaders*

The largest producers in this subsector are Celanese, Akra and Fibras Sinteticas. No Mexican producer of chemical fibre approaches the size of Dominion Textile (1989 revenues of approximately C\$1.4 billion). On the other hand, Akra and Fibras Sinteticas are in the size range of Consoltex Canada (1989 revenues of approximately C\$170 million).

Estimated 1989 gross revenues of each of the three leading Mexican firms in this subsector were (in millions of US\$):

Celanese	710
Akra	276
Fibras Sinteticas	161

Comparative figures for other years were unavailable.

4.7 Industry Characteristics

The operating profile of the chemical-fibre subsector shows steady growth in employment and installed capacity in recent years. These increases accompany what has for the most part been a regular increase in apparent consumption in Mexico of chemical-fibre products. Apparent consumption

* The comparisons below are of leading firms in the Mexican and Canadian textile industries, not of firms in the same sub-sector.

is defined as domestic shipments plus imports less exports. With respect to investment, data referring to the past two years indicate rapid increases.

At the same time, growth figures in the operating characteristics cited in the previous paragraph must be considered in the light of trade statistics (discussed in Section 4.10 of this report, below), which indicate that much of Mexico's growing demand has been satisfied by imported products. As well, capacity utilization data indicate that at least during the mid-1980s - the most recent period for which figures are available - for most products made by this subsector, rates were substantially below those achieved by Canadian producers.

4.7.1 Production and Consumption

During the period 1984-89, total Mexican production increased 22% in volume terms, reaching a level of 390,501 tonnes in 1989. Production figures for this period are included in Appendix G of this report.

We were unable to quantify apparent Mexican production in this subsector by value, as this data is not published. Production figures on a by-value basis are provided in relation to all textile products, including those of the chemical fibre industry. These figures are included in Section 5.7.1 of this report.

Apparent 1989 consumption (domestic shipments plus import less exports) in this subsector in Mexico was 333,954 tonnes. Apparent consumption in Mexico grew 28% by volume during the period 1984-89, as shown in Appendix H of this report. Again, no data are published in relation to apparent consumption by this subsector, by value.

A more detailed examination of the period 1984-89 for each product of this Mexican subsector, in relation to total production, apparent market, and growth (contraction) of apparent market, shows that few products have demonstrated strong production growth on a significant base. Indeed, only acrylic staple fibre production had these qualifications.

4.7.2 Labour Force

Industry employment figures for total employment in this subsector show a modest increase of 8% for the four-year period ending in 1989 - from 17,987 to 19,426. More detailed figures for employment of technical personnel, office/administrative staff and other employees, together with percent increases for each category during this period are included in Appendix I of this report.

Comparative employment figures for total Mexican and Canadian employment in the textile sector, including chemical fibres, are included in section 5.7 of this report.

4.7.3 Investment

Recent industry estimates for this subsector's 1990 investments in productive assets are C\$385 million, compared to 1989 investments totalling C\$110 million. We were unable to obtain a breakdown of these gross production figures by type of equipment.

The amounts given for 1990 Mexican investment in this subsector are high, compared to Canadian total capital expenditures in the entire textile/knitting sector for 1989 of C\$372 million. As well, tracking Canadian investment in the textile sector shows a steady growth in investment during the decade of the 1980s, compared with a major increase in the case of Mexico between 1989 and 1990. Additional analysis of this area could be helpful in confirming and expanding on Mexican investment data.

4.7.4 Technology/Equipment

In general, Mexican chemical fibres are made with technology and equipment equivalent to that used in developed economies, except for some lines of extrusion/spinning of polyester and nylon, which are manufactured with older machinery. We were unable to disaggregate equipment-use and equipment-import data as between this sector and the

textile sector generally. Instead, we have included data on these aspects of the whole sector in section 5.7 of this report.

4.7.5 Installed Capacity

Total installed capacity in the industry as of December 1989 (most recent available figures) was approximately:

1. synthetic fibres:	460,162 tonnes
2. artificial fibres:	<u>24,450</u> tonnes
TOTAL	<u>484,212</u> tonnes

Breaking down installed capacity by product type, production capability for most types showed little growth in recent years - and contraction in some cases - with the notable exceptions of polyester staple and filament and acrylic staple. These data are included in Appendix J. The latter data may vary marginally with the above-noted figures, due to rounding of totals for individual product categories.

4.7.6 Capacity Utilization

Overall, capacity utilization in this subsector has been low, although individual products have shown considerable variation. Capacity utilization increased for several products in this subsector during the early-mid 1980s, driven partly by increased exports, which rose substantially in this period. Detailed capacity utilization rates for this period in relation to several product types are included in Appendix K of this report, in comparison with US rates, which were generally higher. We have been unable to obtain utilization rates for other product types.

Available Canadian statistics are not disaggregated for chemical fibre production. However, using Canadian capacity utilization rates for the broader category of primary textiles (fibre and filament yarn, wool yarn and woven cloth, other spun yarn and woven cloth and broad knitted fabrics), the period 1984-86 showed rates averaging close to 85%. This average rate increased during the period 1987-89 to approximately 96%.

4.8 Production Factors

4.8.1. General

Input prices paid by this subsector, including costs of capital, transportation, utilities, plant, taxation, etc., are for the most part similar to those facing other Mexican producers. These costs are itemized in Section 3 of this report.

Of particular relevance to the chemical fibre subsector is the high cost of Mexican capital, which is especially onerous in a capital-intensive industry such as chemical fibre production. The relatively large size of several Mexican companies in this subsector may mean that some of them are able to borrow offshore, in US dollars. Such borrowing will usually be at rates comparable to those payable by large Canadian and US companies, since funds would be advanced by banks that are not part of the Mexican financial system. Mexican borrowers on offshore money markets would run an exchange rate risk. Firms such as Celanese and Akra, which are related to foreign companies, may have access to intercorporate lending. However, we have no knowledge of specific borrowing practices of individual firms in this subsector.

4.8.2 JIT/AMT

Even though this industry's members are relatively large by Mexican standards, they do not generally use just-in-time ("JIT") or advanced manufacturing technology ("AMT") operations. Poor communications and other infrastructure in Mexico would preclude producers in virtually every industry from using JIT production.

4.9 Price

No recent price figures were available from Mexican producers. However, analyses carried out in the late 1980s indicate that final prices

for most products in this subsector were higher than competing US products. Several of these prices are itemized in Appendix L of this report - prices for other products of this subsector were not available. As well, recent trade statistics indicate that in relation to many of its products, the subsector is not competitive with foreign manufacturers.

Moreover, the prices shown in Appendix L were offered during a period of subsidized energy and feedstock prices. With the Mexican government no longer subsidizing energy prices to manufacturers, the industry would have become less price-competitive, at least for a period of time in which it adjusted to commercial realities, including increased competition from foreign products benefitting from lower Mexican trade barriers.

4.10 International Trade

Trade data for this subsector for the years 1984-89 reflect major competitiveness problems of this Mexican industry.

For most product types, the subsector's export volumes showed no significant increases during the period 1984-89, with the exceptions of acetate staple and tow, nylon filament yarn and nylon industrial filament yarn. The only product of this subsector which showed strong growth on substantial base volumes for much of this period is acrylic staple, which reached export volumes of 31,105 tonnes in 1987, compared to 13,308 tonnes in 1984. However, export volumes even of this product fell to 22,358 tonnes in 1989.

With regard to import volumes for the same period, these increased in virtually all of the 13 product categories of this subsector, in many cases substantially. Main imported products include bleached rayon, polyester staple, polypropylene staple and acrylic staple.

This increase in import volumes occurred in part because of increased access by foreign producers to the Mexican market during the late 1980s. In this period, Mexico's tariffs fell to a range of 10-15% from top levels

of 100%, for almost all products in this subsector. In 1988, Mexico eliminated all quantitative restrictions on these products. In a more open trading environment, Mexican production in most areas of this subsector have not been competitive.

Overall comparisons for import and export levels (in tonnes) in this subsector for 1989 over 1988 are:

	1989	1988	% change
1. exports (tonnes)	24,444 *	22,729	7.5%
2. imports (tonnes)	80,991**	86,289	(6.1)%
<hr/>			
* C\$ value:	87,000,000		
** C\$ value:	323,000,000		

Data showing import and export volumes for individual product types are included in Appendix M of this report. Trade data on a by-value basis are unavailable.

Trade data indicating the performance of Mexico's overall textile industry in exporting to the US are included in Section 5.10 of this report. While Mexico is the sixth largest source of textile imports into the US of products subject to the Multifibre Arrangement, it accounts for only 3.7% of such imports into the US.

4.11 Strengths and Weaknesses

This subsector's strengths include a secure supply of raw materials, mainly from Mexico's strong petrochemical industry, together with low labor costs.

However, a senior representative of the National Association of the Chemical-Fibre Industry considers that these advantages are substantially offset by other factors, including poor transportation and telecom

infrastructure, and - in many cases - relatively high capital costs. Labor costs represent a comparative advantage, but this is less significant in capital-intensive, chemical-fibre production than in other types of textile manufacturing or in apparel production.

The subsector considers itself to be hampered by several major weaknesses, including relatively small plant size, compared to US producers, with the exception of Celanese Mexico. The subsector also faces high costs of taxation and financing, poor infrastructure and shortages of personnel in virtually all categories of technical and skilled employment.

In terms of product types, no product in this subsector is strong in marketing/sales outside Mexico. Only polyester yarn and acrylic yarn are strong in terms of both product quality and cost-competitiveness. The polyester staple process is strong only in terms of cost-competitiveness. Nylon yarn is weak in both cost and marketing/sales aspects, and suffers from serious quality problems, due to low tensile strength caused by low speed extrusion processes.

4.12 NAFTA Readiness/Impact

The expectation of Mexico's chemical fibre producers, as expressed by its association representatives, is that NAFTA will result in long-term benefits for the industry. However, it is concerned about its ability to compete with North American producers (mainly US) on a level playing field, as it fears that the industry's weaknesses will limit its opportunities to a greater extent than its strengths will add to them. Industry spokespersons did not indicate that member companies had investment or marketing plans specifically related to NAFTA.

As far as US and Canadian producers are concerned, industry spokespersons indicate that they expect a degree of rationalization to occur post-NAFTA, with producers in each country increasing their relative degrees of specialization. We found no indication of plans by producers

in either Canada or the US to establish production facilities in Mexico in this subsector.

Chapter 5 - Mexican Textile Industry (Other Textiles)

5.1 Summary and Conclusions

For purposes of this report, we refer to the Mexican textile industry, other than the chemical-fibre subsector, as the textile subsector. This subsector is currently going through a difficult period, caused by reduced protection against imports without a compensating ability to increase exports to a sufficient degree. It shares with the chemical fibre subsector problems of poor infrastructure, high tax and financing costs. As well, the textile subsector is fragmented. This factor, plus low levels of foreign investment suggest, in general, that its prospects for developing management and marketing/sales capability are poorer than those of the chemical-fibre sector. In addition, the textile subsector does not own nor does it have access to proprietary technology sourced from related foreign firms.

In terms of age and modernity of machinery and equipment, this sector is relatively strong. However, it tends to suffer from sub-optimal plant scale in some types of production, together with low productivity and efficiency of machinery use and poor quality control. Generally weak finishing operations tend to impair performance for all types of textile production aimed at the apparel sector. Energy prices, subsidized in earlier years, no longer constitute an advantage for producers.

The subsector's production profile for recent years generally shows a stagnant performance. While investment in new plant and equipment improved in the late 1980s over the middle years of the decade, investment levels are still below those of a decade ago. Substantial import growth in various product types in recent years indicates widespread non-competitiveness in this sector. Mexican imports come mainly from the US and the Far East. Import growth rates, especially in relation to US products, also suggest that efficient Canadian producers could expect to develop a meaningful Mexican market for a variety of products, including knitwear fabrics, in which Mexican production is particularly weak.

5.2. Definition of the Industry

The principal products of the textile subsector are fibre and filament yarn and spun yarn (other than artificial and synthetic fibres produced by the chemical-fibre industry) woven and knitted cloth, household textile products, knitwear such as socks and hose, and carpeting. It also includes dyeing, printing and other finishing operations.

5.3 Organization of the Industry

Nationally, the textile subsector comprises some 2,000 enterprises. Of these, an estimated 95% are closely-held, often family-owned operations. The exception is carpeting, in which three firms control 90% of production. Two of these three carpeting firms, Terza and Luxor-Mohawk, are controlled respectively by the Alfa Group and Cigarrera La Moderna, two major Mexican conglomerates. The third producer, Nobilis Lee, is controlled by the US Burlington firm.

Mexican textile production is geographically widespread in Mexico, with the biggest concentrations in order of magnitude being the states of Puebla and Jalisco, followed by the Federal District. A detailed breakdown of this sector's production by state is included in Appendix N of the report. We have been unable to ascertain the number of producers located in each state.

5.4 Ownership

Ownership in the textile subsector is nearly 100% Mexican, as foreigners were not permitted to control textile operations between 1973 and 1989. An exception, along with Nobilis Lee, is Textiles Morelos, 100% owned by Burlington in the US. Several small foreign-controlled firms, such as Guindy and Saba, also were grandfathered in 1973, but their total production volumes are negligible.

5.5 Integration

Some 44% of spinning and fabric-making operations are integrated. There is little integration between textile producers and apparel makers, with a few exceptions, such as Parras Telas (fabric) - Parras Industrial (Apparel), and Rivtex (fabric) - Grupo GFT (apparel).

5.6 Industry Leaders

The textile subsector is for the most part highly fragmented. Leading firms in spinning operations include Grupo Hytt, Derivados Acrilicos and Fabrica la Estrella. Estimated 1989 gross revenues of each of these firms were (in millions of US\$):

Hytt	136
Derivados Acrilicos	44
La Estrella	41

We have been unable to obtain comparative figures for other years

In fabric operations, leading firms include Parras and Manufactura del Salto. Estimated gross sales of each of these firms in 1989 were (in millions of US\$):

Parras	44
del Salto	25

We have been unable to obtain comparative figures for other years

We have been unable to obtain a profile of this subsector by plant size. However, in general terms, it is apparent that the textile industry in both Canada and Mexico is characterized by a large number of small producers.

5.7 Industry Characteristics

The operating profile of the textile subsector shows a generally stagnant industry, characterized by flat levels of consumption, employment and output by value. As in the case of the chemical-fibre subsector, import penetration in this sector has been significant in recent years.

5.7.1 Production

Total output of Mexican textile products (including artificial and synthetic fibres) for 1988 was valued at approximately C\$3 billion in constant 1980 C\$. With respect to this data, we have been unable to obtain disaggregated information for the chemical-fibre and textile subsectors, respectively. This calculation of C\$3 billion is based on figures provided by Mexico's textile industry association, showing output values of 59,307 millions of 1980 pesos, which we converted at an average 1980 peso-C\$ prevailing exchange rate of 30:1.

Comparative figures are available for products of the textile subsector only, for the three previous years. These figures indicate only modest changes in production by value over the period. These data and breakdowns by major production categories for all textiles are included in Appendix O of this report.

By comparison, Canadian textile industry shipments by value in the Canadian textile industry for the period 1985-88 show a modest growth of 8%, to C\$5 billion in constant 1976 C\$. In current dollars, Canadian textile industry 1988 shipments were valued at C\$7 billion - an increase of 27% over 1985 shipments.

We were unable to obtain data on apparent consumption in the textile sector, or data that would enable us accurately to calculate such consumption on the basis of production, export and import data.

5.7.2 Labour Force

Employment in the textile subsector was about 170,000 as of 1988, and employment figures have been flat during the decade of the 1980s, as indicated in Appendix P of this report. These figures include employment in the chemical-fibre subsector. However, since employment levels in the latter subsector have been flat during the period 1986-89 (see Appendix I of this report), employment in the textile subsector accordingly was also substantially unchanged, at least during the latter period.

Canadian employment in the textile industry has declined during the 1980s – from 70,000 in 1980 to an estimated 62,000 in 1989. However, Canadian textile industry employment has remained steady in the low 60,000s since the end of the 1981-82 recession.

5.7.3 Investment

Investment in Mexico's textile subsector suffered through the economic crisis years 1983-87, with an apparent recovery starting in 1988. However, import levels for machinery and equipment declined again in 1989, compared to the previous year. Moreover, the nominal dollar value of machinery and equipment imports for both years was substantially below the peak levels achieved in the early 1980s (see Appendix Q of this report)

Investment levels in Mexico's textile subsector are effectively measured by the value of machinery and equipment imported annually into Mexico, since virtually 100% of machinery used in the textile industry in Mexico is imported, mainly from Germany, France, Switzerland, Italy and the U.S. Annual import data for machinery and equipment for the 1980s are included in Appendix Q of this report. A breakdown of Mexican machinery imports by type are included in Appendix R of this report.

By comparison, capital expenditures by the Canadian textile industry showed steady growth during the 1980s. Following the recession year of

1982, in which the industry had capital expenditures of C\$144 million, these expenditures rose to C\$348 million, a gain of 141% in current C\$.

5.7.4 Technology/Equipment

General

Mexican machinery and equipment used in numerous operations of the textile subsector is generally competitive with textile production in developed economies in terms of age and modernity, although this is not universally true of all types of operations. Overall, the industry's weakness is not so much the nature of the equipment it uses, but rather has to do with problems in skills training, capacity under-utilization and other factors. The following information on age and modernity of equipment includes equipment used in the chemical fibre industry.

Cotton Spinning

The age profile for equipment in the cotton spinning subsector as of the late 1980s compared favorably with other low-cost producing countries, and was generally superior to the position of the US industry, as shown in Appendix S of this report. However, slow investment rates during the period 1983-88 reduced Mexican competitiveness in this regard. An additional obstacle to greater efficiency of Mexican cotton-spinning firms has been the existence of few plants with more than 15,000 spindles - considered as the minimum size of a cost-efficient operation. We have been unable to ascertain how many Mexican firms have this minimum number of spindles. Variations within the sector include a low penetration of open rotors in this subsector, with Mexico accounting for 0.5% of world use of this equipment in 1985, compared with 2.2% of global short staple spindles.

Cotton Weaving

With respect to this operation, Mexican equipment compares favorably in terms of age with the US, Japan and Germany, but lags behind Italy, the UK and Korea (See Appendix T). Likewise, Mexico is competitive in

terms of the replacement of shuttle looms by projectile, rapier, and air and water-jet looms.

As well, Mexico compares favorably in relation to several competing countries in terms of operating wide looms (at least 160 cms), needed to provide fabric with the dimensions required by the finishing and clothing industries in major importing countries (Appendix U). A problem is that no similar significant demand exists for wide fabrics in Mexico's domestic finishing and clothing sectors, which essentially serve only the domestic market. The result is that fabric producers who want to serve the domestic market and foreign markets must often operate both wide and narrow looms, thereby losing scale economies and operating efficiency.

Wool-Spinning

Despite its name, the wool-spinning process uses primarily man-made fibres, especially acrylics. Wool production is a very small part (less than 15%) of Mexico's textile subsector. Measured in terms of fibre consumption, this process represents 20% of Mexican production in this subsector. Mexico makes three main types of tops using the wool-spinning process - worsted, carded and broad synthetic fibre (sic). To the extent wool is used in the process, most of it (95%) is imported from Australia, in basic form (containing lanolin, etc). The raw wool is washed and combed in Mexico, usually by independent contractors.

In acrylics, the most significant product made using this process, most Mexican equipment used in yarn production was less than seven years old in the late 1980s (Appendix V).

Wool Fabric Process

Mexican machinery used in this process to produce acrylic and wool fabric is generally modern. As of 1988, 74% of such machinery was not more than seven years old, with shuttle-less looms in particular accounting for 85% of total capacity. As of the mid-1980s, more than 85% of plants

involved in this process had at least 35 looms, with the average number of looms per plant standing at 88.

Knitting

Machinery used in this operation is again relatively modern, with exceptions occurring in large-diameter and full-fashion looms (Appendix W). However, there has been low penetration (5-10%) as of the late 1980s of electronic pattern-design machinery.

Dying, Printing and Finishing

Dying, printing and other finishing operations (mercerizing, washing, bleaching, pressing, etc) are generally regarded as the Mexican textile subsector's greatest weakness.

Equipment in this subsector tends to be old, averaging about 20 years, although stamping equipment is newer, with an average age of about 10 years. As a result, few finishing operations can handle 160-cm fabric widths. Nor has there been significant penetration of continuous-process dying operations, partly due to under-investment in this subsector, partly because minimum volumes necessary for efficient use of continuous processes generally exceed those required by Mexican buyers.

The result has been continued excessive use of dyes and other chemicals, greater energy consumption, excess effluents and variable quality, compared to continuous-process finishers in competing countries.

Some of these disadvantages may diminish with the introduction of semi-continuous processes, which are better suited to operations with short runs (under 2,000 meters). However, as of 1988, the penetration of both continuous and semi-continuous processes for dying remained low 6% of total capacity, compared to 32% in the US and 60% in Germany.

There remains an additional difficulty with weighing, measuring and mixing equipment in dying processes. In the absence of automated

systems, especially in smaller plants, these operations are carried out manually, resulting in variable, often poor, quality.

In printing, Mexican plants compare favorably with most other countries, with regard to age of equipment and technology used, particularly rotating frames. In Mexico, 36% of printing operations used the latter in 1988, compared to 14% in the UK. However, Mexico lagged the US at 47%. As well, the base on which these percentages are calculated is small in the case of Mexico, which has a shortage of printing equipment overall. Mexican printing capacity as a percentage of total fabric production at that time was 20%, compared to 35% in the US and 45% in the EC.

Carpets

With regard to technology, Mexican tufting processes are comparable to those used in the US. The majority of carpeting - 95% - is made by the tufting process.

5.7.5 Capacity Utilization

Notwithstanding relatively high standards of machinery age and technology, chronic capacity underutilization limits Mexican efficiency in the textile subsector. The data in this section indicate capacity utilization in terms of annual operating hours for equipment, compared to rates in several countries.

Canadian capacity utilization data are not based on productive machine-hours. Canadian capacity utilization, based on the relationships between production and the existing stock of plant and equipment, indicate average Canadian 1990 utilization rates in primary textiles of 79%, and in textile products of 72%.

Cotton-Spinning

This process shows an average of 5,000 annual operating hours for spinning machinery, or just over two shifts per day, six days weekly. This compares to over 8,000 hours for Korea, which is nearly three shifts per

day, seven days per week. The estimated additional cost to Mexico of this difference in operating hours for cotton-spinning machinery, compared to Korea, is 20% (Appendix X).

Cotton-Weaving

Average per-loom working hours per year in this process in 1988 were about 4,000, compared to a range of 4-5,000 in several EC countries, 6,000 in Brazil, nearly 7,000 in the US and over 7,000 in both India and Korea.

5.7.6 Productivity

Low productivity is a critical issue in the Mexican textile subsector. Several factors are responsible for its often poor results, which industry representatives indicated were characteristic of most types of production in this subsector.

Some of the causes of low productivity in this subsector, as is the case in most Mexican industry sectors, are as basic as employee malnourishment causing poor output. Low literacy levels inhibit process modernization. Many motivated workers try to emigrate to the US. In addition, other factors apply.

In many areas, Mexican producers have not exploited the potential benefits of machinery and equipment they have acquired. Reasons for this include low capacity utilization, already discussed, as well as downtime caused by excessive yarn changes, poor quality of materials used in textile processes, and poor training/operating practices. These factors have combined to yield low efficiency ratings for machinery use in several areas within this sector.

Finally, poor scale economies characterize many Mexican textile operations. In cotton-spinning, Mexican plants have an average of 7,000 spindles. This average size is 20% of the figure for the US.

Measured in terms of hours worked per 100 kilos of product, nearly half of Mexico's operations in this subsector required 18-25 person-hours per 100 kilos, while some 20% of plants required 36 hours or more. By comparison, some 70% of Spanish plants required 8-20 person-hours to produce 100 kilos, while 80% of plants in Germany, France and Italy required only 1-15 hours, as shown in Appendix Y of this report. (Countries compared with Mexico in this section of this report are those used in a major research report into Mexico's textile subsector, conducted in the late 1980s).

In terms of hours per 100 kilos of product, producers in England, Germany, Italy and Spain showed annual improvements of 5-8%. Mexico showed zero productivity improvement in this sub-sector in the period 1980-88.

Another weak area of Mexican textile production in this regard is knitting operations. Although larger plants exist in tricot and raschel, this process is for the most part highly fragmented, especially in flat knitting and full fashion operations, which are dominated by family and other informally-constituted enterprises, often with one to five machines, as shown in Appendix Z of this report.

Mexican productivity in this operation measured in kilos of output per person-hour as of 1988 compared favorably with several developing countries and Japan, but poorly against several European producers and especially against the US, as shown in Appendix AA of this report. Compared to several European countries, Mexico's rate of productivity increase was poor for the decade 1975-85.

5.7.7 Quality Control

This is a problem endemic in Mexico's textile subsector. In cotton-spinning, for example, most plants operate knotting machinery rather than connecting machinery, due to lower acquisition cost and easier maintenance. However, this approach produces yarns of below-export grade quality.

Poor quality control operations are commonplace among most Mexican producers of all types of textile, both in terms of testing equipment and of QC processes, such as statistical process control.

5.8 Production Factors

Input prices paid by this subsector, including costs of capital, transportation, utilities, plant, taxation, etc., are for the most part similar to those facing chemical-fibre producers. These costs are itemized in Section 3 of this report.

5.8.1 Wages/Benefits

The current wage and benefit structure for weavers, as provided in the Mexican government's Official Diary of September 1990, and which is currently in effect, is the equivalent of C\$3.25 per hour. The way in which benefits are calculated on top of the basic weaver's wage is shown in Appendix BB of this report.

Canadian figures for specific textile operations are unavailable. However, average hourly earnings, including overtime, for textile employees paid by the hour were C\$11.42 in 1990, and C\$11.09 in 1989. Except for certain minor variations, such as amounts paid for shift bonuses, the formula used in this calculation also applies to employees in other occupations in this subsector.

5.8.2 Other Employment-Related Factors

The textile subsector faces problems of lack of training and high employee turnover, as discussed in Section 3.3 of this report, above.

5.8.3 Quality of Inputs

Raw material quality is a concern for Mexican textile producers, who report variable-quality inputs in all major domestic sourcing subsectors nylon, acrylic, acetate, polyester and PPP from all major synthetic fibre

producers (Dupont, Celanese, Akzo, Nylon de Mexico, Fisisa and Cydsa) - in each case affecting overall spinning/weaving/knitting performance.

5.8.4 JIT/AMT

JIT or AMT production are generally not factors in Mexican textile operations. Producers tend to hold large inventories, with concomitant expenses. One of Mexico's biggest fabric producers, Caltex of Mexico City, frequently holds up to 6 million linear meters of inventory.

5.9 Price

Under current conditions, textile producers generally report difficulty in penetrating the US market. In combed cotton, for example, a US-made 5-lustre yarn was typically selling in the US at between C\$4.60 - 4.83 per kilo at the beginning of 1991. Mexican producer prices can make a comparable product for C\$4.60. US duties are 8%; fees for US agents are on the order of 6%; additional administrative costs associated with exporting are about 2% (each of these charges is calculated on a base of C\$4.60). These charges bring the cost to C\$5.34 per kilo. Transportation adds about C\$0.09 per kilo, for a total of C\$5.42.

Under NAFTA, the US 8% duty would gradually disappear, lowering this cost by C\$0.37 cents to C\$5.05. To the extent that Mexican producers develop a stronger market presence in the US, the 6% agency fee could be eliminated also, dropping the cost to C\$4.78. At this point, Mexican producers would potentially become competitive in the US and Canada for this product.

Canadian importer perceptions in knitwear, fabric and product, indicate that Mexican production will not significantly alter existing competitive dynamics in Canada, even under NAFTA preferential treatment.

5.10 International Trade

Trade figures for this subsector confirm that the subsector is likely to encounter increasing difficulty in competing with North American producers under NAFTA. Examining textile exports on a by-value basis for the decade of the 1980s, 1990 was the industry's worst year out of the last four years.

Since 1987, when they plateaued at levels considerably above those of previous years, exports have declined, except for a surge year in 1989. Strongest growth came in synthetic yarns and fabrics. The latter products by themselves accounted for the 1989 surge. But even discounting the 1989 figures, synthetic yarns and fabrics were the only group to show strong, sustained export growth during the 1980s, increasing their (nominal) export values by five times during the decade. Appendix CC of this report shows this sector's export performance during the period 1980-89.

Mexican 1990 exports to the US of all MFA fibres stood at 453 million square meters, placing Mexico sixth among all exporters to the US. However, this volume represents only 3.7% of total imports to the US in this category. Mexican MFA-fibre exports to the US showed an increase of 2.3% for 1990 over 1988. This compares to a 25% increase by the People's Republic of China over the same period, 40% for Pakistan and 42% for the Philippines. US imports in this category for the period 1988-90 are shown in Appendix DD of this report.

By contrast, textile imports into Mexico have increased rapidly during the last four years, to a value of C\$400 million in 1990 from C\$130 million in 1987, for yarns and fabric of artificial or synthetic fibres and for all other fabrics, as shown in Appendix EE of this report.

The current impact of Mexican imports in the Canadian market is low. The 1990 total value of Mexican textile exports was C\$30 million, or 1.04% of total Canadian import values in this sector.

5.11 Strengths and Weaknesses

On the basis of interviews with Mexican producers and Canadian textile importers, the perception in Canada of Mexican quality, reliability and price is that Mexico has few strengths in the textile subsector. Generally, Mexican unfinished fabrics - or greige goods - are seen as offering better export value than finished fabrics.

Price and quality-competitiveness is a problem for lighter-weight woven cotton fabric, as well as poly-cotton, polyester and poly-acrylic fabric. Coloring, printing and shrink-resistance of most finished fabrics are poor. Mexican fabric producers in some cases have problems meeting technical specifications, even for such basic material as high-volume fabric for uniforms.

Customer service and relations in this sector are generally inferior, partly due to inadequate management skills, partly as an inevitable result of problems associated with poorly structured operations - including inadequate warehousing and shipping facilities - and with poor infrastructure. Deliveries of textile products remain slow by North American standards.

5.12 NAFTA Impact

The prevailing attitude among Mexican producers in the textile subsector is that the industry is not particularly ready for free trade with the US and Canada. Most producers are not optimistic that NAFTA will help their particular company's prospects, nor do they expect to receive any governmental support, whether in the area of North American marketing/sales/promotion or in adjustment assistance. Nevertheless, they accept the premise that free trade is necessary and even - in the long term - desirable.

We do not sense that many of these producers are currently planning specific investment projects related to NAFTA. Rather, the impression is that they expect further rationalization of the industry, with survivors being in a position to acquire assets of failing businesses as these cases arise. We encountered no indication of deliberately planned major mergers, or strategic alliances aimed at North American market penetration. Given the relatively recent emergence in Mexico's business community of the NAFTA concept, many producers likely still have no well-developed sense of the potential impact on their industry, and expect that any impact will be experienced by others, not themselves.

Canadian importers of Mexican fabric for their part are taking a wait-and-see attitude. The general impression given by them is that relief for Mexican producers (both fibre producers and finished product producers) from Canadian duties and quotas (sic) may result in a supply of goods that are both good value for a given level of quality and that offer security of supply; however, simple extrapolations from current price levels do not make this proposition by any means certain.

US producers generally do not appear to have developed a post-NAFTA Mexican strategy, partly because of uncertainty as to the actual content of an eventual agreement. At this time, US producers in the textile subsector are more concerned about current GATT negotiations, and the effect of a potential dismantling of the Multi-Fibre Arrangement. To the extent NAFTA in fact resembles FTA in the textile and apparel sectors, current thinking in the textile subsector seems to focus primarily on establishing distribution networks in Mexico, for the marketing and sales of US textile products in that country.

There is no expectation on the part of US producers at this time that increased import volumes from Mexico will result in diversion of US products to Canada.

Chapter 6 - Mexican Apparel Industry

6.1 Summary and Conclusions

This sector of Mexican production is difficult to assess in quantitative terms. The industry's biggest association - The National Chamber of the Clothing Industry - keeps few meaningful statistics. Its senior staff advised us that none of the regional chambers keep such records either. No recent independent study has been made of the industry, either by Mexican or other analysts. The most recent statistical records collected by the Mexican government date from the mid-1980s. If more recent government data exists, it is not publicly available.

In the absence of this data, we relied principally on empirical information provided to us by Mexican apparel producers, and by US participants in production-sharing arrangements with Mexican producers. Using this approach, we were able to assess the main factors of production in this sector, thereby enabling a comparison with Canadian apparel operations. To a considerable extent, the scarcity of statistical information reflects the fragmentation and weaknesses of domestic production in this sector.

Overall, the industry is made up of a large number of small operators. Small size and lack of management skill and foreign marketing/sales/promotion operations are major problems for this sector. In particular, English-language skills are weak; marketing capability is practically non-existent. Travel and promotional funds for business development are not generally available, except for a small number of leading firms.

Mexican domestic producers will have preferential access to Canada under NAFTA. However, their ability to compete in this market with both 3d-country imports and with Canadian producers remains problematic, as shown by the lack of success which Mexican producers have historically had in the Canadian market.

The marriage between Mexican labor cost and foreign strength in other factors of production - design, quality control, management, and

marketing/sales activities - is occurring through shared-production operations, mainly in northern Mexico. These operations and a small number of well-managed domestic producers will likely have an impact on Canadian production. With regard to production-sharing operations, the extent and rate of potential penetration of the Canadian market will depend on several factors, including the degree to which FTA and NAFTA result in retail operations being rationalized between Canada and the US.

Given that Mexico's apparel industry is primarily oriented to low-end products, its manufacturers will in most cases compete for Canadian market share not with domestic producers but with third-country producers, many of whom are considerably more competitive than Mexico.

As well, a critical factor for Mexican producers may be competition in low-end products from US manufacturers located mainly in several southern states.

The growth of apparel imports into Mexico, mainly from the US, suggest that Canadian producers could establish a Mexican market for their products, at least for niche articles.

6.2 Industry Definition

The industry produces the following products:

Womens and Girls

- dressess and suits
- skirts
- blouses
- pants/shorts
- coats and jackets

Mens and Boys

- pants
- jackets
- suits and blazers
- shirts
- sport-shirts

Outerwear

- uniforms
- coats and raincoats
- athletic wear
- underwear and sleepwear
- other clothing

6.3 Industry Organization

The national chamber has some 3,000 members. In addition, there are seven regional chambers, located in Jalisco, Aguascalientes, Nuevo Leon, Tehuacan, Irapuato, Saltillo and Merida. These local chambers in turn have a total membership of 3,000-4,000. Producers too small and unspecialized to fit into any of these organizations belong to general industry associations such as the National Chamber of Industry.

All Mexican manufacturers are legally required to belong to their respective industry associations. However, an estimated several thousand apparel producers are so small - often located in individual homes - that they in fact belong to no association. The total number of Mexican apparel producers is estimated at about 14,000, of which some 90% are considered small businesses.

The National Chamber estimates average company size at around 50 employees. The National Chamber believes no Mexican producer has more than 1,000 employees. It considers that there are about 30 firms which employ at least 500 persons, but could not name any.

Canadian apparel operations are also fragmented. Out of 2,607 establishments operating in Canada in 1987, 1,960 (75% of the total number) had fewer than 50 employees.

6.4 Integration

There is for the most part little vertical integration among Mexican apparel producers, either upstream or downstream. Exceptions include GFT Mexico, which comprises three operations. Its fabric producer, Rivtex, imports wool yarn, along with poly-wool and silk-wool blended yarns, mostly from Australia and New Zealand. Its apparel producer, Confitalia, sells domestically through a wholly-owned retailer - High Life - and also exports smaller volumes to other GFT subsidiaries in the US and Canada, with minimal volumes going to the UK and France. As well, Parras comprises both a textile and an apparel operation.

6.5 Ownership

There is very little foreign ownership in this sector, maquiladora operations included, as non-Mexicans were until 1989 prohibited from controlling any type of apparel operation. A few non-Mexican-controlled operations were grandfathered, when foreign investment restrictions were introduced in 1973. Novelty, High-life and Levis are non-Mexican controlled domestic producers. However, their total production is negligible. Arrow is the biggest foreign-owned apparel-maker in Mexico.

6.6 Industry Leaders

Among industry leaders are Vanity and Parras. Estimated 1989 gross sales for these firms were:

Vanity	US\$276 million
Parras	US\$161 million

We have been unable to obtain comparative figures for earlier years

By comparison, most Canadian producers are also small. The largest Canadian apparel maker, the Algo group, had 1990 sales of approximately C\$400 million. Mr. Jax had 1989 gross sales of C\$73 million. John Forsyth Company Inc. had sales of C\$101 million in 1990.

6.7 Industry Characteristics

We were able to obtain only limited information on major characteristics of the Mexican apparel industry, including the following.

6.7.1 Production and Apparent Consumption

Production in this sector by unit volumes for 1989 compared with 1988 shows that total volumes in all categories for the industry show modest year-over-year growth of 2.3%, as shown in Appendix FF. This is a deceleration compared to the previous year's growth, which was 11.6% over 1987 volumes of 717,143,000 units. In comparison, Canadian apparel production was 355,809,409 units in 1988 and increased by 7.6% to 382,787,427 units in 1990. No figures were available that demonstrate apparent consumption in Mexico in this sector. The Canadian apparent market for apparel was 620,601,000 in 1988 and 660,739,000 in 1989.

Canadian apparel producers shipped an estimated C\$6.5 billion worth of products in 1987. The apparent Canadian market in 1989 was an estimated C\$9 billion in current C\$, C\$6.7 billion in constant 1976 C\$.

6.7.2 Labor Force

Total current employment is estimated by Mexican analysts in this area at approximately 600,000. Of this total, some 35,000 persons work in maquiladora or production-sharing operations. By comparison, the Canadian apparel sector employed some 113,000 persons in 1986.

6.7.3 Investment, Installed Capacity and Capacity Utilization

We were unable to obtain statistical data indicating the nature and extent of investment, the level of installed capacity or rates of capacity utilization in this sector.

6.7.4 Technology/Equipment

We could find no statistical evidence as to the kind of machinery and equipment commonly in use among Mexican apparel makers. To assess the type of equipment and technology currently used would require an extensive analysis of individual producers and of domestic and foreign equipment suppliers.

A canvas of a representative, mid-size Mexican producer of mens/boys tailored apparel indicated that the plant used the following equipment:

- Singer single-needle sewing machines, with an average age of 20 years;
- PAF sleeve and collar-making machinery with an average age of 5 years;
- Reece pocket-making machinery with ages varying from 2-10 years; and
- AMF button-sewers and pinch-stitchers with average ages of 4-5 years.

6.8 Production Factors

The most significant factor behind Mexican competitiveness in this sector is low wage costs. These in turn are offset by several major deficiencies, especially the absence of North American marketing/sales capability and of management that understands North American market needs and knows the nature of competition in this market, from both domestic producers and from exporters in third countries.

The following categories indicate the range of main input costs payable by Mexican apparel makers.

6.8.1 Wages/Benefits

The fully-fringed hourly cost for sewing machine operators in the Mexico City area averages around C\$1.68. In smaller inland centers, such as Aguascalientes or Queretaro, this price would be around C\$1.23. Labor costs in Guadalajara and Cuernavaca would be somewhere between these points. Prices rise again in the border area. The structure of fringe benefits payable to employees in the apparel sector will be essentially similar to the arrangements which apply in the textile sector, as shown in Appendix BB.

Fully-fringed current hourly wage costs in Canada for such employees would typically range from a low of about C\$7.00 for some Quebec and Manitoba operations to a high of about C\$9.50 in the Toronto area.

6.8.2 Other Employment-Related Factors

Turnover

The turnover rate for direct labor employees in the Mexico City area and in the border region commonly ranges from about 50-80% annually. In smaller centers, this rate tends to drop into the 10-20% range, similar to rates reported by Canadian producers.

Severance, Taxation, Plant/Land Costs, Capital and Telecom

These issues are discussed in Section 3 of this report, which also apply to the apparel sector.

Training

Although this factor is less significant in apparel than in chemical-fibre or textile production, Mexican producers consider that the lack of specialized training in Mexico's education system imposes a significant cost training cost on employers, especially in areas where turnover rates are high. We

were unable to quantify training cost as a function of payroll or other operating costs.

Utilities

Monthly electricity costs for a medium-size plant operating two shifts would likely be in the area of US\$2,000.

Transportation

The cost of truck transport from Mexico City to Toronto or Montreal is about C\$1.07 per mens suit, about half that for pants or jacket. Such a cost would represent approximately 1% of the producer's cost, and do not constitute any significant export impediment. Transport time for such shipments is about 10 days. Internal administration costs and brokerage fees associated with import-export operations, including importation of fabric, are a significant factor, amounting to about 3% of final cost.

The impact of this administration cost would drop, if Mexican producers were to become more successful exporters, sending bigger shipments.

JIT/AMT

Mexican apparel producers do not operate on a JIT or AMT basis.

Marketing and Sales

Most Mexican apparel operations do not have managerial staff dedicated to studying market conditions in North America, or to performing North American sales, promotion or distribution activities. Where a plant has an export orientation, its marketing/sales activities are for the most part carried out by non-exclusive agents, who also carry competing local and other imported lines. The cost of such representation usually adds 5 - 6% to product prices.

6.9 Price

Canadian importer and producer/importer views on Mexican prices generally indicate that Mexico is uncompetitive in the Canadian market against either domestic companies or third-country production. For example, recent costs of womens sweaters knitted in Hong Kong with US cotton were 25% of the cost of comparable Mexican product. The recent cost to a Canadian importer of one-and-a-quarter-pound combed cotton medium-detail mens/womens sweaters, with panels knitted in China and trim and finishing done in Hong Kong was US\$2.10, including knitting, dying, finishing and profit (no materials). No Mexican producer quoted a price for this product that was less than US\$10.00

NAFTA duty reductions of 22.5 - 25% for most Mexican apparel products could make Mexico price-competitive to a greater degree. However, importers also report serious quality problems, which could make Mexican exports uncompetitive at any price, given minimum quality levels demanded by Canadian consumers.

A major factor for Mexico will be price-competition with US producers, especially in Florida, several southern states and California. Producers in these areas can pay in the C\$4.50 - 5.50 range for sewing machine operators. Along with wages considerably lower than those paid by Canadian producers, US apparel production eliminates problems of language barriers, poor management, transport delays, border-crossing costs, currency risk, poor communications, and other infrastructure deficiencies, all of which frequently characterize Mexican production.

6.10 International Trade

Figures for Mexican exports to the US for 1989 and 1990 by square meters, classified by three categories - Mexican-origin, 807 and Special Regime (807A) are shown in Appendix GG of this report. These results indicate that overall export levels declined marginally year-over-year, that

Special Regime exports are by far the most important export category of the three, and that 807-category exports fell by 11.6% in 1990, while Mexican-origin export volumes grew by 21.8%.

Appendix HH shows overall trade balances for the sector during the period 1985-90. Noteworthy is the fact that with the reduction of barriers to apparel imports into Mexico, this balance has already shifted into considerable deficit in recent years, as imports have grown rapidly, while exports (by values) have not achieved anywhere near the same level of growth.

Canadian import statistics demonstrate the extremely modest penetration that Mexican apparel has made in the domestic market. Canadian 1990 imports from Mexico were valued at approximately C\$9 million, or about one-third of one per cent of total Canadian apparel imports valued at C\$2.5 billion. Only 6 tariff categories showed import levels of at least C\$250,000 in both 1989 and 1990. These relatively strong categories in an overall weak performance were:

- mens/boys suits, wool or fine animal hair, not knitted
- mens/boys suits of synthetic fibres, not knitted
- mens/boys trousers and shorts of cotton, not knitted
- mens/boys trousers and shorts of synthetic fibres, not knitted
- garments made up of textile felts and non-woven textile fabrics
- brassieres and parts thereof, of textile materials

6.11 Case Histories

The two cases histories included in this section of the report indicate why Mexican producers continue to have problems in developed-country markets, notwithstanding their labor cost savings. These case histories also indicate Mexico's potential for export growth under NAFTA.

In both cases, we examined producers of mens/boys tailored clothing. Of total 1990 values of nearly C\$6 million for Mexico's six main types of apparel exports to Canada, three items alone - mens/boys wool suits,

mens/boys synthetic suits and mens/boys trousers and shorts - accounted for \$3,767,000 or 63% of total imports in these categories.

6.11.1 Trajes Oxford (Oxford Suits)

This Mexico City company's experience indicates that price-competitiveness alone is inadequate for Mexican producers considering penetrating the Canadian market. This is especially true if third-country producers can considerably out-price their Mexican competitors. In basic production, the issue for Mexico will be whether or not its apparel producers can get enough of an edge from tariff reduction to overcome current non-competitiveness. In most types of basic production, Mexico will be competing less with Canadian producers than with third-country shippers. However, in workwear and basic underwear Mexico may compete with Canadian producers post-NAFTA.

Oxford produces a mens low-to-medium price suit in a production volume of 1,000 - 3,000 units monthly per style. Its 1990 cut-make-trim ("CMT") cost was C\$31.00 FOB, with machinery cost, overhead and general selling and administrative expenses included in this amount. The delivered price of this product was approximately C\$34.00.

Moorewill Clothing of Montreal had for several years been importing Oxford suits. However, in 1990 comparable suits became available in Poland with a CMT cost of C\$25.00 FOB, or about C\$28.00 CIF. To the C\$6 higher Mexican price must be added 25% Canadian duty, bringing the Mexican product cost to C\$41.75 (C\$31 CMT plus C\$7.75 duty plus C\$3 shipping). By contrast, the final cost of the Polish CMT is C\$34.25 (C\$25.00 CMT plus C\$6.25 duty plus C\$3.00 shipping), for a difference of C\$7.50.

Under a fully-implemented NAFTA the Mexican producer would receive a 25% duty savings on its CMT price - or C\$7.75 on C\$31 - compared to non-NAFTA exporters. If the Mexican producer fully passes this duty savings on to the Canadian buyer, the cost of the delivered Mexican product would then be C\$34 while the Polish product's cost would be

unchanged. In other words, the Mexican product would be marginally cost-competitive with the Polish product.

However, Moorewill is concerned over Mexican pricing. World-wide, Moorewill's experience has been annual price increases by producers. In Mexico, increases currently tend to be twice-yearly. Moorewill's experience in the past two years has been that Mexican producers have imposed cumulative increases of 25-40%, depending on the particular seller, in mens pants and suits. For Mexico to be competitive with third countries under NAFTA, price restraint will be important.

6.12 Strengths/Weaknesses

While Mexico offers potential advantages as location for apparel production, these advantages have often been poorly exploited to date. They are based on the existence of a pool of employees that are relatively

low-cost, compared to other North American locations. If this labor force is properly mobilized by good management with adequate financing and if it is supported by an efficient infrastructure, it could be competitive in the Canadian market. As well, it could likely compete with Canadian producers for US market share.

However, apart from production-sharing arrangements, mainly located in northern Mexico, the Mexican apparel sector has to date shown little indication that any significant upgrading of production in this way is imminent. At this time, production-sharing seems to offer the strongest possibility for affecting Canadian production, through penetration of the domestic market.

Principal weaknesses include lack of management skill and poor marketing/sales capability. Commercial arrangements involving multiple agents and intermediaries in the sourcing of fabric and inputs and in existing sales operations keeps Mexican apparel prices generally high. Reliability problems are chronic, according to importers' report, including failure to quote on samples, failure to deliver products on time, and delivering products that do not resemble samples. Additionally, many Mexican apparel makers suffer from low levels of working capital.

If production and marketing/sales operations can improve substantially, Mexico offers advantages to importers in terms of convenient access, as well as lower-cost financing requirements for goods in transit, since delivery periods are shorter than those applicable to Asian products delivered by sea.

By product type, Mexican strengths in this sector lie in long-run, relatively undifferentiated products, especially those made from relatively heavy fabrics. Such products include jeans, workwear and uniforms, principally made from gabardine, heavy cotton, and heavy poly-cotton blends. Weaknesses lie in delicate fabrics, woolens, ramies, printed fabrics, suitings and shirtings. The industry has a fashion capability only in the sense of creative designers serving the local market with local

styles. To date, Mexico's design capability has not been a factor in terms of North American fashion trends.

A key issue regarding potential Mexican competitiveness in the apparel sector post-NAFTA will be wage levels. While a large labour pool (60% of Mexico's population is under 25 years old) will tend to keep wages low, this factor will be offset by several others. The supply of skilled labour is relatively small. The potential growth of independent unions could result in improved wage payments and job security for employees. The expected general economic recovery in Mexico will tend to cause all wages to rise more quickly than in either Canada or the US.

6.13 NAFTA Readiness

Most Mexican producers in this sector are not planning specifically for NAFTA. Most do not have the resources to plan for it. A small number of more sophisticated and/or larger producers, such as Vanity, are planning to increase production and North American market orientation. This essentially means the US market at this time, since almost no awareness exists of the Canadian market.

For its part, the National Chamber of the Clothing Industries is pursuing three priority items, intended to improve the industry's competitiveness. The first of these is laboratory facilities to help in testing of materials and processes. Such an operation is currently projected for Mexico's footwear industry, with plans for apparel to be dealt with subsequently.

Second, the Chamber wants training school facilities aimed specifically at the apparel sector. Some training is apparently available as part of general programs at the secondary school level, but these are modest in scope and not specialized. Finally, it wants to see industry-wide quality-control programs established.

However, these objectives are for the time being no more than a wish-list, as no concrete plans or budget exist for any of these prospective programs.

US industry perspectives at this time remain largely undefined, with respect to possible activities in Mexico, and will not likely firm up until NAFTA's origin rules are known. However, industry representatives indicate that while they expect a degree of rationalization to occur, no major changes in trade and investment are expected in the near and medium term. Generally, they do see Mexico as offering weak inputs in the apparel-making process. US producers using US inputs under the Special Regime accordingly already operate in a substantially free-trading environment with respect to Mexico.

There is no expectation on the part of US producers at this time that increased import volumes from Mexico will result in diversion of US products to Canada.



APPENDICES

APPENDIX A

SECRETARIA DE COMERCIO Y FOMENTO INDUSTRIAL

ACUERDO que establece la información comercial que deben ostentar los textiles, y las prendas de vestir y sus accesorios.

Al margen un sello con el Escudo Nacional, que dice: Estados Unidos Mexicanos. - Secretaría de Comercio y Fomento Industrial.

JAIME SERRA PUCHE, Secretario de Comercio y Fomento Industrial, con fundamento en los artículos 34 de la Ley Orgánica de la Administración Pública Federal; 1o., 2o., 5o., fracciones I, II, III, IV y VIII, 6o., fracciones I y III, 7o., 8o., 10, 12, 13 y demás relativos de la Ley Federal de Protección al Consumidor y 1o. y 5o., fracciones I y XV del Reglamento Interior de la Secretaría de Comercio y Fomento Industrial, y

CONSIDERANDO

Que es deber de la autoridad velar por la seguridad de los consumidores y proporcionar instrumentos adecuados para propiciar que el público consumidor tome decisiones adecuadas sobre la adquisición de los productos que utiliza;

Que es interés del Gobierno Federal que los productos importados concurren al mercado en condiciones de igualdad que los nacionales, proporcionando métodos para evitar fenómenos de competencia desleal en el mercado nacional;

Que es necesario precisar los requisitos de información comercial que deberán ostentar ciertos productos a fin de que el consumidor obtenga información útil;

Que es conveniente actualizar el marco regulatorio en materia comercial a fin de hacerlo más transparente, sencillo y operativo, evitando la dispersión de reglamentaciones que provoquen confusión al público;

Que es conveniente reforzar las medidas de vigilancia a las disposiciones reglamentarias en vigor, a fin de garantizar al usuario que los productos que se ofrecen en el mercado cumplan con los lineamientos establecidos por las disposiciones aplicables en materia de protección al consumidor, he tenido a bien expedir el siguiente

ACUERDO QUE ESTABLECE LA INFORMACION COMERCIAL QUE DEBEN OSTENTAR LOS TEXTILES, Y LAS PRENDAS DE VESTIR Y SUS ACCESORIOS.

ARTICULO 1o.—El presente acuerdo tiene por objeto establecer la información comercial que los fabricantes y confeccionistas nacionales, así como los importadores, deben fijar en los textiles, en las pre-

das de vestir y sus accesorios, para su comercialización e internación dentro del territorio nacional.

ARTICULO 2o.—Para los efectos del presente acuerdo se entenderá por:

I.—Textiles, a aquellas mercancías sujetas a las reglas del Acuerdo Relativo al Comercio Internacional de los Textiles, publicado en el Diario Oficial de la Federación el 23 de enero de 1976, incluyéndose entre ellos, las telas, casimires, blancos, cobertores, pasamanerías, estambres, hilaturas, tejidos, encajes, listones, bordados y elásticos;

II.—Prendas de vestir, a los artículos confeccionados con textiles o plásticos, que tienen como finalidad cubrir cualquier parte del cuerpo;

III.—Accesorios, a aquellos artículos que se utilizan como complemento de las prendas de vestir con fines ornamentales, y

IV.—Insumos, a las materias primas susceptibles de ser utilizadas en la fabricación o confección de textiles y prendas de vestir y sus accesorios, excluyendo aquellas que se incorporen al producto para efectos funcionales como botones, cierres, broches, etc.

ARTICULO 3o.—Quedan obligados a cumplir con las disposiciones del presente acuerdo los fabricantes y confeccionistas nacionales, así como los importadores, de textiles y prendas de vestir y sus accesorios.

Se considerará fabricante al comerciante, respecto de aquellos productos que ostenten su marca, aun cuando haya ordenado la elaboración total o parcial, confección o terminado de ellos a un tercero.

ARTICULO 4o.—Las personas que en cualquier forma comercien con los productos antes señalados, deberán exigir a sus proveedores que los productos ostenten la información comercial requerida en los términos de este acuerdo.

Los comerciantes no serán responsables de la veracidad de la información que ostenten los productos, pero sí de expendir éstos sin que contengan la información a que se refiere este acuerdo.

ARTICULO 5o.—Los textiles y prendas de vestir y sus accesorios deberán ostentar, en los casos y términos que señala este acuerdo, la siguiente información en forma legible:

I.—Nombre, denominación o razón social del fabricante o confeccionista nacional, o del importador, según el caso, así como su registro federal de contribuyentes;

II.—Marca comercial;

III.—Descripción de insumos;

IV.—Talla;

V.—Instrucciones de cuidado;

VI.—País de origen, y

VII.—Descripción del producto cuando se comercialice en empaque cerrado que no permita ver el contenido.

La información anterior deberá presentarse cuando menos en idioma español; y por lo tanto, en los términos del artículo 7o. de la Ley Federal de Protección al Consumidor, se autoriza la utilización de otros idiomas y unidades de medida para los productos a que se refiere este acuerdo, destinados a la exportación o para ser adquiridos por el turismo extranjero.

ARTICULO 6o.—En caso de que el fabricante o confeccionista nacional o importador de los productos objeto del presente acuerdo utilice un nombre comercial diferente a su nombre, denominación o razón social, deberá incluir la designación por la cual es conocida como ofertante del producto.

ARTICULO 7o.—Para efectos de este acuerdo, el fabricante o confeccionista nacional o el importador deberá expresar el insumo en porcentaje, con relación al peso, de las diferentes fibras que integran el producto, en orden del predominio de dicho porcentaje, conforme a las siguientes indicaciones:

I.—La denominación de las fibras deberá apearse a la terminología establecida por las Normas Oficiales Mexicanas;

II.—Toda fibra que se encuentre presente en un porcentaje igual o mayor al 5% del total, deberá expresarse por su nombre genérico. Se podrá usar el nombre comercial o la marca registrada de alguna fibra si se tiene autorización de su titular, como es el caso del nylfil, acrilán o dacrón, siempre que se use en conjunción al nombre genérico de la fibra y en caracteres de igual tamaño;

III.—En caso de que alguna fibra se encuentre presente en un porcentaje menor al 5% del total, se deberá designar como "otras";

IV.—Cuando se trate de textiles integrados por dos o más fibras, se hará mención de cada una de las fibras presentes en cuando menos 5% hasta completar el 100%.

V.—Cuando los textiles, prendas de vestir o accesorios hayan sido elaborados o confeccionados con desperdicios, sobrantes, lotes diferentes, subproductos textiles, de segunda, o usados, que sean desconocidos o cuyo origen no se pueda demostrar, se deberá indicar el porcentaje de fibras que encuadren en este supuesto, o en su defecto con la leyenda "... (porcentaje) de fibras desconocidas";

VI.—Cuando se usen fibras regeneradas o mezclas de éstas con otras fibras vírgenes o regeneradas, deberán señalarse los porcentajes y los nombres genéricos de cada una de las fibras que integren los productos, anotando las palabras "regenerado" o "regenerada" después del nombre de la fibra;

VII.—Sólo se podrán utilizar los términos "virgen" o "nuevo" cuando la totalidad de las fibras integrantes del textil sean nuevas o vírgenes;

VIII.—No se podrá utilizar el nombre de animal alguno al referirse a las fibras que integran el textil a menos que la fibra o el textil estén elaborados con el pelo desprendido de la piel del animal de que se trate. Queda prohibida la mezcla de palabras que impliquen o tiendan a inducir la existencia de componentes derivados de la piel o el pelo de animal alguno;

IX.—Se permitirá una tolerancia de 3% en relación con el peso de cada uno de los insumos indicados en la etiqueta, excluyendo materiales utilizados con fines ornamentales o para el armado de la prenda de vestir en sí, salvo en el caso que se utilicen expresiones como "100%", "pura" o "todo" al referirse a los insumos del producto;

X.—Para el porcentaje, en relación con el peso de las cintas elásticas en las que intervienen fibras elastoméricas de origen natural o sintético e entorchados, hilos, hilados e hilazas de fantasía, la tolerancia será considerada sobre el peso total del producto y no sobre cada una de las fibras que lo integran, y

XI.—Tratándose de insumos o forros cuyo peso no exceda del 5% del total o del 15% de la superficie del producto, y hayan sido incorporados para efectos ornamentales, de protección o de armado de la prenda de vestir, no será obligatoria su indicación.

ARTICULO 8o.—La talla o medida de las prendas de vestir, de los accesorios e insumos deberán expresarse conforme al Sistema General de Unidad de Medida y a las Normas Oficiales Mexicanas.

ARTICULO 9o.—Las prendas de vestir y los accesorios deberán ostentar información relativa al tratamiento adecuado e instrucciones de cuidado y conservación del producto, debiendo comprender los siguientes datos:

I.—Lavado:

a) A mano, en lavadora, en seco o proceso especial;

b) Temperatura del agua;

c) Con jabón o detergente, y

d) Prohibición de lavado en húmedo o en seco.

II.—Secado:

a) Exprimir o no;

b) Al sol o a la sombra;

c) Colgado;

d) Horizontal;

e) Uso o prohibición de equipo especial, secadora doméstica o industrial, y

f) Recomendaciones específicas de temperatura ciclo de secado;

III.—Planchado:

a) Con planta tibia, caliente o a vapor;

b) Prohibición de planchado, y

c) Condiciones especiales;

IV.—Blanqueo: Utilización o no de compuestos clorados u otros blanqueadores, y

V.—Otras recomendaciones particulares, haciendo mención específica de las tendencias a encogimiento o deformación cuando le sean propias, indicando instrucciones para atenderlas.

La información anterior, deberá indicarse por medio de leyendas breves y claras o usar la simbología que establezcan las Normas Oficiales Mexicanas.

ARTICULO 10.—Sólo podrá utilizarse la leyenda "hecho a mano" o frases similares cuando el producto haya sido confeccionado, elaborado o producido totalmente a mano. La indicación "a mano" deberá ir acompañada de la descripción de aquella parte del proceso que se haya realizado a mano, por ejemplo "cosido a mano".

ARTICULO 11.—La información sobre el país de origen, se sujetará a las siguientes reglas:

I.—Cuando el producto terminado, así como todos sus insumos se hayan elaborado o producido en el mismo país, con la expresión "hecho en ..." (país de origen)";

II.—Cuando el producto haya sido elaborado en un país con insumos de otro, con la leyenda "hecho en ..." (país de elaboración) con ... (descripción de los insumos) importados de ... (país de origen)", y

III.—Cuando el proceso de elaboración haya sido realizado en dos o más países, se deberá señalar qué parte del proceso se llevó al cabo en los últimos dos países, con leyendas como "terminado en ..." (país) de material importado", o "fabricado en ..." (país), terminado en ... (país)", o aquellas otras que describan brevemente el proceso de elaboración del producto.

ARTICULO 12.—Los acabados que se apliquen a los productos objeto del presente acuerdo, deberán utilizarse conforme a la terminología que establezcan las Normas Oficiales Mexicanas. Cuando se utilice información sobre el acabado del producto, deberá estar acompañada de la información del insumo, por ejemplo, "impermeabilizado".

ARTICULO 13.—La información a que se refiere el presente acuerdo, deberá incorporarse a las prendas de vestir en el lugar donde se elaboren o fabriquen como tales. En todos los demás productos, podrá incorporarse previamente a su comercialización.

ARTICULO 14.—De acuerdo a las características de los productos, la información que deberán ostentar será la siguiente:

I.—Prendas de vestir y sus accesorios, la referida en los artículos 5o. a 9o. de este acuerdo, y

II.—Los demás productos, la prevista en los ar-

tículos 5o., fracciones I, VI y VII, 6o. y 7o. de este ordenamiento.

ARTICULO 15.—Las prendas de vestir y sus accesorios deberán ostentar la información a que se refiere la fracción I del artículo anterior, en etiquetas de tela o de cualquier otro material que tenga una duración cuando menos igual a la del producto al que se apliquen, cosida en la parte interior del cuello o cintura o en cualquier otro lugar visible de acuerdo a las características de la prenda.

Cuando las prendas se comercialicen como conjunto o pares confeccionados del mismo material, podrán presentar la etiqueta cosida en una sola de las piezas, pero en todo caso, cuando el producto tenga forro, la información deberá expresarse en forma separada para éste.

ARTICULO 16.—La información a que se refiere la fracción II del artículo 14 de este acuerdo se presentará bordada, grabada o impresa de tal manera que llegue al consumidor final, en los productos que a continuación se señalan:

I.—Casimires;

II.—Bolsos;

III.—Maletas;

IV.—Monederos;

V.—Billeteras;

VI.—Estuches, y

VII.—Mochilas.

En fabricante o confeccionista nacional o el importador podrá optar por presentar dicha información en la forma prevista en el artículo anterior.

ARTICULO 17.—La información a que se refiere la fracción II del artículo 14 de este acuerdo, se presentará en etiquetas adheridas o amarradas de tal forma al producto que el comprador potencial del mismo tenga acceso a dicha información al momento de realizar la compra, en los siguientes casos:

I.—Rollos de tela;

II.—Alfombras;

III.—Sábanas;

IV.—Cobijas;

V.—Sobrecamas;

VI.—Pañuelos;

VII.—Guantes;

VIII.—Pelucas;

IX.—Artículos para el pelo;

X.—Sombreros.

XI.—Corbatas de moño;

XII.—Cuellos y puños desprendibles;

XIII.—Paraguas y parasoles;

XIV.—Fieltrós;

XV.—Manteles;

XVI.—Manteles individuales;

XVII.—Servilletas

XVIII.—Cubreasientos;

XIX.—Artículos para cubrir aparatos electrodomésticos y domésticos;

XX.—Cubiertas para planchadores;

XXI.—Cubiertas para baño;

XXII.—Otras cubiertas para muebles;

XXIII.—Cajines;

XXIV.—Protectores;

XXV.—Tapetes, y

XXVI.—Artículos desechables destinados a ser utilizados en una sola ocasión

El fabricante o confeccionista nacional o el importador podrá optar por presentar dicha información en cualquiera de las formas previstas por los artículos 15 y 16 de este acuerdo.

ARTICULO 18.—La información a que se refiere la fracción II del artículo 14 de este acuerdo, se presentará en la factura de venta correspondiente, respecto de los productos que a continuación se señalan:

I.—Cortinas;

II.—Artículos hechos a la medida cuando el consumidor final haya decidido la compra conociendo los insumos;

III.—Etiquetas;

IV.—Lienzos para pintores, y

V.—Telas que estén destinadas directamente a la confección.

El fabricante o confeccionista nacional o el importador podrá optar por presentar dicha información en cualquiera de las formas previstas por los artículos 15 a 17 de este acuerdo.

ARTICULO 19.—La información a que se refiere la fracción II del artículo 14 de este acuerdo, se presentará en el empaque o fajilla en los que se expone el producto, en los siguientes casos:

I.—Hilos e hilaturas;

II.—Estambres;

III.—Piezas o rollos, de cualquier longitud, de encajes, tiras bordadas, listones, cintas, elásticos y demás artículos de pasamanería con anchura hasta de 15 centímetros;

IV.—Calcetines;

V.—Medias;

VI.—Pantimedias;

VII.—Productos que se expendan en empaques cerrados que, por no ser transparentes, no permiten al consumidor ver el contenido o información comercial incorporada al mismo;

VIII.—Artículos que se expendan en mazos o empaques de varias unidades, y

IX.—Aquellos otros productos que por ser delicados, el fijarles la información en forma directa, perjudicaría el uso o estética del mismo u ocasionaría que perdiesen valor.

El fabricante o confeccionista nacional o el importador podrá optar por presentar dicha información en cualquiera de las formas previstas por los artículos 15 a 18 de este acuerdo.

ARTICULO 20.—Quedan exentos de ostentar la información a que se refiere el presente acuerdo, los siguientes productos:

I.—Agujetas;

II.—Bajo alfombras;

III.—Juguets;

IV.—Colchones;

V.—Box spring;

VI.—Artículos para limpieza;

VII.—Pedacerías y desperdicios;

VIII.—Relleno de fibras aglutinadas o a base de desperdicios para colchones, cajines, almohadas o prendas de vestir, incluyendo entretelas;

IX.—Artesanías mexicanas;

X.—Pantallas de lámpara;

XI.—Mamparas y biombos;

XII.—Pantallas;

XIII.—Forros y señaladores de libros;

XIV.—Artículos deportivos que no sean prendas de vestir;

XV.—Muebles de playa y de jardín;

XVI.—Artículos de uso médico que no sean prendas de vestir;

XVII.—Toallas sanitarias, y

XVIII.—Pañales.

ARTICULO 21.—En los productos objeto del presente acuerdo, sólo podrá usarse la palabra "garantía" o "garantizado" cuando se cumpla con los requisitos que establece el Acuerdo por el que se establecen las bases mínimas de carácter general que deberán contener las pólizas de los productos y servicios que se otorgan con determinada garantía, a fin de asegurar su cumplimiento y evitar prácticas engañosas a los consumidores, publicado en el Diario Oficial de la Federación el 4 de mayo de 1976.

ARTICULO 22.—La inspección y vigilancia de lo dispuesto en este acuerdo; la imposición de sanciones por su violación o inobservancia; así como la resolución de los recursos de revisión interpuestos en contra de las resoluciones que se dicten, se regirán por lo dispuesto en la Ley Federal de Protección al Consumidor.

TRANSITORIOS

PRIMERO.—El presente Acuerdo entrará en vigor al día siguiente de su publicación en el Diario Oficial de la Federación.

SEGUNDO.—Se abroga el Acuerdo que Establece la Información que Deberán Ostentar las Prendas de Vestir, las Telas y Demás Productos Textiles, publicado en el Diario Oficial de la Federación el 22 de noviembre de 1982, y se derogan en lo conducente las demás disposiciones que se opongan a este acuerdo.

México, D.F., a 22 de octubre de 1990.—El Secretario de Comercio y Fomento Industrial, Jaime Serra Puche.—Rúbrica.

MEXICAN LABELING REGULATIONS FOR IMPORTED TEXTILES

First Article:

The object of this decree is to establish the commercial information that national and foreign manufacturers and importers of apparel must place in the clothing and apparel accessories marketable in Mexico.

Second Article:

The following products are covered by this decree:

- 1) Textiles: the merchandise subject to the regulations established in the international textile decree published in the Official Gazette of January 23, 1976, including fabrics, wool textiles, bedspreads and bedsets; sheets and pillowcases; cotton towels and washcloths, housefurnishings; embroideries; yarns; lace and net goods; trimmings; canvas and related products; pleating and stitching; and elastic ribbons.
- 2) Any type of women's, children and men's wear made of textiles or plastics.
- 3) Hats, belts and apparel accessories as part of clothing or separate for ornamental purposes.
- 4) Raw materials used to produce textiles or apparel and apparel accessories, except those used for functional purposes such as buttons, zippers, cuff buttons, hooks, and eyes, etc.

Third Article:

National producers of textiles, apparel and apparel accessories, as well as importers of these products are subject to this decree.

The trader is considered to be the manufacturer of those products if his trademark is used, whether or not the total or partial manufacturing or finishing of the products was done by a third party.

Fourth Article:

Merchants of any product subject to this decree must request from their suppliers that the products involved have the commercial labeling information required by this decree.

The merchants will not be responsible for the accuracy of the information

indicated in the label, however, they will be liable for selling merchandise with no label information.

Fifth Article:

Textiles, apparel and apparel accessories should in the cases and terms established in this decree, have the following label information.

- 1) Name of the national manufacturer, or importer depending the case, as well as the IRS identification number [Registro Federal de Causantes].
- 2) Trademark or commercial name brand.
- 3) Description of the raw materials involved.
- 4) Size.
- 5) Instructions for use and care.
- 6) Country of origin.
- 7) Product description whenever the product is packed in such a form that it is not visible.

The information should be in Spanish and therefore subject to the seventh article of the Federal Law for Consumer Protection. Other languages and measuring units are authorized to be used for the products to be exported or bought by foreign tourists.

Sixth Article:

In the case where the local manufacturer or importer of the products subject to this decree uses a different name or trademark, it should be included in the label.

Seventh Article:

For the effects of this decree, the local manufacturer or importer should indicate the raw material as percentage, regarding the weight of the different fibers used in the product, by percentage order, according to the following indications:

- 1) The importance of the fibers must be the same as the terminology established in the Mexican official norms.
- 2) Every fiber that has a percentage equal to or more than five percent of the

total, should be stated by its generic name. The trademark or commercial name of any fiber can be used if it is authorized by its owner, as is the case of Nylfil, Acrylan, or Dacron: If and when it is used combined with the generic name of the fiber and with the same size of characters.

- 3) In the event that a fiber has less than five percent of the total, it should be listed as "Other Fibers."
- 4) Whenever textiles involved have two or more fibers, it should be mentioned the type of fibers with a content of at least five percent up to 100 percent.
- 5) Whenever the textiles, apparel or apparel accessories are made of unknown waste, left overs, different lots, textile subproducts, second class, or used, or if its origin cannot be proved, the percentage of fibers involved should be indicated or stated as "[percentage] unknown fibers."
- 6) Whenever regenerated fibers or a mixture of these is made with other new or regenerated fibers, the percentage and the generic names of each of the fibers that form the product should be stated, using the word regenerated after the name of the fiber.
- 7) The terms virgin or new can only be used whenever the total amount of fibers used are new or virgin.
- 8) No animal name can be used to refer to the fibers used in the production of a textile product, unless the fiber or products is made from the hair of the animal. The mixture of words implying or tending to suggest the existence of derived compounds of any skin or animal hair is forbidden.
- 9) Up to three percent of tolerance in the weight of each one of the raw materials indicated in the label will be allowed, excluding materials used for decoration or for assembling the apparel product per se, unless the expressions 100 percent, pure or all are used whenever reference is made to the raw materials used in the product.
- 10) For the percentage, related to the weight of elastic ribbons where elastomeric fibers of natural or synthetic origin, threads, weavings or fantasy yarns are involved, the tolerance will be based on the total weight of the product and not upon each one of the integrating fibers.
- 11) Regarding raw materials or lining whose weight does not exceed five percent of the total or 15 percent of the product surface, which were included for decoration, protection or assembling purposes, it will not be mandatory to state the percentage involved.

Eighth Article:

The size or measure of the apparel and apparel accessories, should be expressed in accordance with the general unit measure system and the Mexican official norms.

Ninth Article:

Apparel and apparel accessories should have instructions in Spanish for use and care with the following data:

1) Washing

- A) Hand or machine washing, dry cleaning, or special process
- B) Water temperature
- C) Soap or detergent
- D) Do not dry clean or water launder

2) Drying

- A) Wringing or not
- B) Sun and shade drying
- C) Hang dry
- D) Flat dry
- E) Use or not of special equipment, drying machine, whether domestic or industrial

3) Ironing

- A) Cool, warm, or steam ironing
- B) non-ironing
- C) Special recommendations

4) Bleaching: Use or not of chlorinate compounds or other bleaching products.

5) Other particular recommendations, specifically mentioning the tendencies of shrinking or deformations whenever appropriate, providing the instructions to avoid them.

The above information should be indicated by means of brief and clear wording or symbols that are established within the Mexican officials norms.

Tenth Article:

The wording hand made or similar phrases can only be used whenever the product was made or produced totally by hand. The indication hand made should

be accompanied by the description of that part of the production process hand made, i.e. hand sewed.

Eleventh Article:

The information regarding the country of origin will be subject to the following regulations:

- 1) When the finished product, as well as the raw materials used to produce it come from the same country, the wording made in country or origin should be used.
- 2) When a product was made in one country using raw materials produced by another country, the wording made in country of origin with (description of the raw materials) made in (country or origin) should be used.
- 3) Whenever the manufacturing of a product was made in two or more countries, the portion of the process made in the last two countries involved should be stated, using the wording made in (name of country) with imported raw materials from (country of origin) finished in (name of country), or other wording briefly describing the manufacturing process of the product.

Twelfth Article:

The applied finishings to the products subject to this decree, should be used according to the terminology established in the Mexican official norms. Whenever the information on product finishing used, it must be accompanied by the information of the process, i.e. waterproof.

Thirteenth Article:

The labeling information referred to in this decree should be incorporated in the apparel at the manufacturing site of the apparel. Regarding any other textile product, the labeling information can be placed at the marketing destination previous to its sale.

Fourteenth Article:

Depending on the product characteristics, the labeling information must have the following data:

- 1) Apparel products and apparel accessories mentioned in articles Fifth and Ninth of this decree.

- 2) Other products including those mentioned in articles Fifth, fractions 1), 4), and 7), Sixth and Seventh of this decree.

Fifteenth Article:

Apparel and apparel accessories should have information referred to in 1) of the above article, in textile or any other durable type of material labels, which should last at least the same period of the product life to which they are applied to, sewed in the interior side of the collar or waist, or at any other visible place, depending on the product characteristics.

Sixteenth Article:

The information referred to in 2) of the Fourteenth article, should be embroidered, sealed or printed so it can be read by the consumer, in the following products:

- 1) Wool Textiles
- 2) Purses
- 3) Luggage or suitcases
- 4) Change Purses
- 5) Wallets
- 6) Cases
- 7) Knapsacks or school bags

The local manufacturer or importer may choose as stated in the previous article.

Seventeenth Article:

The information referred to in 2) of the Fourteenth article of this decree, should be placed in, attached, fastened, or tied to labels at a visible place where the consumer can read it before buying the product, for the following:

- 1) Fiber rolls
- 2) Rugs
- 3) Bed sheets
- 4) Blankets
- 5) Bedspreads
- 6) Handkerchiefs
- 7) Gloves
- 8) Wigs
- 9) Hair pieces
- 10) Hats
- 11) Bow ties

- 12) Detachable collars and wristbands
- 13) Parasols and umbrellas
- 14) Felts
- 15) Tablecloths
- 16) Individual place mats
- 17) Napkins
- 18) Seat Covers
- 19) Household electric and domestic appliance covers
- 20) Covers for ironing boards
- 21) Covers for bathroom furniture
- 22) Other house furniture covers
- 23) Pillow and cushions
- 24) Protectors
- 25) Carpets
- 26) Disposable products for a single use

The local manufacturer or importer can choose the labeling presentation suitable for these products in any of the forms stated in articles Fifteenth and Sixteenth of this decree.

Eighteenth Article:

The information referred to in 2) of article Fourteenth of this decree, should be presented in the corresponding sales invoice, regarding the following products:

- 1) Draperies
- 2) Articles made upon request whenever the final consumers have decided their purchase being aware of the raw material used in their manufacturing.
- 3) Labels
- 4) Artists linen cloths
- 5) Fibers directly destined for apparel manufacturing.

The local manufacturer or importer can choose the labeling presentation suitable for these products in any of the forms stated in articles Fifteenth to Seventeenth of this decree.

Nineteenth Article:

The information referred to in 2) of article Fourteenth of this decree should be presented in the packaging or sash where the product is placed, for the following:

- 1) Threads
- 2) Yarns
- 3) Portions or spools, of any length, of laces, ribbons, bands, embroidery strips, elastic ribbons, and other trimmings with up to 15 centimeters of width
- 4) Socks
- 5) Hosiery
- 6) Pantyhose
- 7) Products sold in sealed packages, that not being transparent, do not allow the consumer to see the product or labels with commercial information regarding the same.
- 8) Products that are sold in bunch or packages with several units.
- 9) Other products that because of their delicacy, fixing the label directly, will damage the use or aesthetics of the same or could cause their devaluation.

The local manufacturer or importer can choose the labeling presentation suitable for these products in any of the forms stated in articles Fifteenth and Eighteenth of this decree.

Twentieth Article:

The following products are exempted from the labeling requirements referred to in this decree:

- 1) Strings or shoelaces with or without metal tips
- 2) Carpet Underpads
- 3) Toys
- 4) Mattresses
- 5) Box springs
- 6) Cleaning Articles
- 7) Pieces and Remains
- 8) Stuffing of agglutinated fibers or waste for mattresses, pillows, cushions, or garments, including interlinings
- 9) Mexican handicrafts
- 10) Lamp shades
- 11) Movable room dividers and folding screens
- 12) Shades
- 13) Bookbinders and bookmarks
- 14) Sporting goods except clothing
- 15) Beach and garden furniture
- 16) Products for medical use except clothing
- 17) Sanitary napkins
- 18) Diapers

Twenty-First Article:

The products subject to this decree can only use the word guarantee or guaranteed when the requirements established in the decree published in the Official Gazette of May 4, 1976 are met.

Twenty-Second Article:

The inspection as well as the sanctions for violating or non-observance of this decree, will be subject to consumer protection law.

Transitory Articles:

First: This decree will start operating the day after its publication in the Official Gazette.

Second: The decree establishing the labeling requirements for apparel, fibers, and other textile products published in the Official Gazette of November 22, 1982 is hereby annulled and revokes other regulations that are contrary to this agreement.

**UNDERSTANDINGS REGARDING MEXICO'S
LABELLING DECREE (ACUERDO) FOR TEXTILE AND APPAREL PRODUCTS**

A. The Government of the United States accepts that an identifier for the Mexican importer will be necessary on labels for apparel and other textile products identified in the Mexican labelling regulations. The Government of the United States recognizes the right of the Mexican Government to establish the identification requirements it deems necessary for firms and individuals doing business in Mexico. The Government of Mexico confirms that the aforementioned identifier for textile products must include the name of the domestic producer or importer of record, as appropriate, and the corresponding Mexican quota RFC unquote identification number.

B. The Government of Mexico affirms that labels for products entering Mexico need not be affixed at the manufacturing site. The Government of the United States recognizes that goods must be labelled prior to entry through Mexican customs.

C. The Government of Mexico will accept apparel and accessories for entry into Mexico upon which labels are sewn in or otherwise permanently affixed as if they were sewn in so as to remain attached to the product and/or its package throughout any distribution, sale, resale and until sold and delivered to the ultimate consumer.

D. Provided that other requirements of the Mexican labelling regulations are satisfied, products shall be accepted for entry into Mexico if they satisfy the requirements set forth in paragraphs I, II or III of Article 11 of the Mexican labelling decree or if any other phrase that briefly describes the manufacturing process is otherwise provided. In instances where Mexican customs authorities have reason to question whether or not the labelling information provided for particular imports from the United States adequately meets this test, the inscription quote made in the United States unquote shall be deemed sufficient for this purpose.

E. The Government of Mexico affirms that the following interpretations of the labelling decree are accurate:

- more than one label may be used in conveying information;
- dual language labelling is acceptable, provided that Spanish is used in every case;
- care symbols, according to international (ISO) standards are acceptable in and of themselves without further need for written embellishment. However, when written text is used either with or without care symbols, such text must be at least in Spanish;

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-- in the case of shipments of fiber and yarn, stenciled quote shipping marks unquote that includes all the information required by the labelling decree for these products, on the outside of every case will satisfy the labelling requirements;

-- cut pieces sent to Mexico for assembly do not require labels, but relevant information will be described on corresponding invoices as specified in Article 18 of the labelling decree;

-- the provisions of Article 17 of the labelling decree shall be considered to apply to towels, bathmats, washcloths, and similar household textiles not elsewhere specified in the regulations; and

-- the rules specified in Article 8 regarding metric units of measure are suspended indefinitely as previously announced by the Government of Mexico.

F. The Government of Mexico agrees to extend the March 19, 1991 decision setting deadlines for domestic manufacturers and importers to abide by certain provisions of the decision that establishes trade information to be shown on textiles, clothing and accessories until October 1, 1991, and to undertake its best efforts to allow that all goods introduced into commerce under the terms of the extension can be sold without undue hinderance down to the retail level during a period of five months thereafter.

G. Both parties agree to inform each other of methods to ensure compliance with their respective labelling requirements for textile products, and reserve the right to request consultations on the implementation of this understanding.

H. This understanding shall be effective as of July 1, 1991.

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APPENDIX B

SOURCE OF MAJOR INPUTS OF THE MEXICAN CHEMICAL-FIBRE INDUSTRY

1. Nylon

cyclohexane	Pemex
ammonia	Pemex
caprolactame monomers	Univex

2. Polyester

paraxilene	Pemex
methanol	Pemex
DMT	Petrocel
TPA	Petrocel
TPA fibre grade	Tereftalatos Mex.
MEG (monoethylene glycol)	Idesa
	Glicoles Mex.
	Polioles

3. Acrylics

acrilonitrile monomer	Pemex
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APPENDIX C

ANEXO 4

FRACCIONES DE IMPORTACION		
FRACCION		ARANCEL
ARANCELARIA		(%)
PETROQUIMICOS BASICOS		
29021101	Ciclohexano	Exenta
29024301	Para-xileno	Exenta
29101001	Oxido Etileno	Exenta
MATERIAS PRIMAS PARA FIBRAS		
29053101	Etilenglicol	10
29142201	Ciclohexanona	10
29173901	Acido Tereftalico y sus Sales	15
29173701	Tereftalato Dimetilo	15
29261001	Acronitrilo	Exenta
29337101	epsilon-Caprolactama	10
FILAMENTOS SINTETICOS O ARTIFICIALES		
ALTA TENACIDAD SINTETICOS		
54021001	Nylon	15
54021002	Fibras aramidicas	10
54022001	Poliester	15
HILADOS SINTETICOS TEXTURADOS		
54023101	Nylon hasta 50 tex	15
54023201	Nylon superior a 50 tex	15
54023301	Poliester	15
54023901	Alcohol polivinilico	10
54023902	Acrilicas o modacrilicas	15
54023903	Poliolefinas	15
54023999	Los demas	15
HILADOS SINTETICOS C/TORSION HASTA 50 VPM		
54024101	Nylon	15
54024102	Nylon 44.4 dtex y 34 filamentos	10
54024103	Aramidas	10
54024201	Poliester parcialmente orientados	15
54024301	Poliester	15
54024901	Poliuretano	10
54024902	Poliuretano de 44.4 a 1887 dtex	15
54024903	Poliolefinas	15
54024904	Acrilicos o modacrilicos	15
54024905	Alcohol polivinilico	10
54024906	Poltetrafluoroetileno	10
54024907	Polipropileno fibrilizado	10
54024999	Los demas	15
HILADOS SINTETICOS C/TORSION SUPERIOR A 50 VPM		
54025101	Nylon	15
54025102	Aramidas	10
54025201	Poliester 75.48 dtex, tejido, 32 fil	10
54025299	Poliester	15
54025901	Poliolefinas	15
54025902	Acrilicos o modacrilicos	15
54025903	Alcohol polivinilico	10
54025904	Poltetrafluoroetileno	10
54025905	Polipropileno fibrilizado	10
54025999	Los demas	15
HILADOS SINTETICOS TORCIDOS O CABLEADOS		
54026101	Nylon	15
54026102	Aramidas	10
54026201	Poliester 75.48 dtex, tejido, 32 fil	10
54026299	Poliester	15
54026901	Poliolefinas	15
54026902	Acrilicos o modacrilicos	15
54026903	Alcohol polivinilico	10

FRACCION ARANCELARIA	ARANCEL (%)
54020004 Politetrafluoroetileno	10
54020005 Polipropileno fibrilizado	10
54020000 Los demas	15
ALTA TENACIDAD ARTIFICIALES	
54031001 Rayon viscosa	15
HILADOS ARTIFICIALES TEXTURADOS	
54032001 Acetato celulosa	15
54032000 Los demas	15
HILADOS ARTIF SENCILLOS, TORSION HASTA 120 VPM	
54033101 Rayon viscosa 1332 dtex, hasta 120 vpm	15
54033100 Los demas	15
HILADOS ARTIF SENCILLOS, TORSION SUP A 120 VPM	
54033201 Rayon viscosa de 1332 dtex	15
54033200 Los demas	15
54033301 Acetato de celulosa	15
54033300 Los demas	15
HILADOS ARTIFICIALES TORCIDOS O CABLEADOS	
54034101 Rayon viscosa de 1332 dtex	15
54034100 Los demas	15
54034201 Acetato de celulosa	15
54034300 Los demas	15
MONOFILAMENTOS, TIRAS Y FORMAS SIMILARES	
54041001 Polyester	10
54041002 Nylon	15
54041003 Poliolefinas	15
54041004 Alcohol polivinilico	10
54041000 Los demas monofilamentos	15
54049000 Los demas sinteticos	15
54050001 Monofilamentos artificiales	15
54050002 Paja artificial	10
54050003 Imitacion catgut, diametro 0.05-0.70 mm	15
54050004 Imitacion catgut, diametro 0.05-0.70 mm	10
54050000 Los demas artificiales	15
TEJIDOS DE FILAMENTOS SINTETICOS	
54071001 Alta tenacidad de nylon o polyester	15
54081004 Empleados en neumaticos	15
FIBRAS SINTETICAS O ARTIFICIALES DISCONTINUAS	
55011001 Cables nylon	10
55012001 Cables polyester	10
55012002 Cables polyester, color negro teñido	10
55012003 Cables polies AT igual o sup 7.77 g/dtex	10
55012000 Los demas cables polyester	10
55013001 Cables acrilicos o modacrilicos	10
55018001 Cables cloruro de polivinilo	10
55019000 Los demas cables de fibras sinteticas	10
55020001 Cables de filamentos artificiales	10
55031001 FC nylon	10
55031000 Las demas FC poliamidas	10
55032001 FC polyester	10
55032002 FC polyester AT igual o sup 7.77 g/dtex	10
55032003 FC polyester, color negro teñido	10
55032000 FC acrilica o modacrilica	10
55033001 FC polipropileno de 3 a 25 dn	10
55034001 Los demas FC de polipropileno	Exenta
55039001 FC cloruro de polivinilo	10
55039000 Los demas FC sinteticas	10
55041001 FC rayon	Exenta
55041000 Los demas FC de viscosa	10
55049001 Los demas FC artificiales	10

FRACCION ARANCELARIA	ARANCEL (%)
55051001 Desperdicios fibras sinteticas	15
55052001 Desperdicios fibras artificiales	15
59021001 Napas tramadas de nylon	15
59022001 Napas tramadas de polyester	15
SEDA	
HILADOS	
50040001 Sin acondicionar	15
50050001 De desperdicios sin acondicionar	15
50060001 Acondicionados	15
TEJIDOS	
50071001 De borriila teñidos	15
50071002 De borriila estampados	15
50071099 Los demas de borriila	15
50072001 Contenido de 85% teñidos	15
50072002 Contenido de 85% estampados	15
50072003 Contenido 85% para corbatas	15
50072099 Los demas con contenido 85%	15
50079001 Los demas teñidos para corbatas	15
50079099 Los demas	15
LANA Y PELOS	
51011101 Lana esquilada c/trend hasta 75%	Exenta
51011102 Lana esquilada c/trend sup 75%	Exenta
HILADOS	
51061001 Contenido de 85% lana cardada s/acond	15
51062001 De lana cardada sin acondicionar	15
51071001 Contenido de 85% lana peinada s/acond	15
51072001 De lana peinada sin acondicionar	15
51081001 De pelo fino cardado	15
51081099 De pelo fino	15
51082001 De pelo fino peinado	15
51082099 De pelo fino	15
51091001 De lana o pelo fino conteniendo 85% acond	15
51099099 De lana o pelo fino acondicionados	15
51100001 De pelo ordinario	15
TEJIDOS CARDADOS	
51111101 Lana o pelo fino (85%) con peso 300g/m2	15
51111999 Los demas lana o pelo fino	15
51112099 Los demas lana o pelo fino c/filam FAS	15
51113099 Los demas lana o pelo fino c/FC FAS	15
51119099 Los demas lana o pelo fino	15
TEJIDOS PEINADOS	
51121101 Lana o pelo fino (85%) con peso 200g/m2	15
51121999 Los demas lana o pelo fino	15
51122001 Los demas lana o pelo fino c/filam FAS	15
51123099 Los demas lana o pelo fino c/FC FAS	15
51129099 Los demas lana o pelo fino	15
51130001 Tejidos de pelo ordinario	
51130002 Tejidos de crin	
ALGODON	
52010002 Sin pepita con mas de 29 mm longitud	10
52010003 Sin pepita	Exenta
HILADOS DE COSER	
52041101 Con contenido superior o igual a 85%	15
52041999 Los demas	15
52042001 Acondicionados	15
HILADOS DE FIBRAS SIN PEINAR 85%	
52051101 De titulo sup o igual a 714.29 dtx	15
52051201 De titulo 232.56 a 714.29 dtx	15
52051301 De titulo 192.31 a 232.56 dtx	15
52051401 De titulo 125 a 192.31 dtx	15
52051501 De titulo inferior a 125 dtx	15

FRACCION ARANCELARIA		ARANCEL (%)
HILADOS DE FIBRAS PEINADAS 85%		
52052101	De título sup o igual a 714.29 dtx	15
52052201	De título 232.56 a 714.29 dtx	15
52052301	De título 192.31 a 232.56 dtx	15
52052401	De título 125 a 192.31 dtx	15
52052501	De título inferior a 125 dtx	15
HILAD RETOR O CAB DE FIBRAS S/PEINAR 85%		
52053101	De título sup o igual a 714.29 dtx	15
52053201	De título 232.56 a 714.29 dtx	15
52053301	De título 192.31 a 232.56 dtx	15
52053401	De título 125 a 192.31 dtx	15
52053501	De título inferior a 125 dtx	15
HILAD RETOR O CAB DE FIBRAS PEINADAS 85%		
52054101	De título sup o igual a 714.29 dtx	15
52054201	De título 232.56 a 714.29 dtx	15
52054301	De título 192.31 a 232.56 dtx	15
52054401	De título 125 a 192.31 dtx	15
52054501	De título inferior a 125 dtx	15
HILADOS DE FIBRAS SIN PEINAR		
52061101	De título sup o igual a 714.29 dtx	15
52061201	De título 232.56 a 714.29 dtx	15
52061301	De título 192.31 a 232.56 dtx	15
52061401	De título 125 a 192.31 dtx	15
52061501	De título inferior a 125 dtx	15
HILADOS DE FIBRAS PEINADAS		
52062101	De título sup o igual a 714.29 dtx	15
52062201	De título 232.56 a 714.29 dtx	15
52062301	De título 192.31 a 232.56 dtx	15
52062401	De título 125 a 192.31 dtx	15
52062501	De título inferior a 125 dtx	15
HILAD RETOR O CAB DE FIBRAS S/PEINAR		
52063101	De título sup o igual a 714.29 dtx	15
52063201	De título 232.56 a 714.29 dtx	15
52063301	De título 192.31 a 232.56 dtx	15
52063401	De título 125 a 192.31 dtx	15
52063501	De título inferior a 125 dtx	15
HILAD RETOR O CAB DE FIBRAS PEINADAS		
52064101	De título sup o igual a 714.29 dtx	15
52064201	De título 232.56 a 714.29 dtx	15
52064301	De título 192.31 a 232.56 dtx	15
52064401	De título 125 a 192.31 dtx	15
52064501	De título inferior a 125 dtx	15
HILADOS ACONDICIONADOS		
52071001	Con contenido sup o igual a 85%	15
52079000	Los demás	15
TEJIDOS C/CONT DE 85%, GRAMAJE DE 200 G/M2		
52081101	Crudos, ligamento tafetan, hasta 100g/m2	15
52081201	Crudos, ligamento tafetan, sup 100g/m2	15
52081301	Crudos, ligamento sarga, curso hasta 4	15
52081901	Los demás crudos	15
52082101	Blanq, ligamento tafetan, hasta 100g/m2	15
52082201	Blanq, ligamento tafetan, sup 100g/m2	15
52082301	Blanq, ligamento sarga, curso hasta 4	15
52082901	Los demás blanqueados	15
52083101	Terfidos, ligamento tafetan, hasta 100g/m2	15
52083201	Terfidos, ligamento tafetan, sup 100g/m2	15
52083301	Terfidos, ligamento sarga, curso hasta 4	15
52083901	Los demás terfidos	15
52084101	Hil color, ligamento tafetan, hasta 100g/m2	15
52084201	Hil color, ligamento tafetan, sup 100g/m2	15
52084301	Hil color, ligamento sarga, curso hasta 4	15

FRACCION ARANCELARIA		ARANCEL (%)
52084901	Los demas con hilados de distinto color	15
52085101	Estamp, ligamento tafetan, hasta 100g/m2	15
52085201	Estamp, ligamento tafetan, sup 100g/m2	15
52085301	Estamp, ligamento sarga, curo hasta 4	15
52085901	Los demas estampados	15
TEJIDOS C/CONT DE 85%, GRAMAJE SUP A 200 G/M2		
52091101	Crudos, ligamento tafetan	15
52091201	Crudos, ligamento sarga de curo hasta 4	15
52091901	Los demas crudos	15
52092101	Blanq, ligamento tafetan	15
52092201	Blanq, ligamento sarga de curo hasta 4	15
52092901	Los demas blanqueados	15
52093101	Teñidos, ligamento tafetan	15
52093201	Teñidos, ligamento sarga, curo hasta 4	15
52093901	Los demas teñidos	15
52094101	Hil color, ligamento tafetan	15
52094201	Hil color, de mezcla	15
52094301	Hil color, ligamento sarga, curo hasta 4	15
52094901	Los demas con hilados de colores	15
52095101	Estampados, ligamento tafetan	15
52095201	Estamp, ligamento sarga de curo hasta 4	15
52095901	Los demas estampados	15
TEJIDOS MEZCLADOS C/FAS, CONTENIDO ALG 85% EN PESO, GRAMAJE HASTA 200 G/M2		
52101101	Llao, 225 cm ancho, 100% rayon urdimbre	10
52101199	Los demas crudos	15
52101201	Crudos, ligamento sarga de curo hasta 4	15
52101901	Los demas crudos	15
52102101	Blanq, ligamento tafetan	15
52102201	Blanq, ligamento sarga de curo hasta 4	15
52102999	Los demas blanqueados	15
52103101	Teñidos, ligamento tafetan	15
52103201	Teñidos, ligamento sarga, curo hasta 4	15
52103999	Los demas teñidos	15
52104101	Hil color, ligamento tafetan	15
52104201	Hil color, ligamento sarga curo hasta 4	15
52104999	Los demas con hilados de colores	15
52105101	Estampados, ligamento tafetan	15
52105201	Estamp, ligamento sarga de curo hasta 4	15
52105901	Los demas estampados	15
TEJIDOS MEZCLADOS C/FAS, CONTENIDO ALG 85% EN PESO, GRAMAJE SUPERIOR A 200 G/M2		
52111101	Llao, 225 cm ancho, 100% rayon urdimbre	10
52111199	Los demas crudos	15
52111201	Crudos, ligamento sarga de curo hasta 4	15
52111901	Los demas crudos	15
52112101	Blanq, ligamento tafetan	15
52112201	Blanq, ligamento sarga de curo hasta 4	15
52112999	Los demas blanqueados	15
52113101	Teñidos, ligamento tafetan	15
52113201	Teñidos, ligamento sarga, curo hasta 4	15
52113901	Los demas teñidos	15
52114101	Hil color, ligamento tafetan	15
52114201	Hil color, de mezcla	15
52114399	Hil color, ligamento sarga curo hasta 4	15
52114901	Los demas con hilados de colores	15
52115101	Estampados, ligamento tafetan	15
52115201	Estamp, ligamento sarga de curo hasta 4	15
52115901	Los demas estampados	15

FRACCION ARANCELARIA	ARANCEL (%)
LOS DEMAS TEJIDOS DE ALGODON	
52121101 Crudos, gramaje hasta 200 g/m2	15
52121201 Blanqueados, gramaje hasta 200 g/m2	15
52121301 Teñidos, gramaje hasta 200 g/m2	15
52121401 Hilados color, gramaje hasta 200 g/m2	15
52121501 Estampados, gramaje hasta 200 g/m2	15
52122101 Crudos, gramaje sup 200 g/m2	15
52122201 Blanqueados, gramaje sup 200 g/m2	15
52122301 Teñidos, gramaje sup 200 g/m2	15
52122401 Hilados color, gramaje sup 200 g/m2	15
52122501 Estampados, gramaje sup 200 g/m2	15
LAS DEMAS FIBRAS TEXT VEG; HILADOS DE PAPEL Y TEJ DE HILADOS DE PAPEL	
53081001 Hilados de lino sencillos	15
53082001 Hilados de lino retorcidos o cableados	15
53071001 Hilados de yute sencillos de un cabo	10
53071099 Los demas hilados de yute sencillos	10
53072001 Hilados de yute retorcidos o cableados	10
53081001 Hilados de coco	10
53082001 Hilados de coco p/naves aereas	10
53082099 Los demas hilados de coco	10
53083001 Hilados de papel	10
53089001 Hilados de ramio	15
53089099 Los demas hilados	10
53091101 Tej de lino crudos o blanqueados 85%	15
53091099 Los demas tej lino crudos o blanq 85%	15
53092101 Tej de lino crudos o blanq inf 85%	15
53092999 Los demas	15
HILADOS DE FILAMENTOS	
54011001 De coeer sinteticos	15
54012001 De coeer artificiales	15
HILADOS ACONDICIONADOS	
54061001 Nylon	15
54061002 Aramidas	10
54061003 Polieeter	15
54061099 Los demas sinteticos	15
54062001 Artificiales	15
TEJIDOS DE FILAMENTOS SINTETICOS	
54071002 Para neves aereas	10
54071099 Los demas de alta tenacidad	15
54072001 De tiras de polipropileno e hilados	10
54072099 Los demas fabricados con tiras	15
54073001 Napes hil paralelos FAS, crudos o blanq	15
54073002 Para neves aereas	10
54073003 Redes o mallas de materias plasticas	10
54073099 Los demas	15
CONTENIDO NYLON IGUAL O SUP A 85% EN PESO	
54074101 Crudos o blanqueados	15
54074201 Teñidos	15
54074301 Golrados con hilados distintos colores	15
54074302 P/naves aereas c/hilados distintos color	10
54074304 Ancho 64-72 cm p/corbatas, c/hil color	15
54074399 Los demas con hilados de distinto color	15
54074401 Estampados	15
CONT POLIESTER TEXT IGUAL O SUP A 85% EN PESO	
54075101 Crudos o blanqueados	15
54075201 Teñidos	15
54075301 Golrados con hilados distintos colores	15
54075302 P/naves aereas c/hilados distintos color	10
54075303 Ancho 64-72 cm p/corbatas, c/hil color	15
54075399 Los demas con hilados de distinto color	15
54075401 Estampados	15

FRACCION ARANCELARIA	ARANCEL (%)
CONT POLIESTER IGUAL O SUP A 85% EN PESO	
54076001 Crudos o blanqueados	15
54076099 Los demas	15
CONT FILAM SINTETICO IGUAL O SUP A 85% EN PESO	
54077101 Crudos o blanqueados	15
54077201 Teñidos	15
54077301 Gofrados con hilados distintos colores	15
54077302 P/aves aereas c/hilados distintos color	10
54077303 De poliuretano, "elastico", entorchados	15
54077399 Los demas	15
54077401 Estampados	15
CONT FILAM SINTETICO INF O IGUAL A 85% EN PESO MEZCLADOS PRINCIPALMENTE CON ALGODON	
54078101 Crudos o blanqueados	15
54078201 Teñidos gofrados	15
54078202 Teñidos para naves aereas	10
54078203 De poliuretano, "elastico", entorchados	15
54078299 Los demas	15
54078301 Con hilados de distintos colores	15
54078401 Estampados	15
LOS DEMAS TEJIDOS SINT CRUDOS O BLANQUEADOS	
54079101 Asociados con hilos de caucho	15
54079102 Gofrados	15
54079103 De alcohol polivinilico	15
54079104 Para naves aereas	10
54079105 De poliuretano, "elastico", entorchados	15
54079106 Nylon, tram 40 dn y pie 70 dn	10
54079199 Los demas	15
LOS DEMAS TEJIDOS SINTETICOS TENIDOS	
54079201 Asociados con hilos de caucho	15
54079202 Gofrados	15
54079203 De alcohol polivinilico	15
54079204 Para naves aereas	10
54079206 De poliuretano, "elastico", entorchados	15
54079299 Los demas	15
LOS DEMAS TEJIDOS SINT C/HILADOS DISTINTO COLOR	
54079301 Asociados con hilos de caucho	15
54079302 Gofrados	15
54079303 De alcohol polivinilico	15
54079304 Para naves aereas	10
54079305 Ancho 64-72 cm para corbatas	15
54079306 De poliuretano, "elastico", entorchados	15
54079399 Los demas	15
LOS DEMAS TEJIDOS SINTETICOS ESTAMPADOS	
54079401 Asociados con hilos de caucho	15
54079402 Gofrados	15
54079403 De alcohol polivinilico	15
54079404 Para naves aereas	10
54079405 Ancho 64-72 cm para corbatas	15
54079406 De poliuretano, "elastico", entorchados	15
54079499 Los demas	15
TEJIDOS DE FILAMENTOS ARTIFICIALES ALTA TENACIDAD	
54081001 De rayon viscosa asociado c/hilos caucho	15
54081002 Crudos o blanqueados	15
54081003 Para naves aereas	10
54081099 Los demas	15

FRACCION ARANCELARIA	ARANCEL (%)
TEJIDOS CONT FILAM O TIRAS SUP O IGUAL 85% EN PESO CRUDOS O BLANQUEADOS	
54082101 Asociados con hilos caucho	15
54082102 Gofrados	15
54082103 Para naves aereas	10
54082199 Los demas	15
TENIDOS	
54082201 Asociados con hilos caucho	15
54082202 Gofrados	15
54082203 Para naves aereas	10
54082299 Los demas	15
CON HILADOS DE DISTINTOS COLORES	
54082301 Asociados con hilos caucho	15
54082302 Gofrados	15
54082303 Para naves aereas	10
54082304 Ancho 64-72 cm para corbatas	15
54082399 Los demas	15
54082401 Estampados	15
LOS DEMAS TEJIDOS ARTIFICIALES	
54083101 Crudos o blanq asociados c/hilos caucho	15
54083102 Crudos o blanqueados gofrados	15
54083103 Crudos o blanqueados p/naves aereas	10
54083199 Los demas crudos o blanqueados	15
54083201 Teñidos asociados c/hilos caucho	15
54083202 Teñidos gofrados	15
54083203 Teñidos para naves aereas	10
54083204 Teñidos redes o mallas	10
54083299 Los demas teñidos	15
54083301 De hilados color asociado c/hilos caucho	15
54083302 De hilados color gofrados	15
54083303 De hilados color p/naves aereas	10
54083399 Los demas de hilados de colores	15
54083401 Estampados asociados con hilos de caucho	15
54083402 Estampados gofrados	15
54083499 Los demas	15
55061001 FC nylon cardada	10
55062001 FC poliester cardada	10
55063001 FC acrílica o modacrílica cardada	10
55069099 Las demas FC cardadas o peinadas	10
55070001 FC artificiales cardadas o peinadas	10
55081001 Hilo de coser fibras sinteticas disc	10
55082001 Hilo de coser fibras artificiales disc	10
HILADOS SIN ACONDICIONAR	
55091101 Nylon 85% en peso sencillos	15
55091201 Nylon 85% en peso retorcidos o cableados	15
55092101 Poliester 85% en peso sencillos	15
55092201 Poliester 85% en peso retorcidos o cab	15
55093101 Acrílico 85% en peso sencillos	15
55093201 Acrílico 85% en peso retorcidos o cab	15
55094101 Fibras sint 85% en peso sencillos	15
55094201 Fibras sint 85% en peso retor o cab	15
55095101 Poliester mezclado c/FC artificiales	15
55095201 Poliester mezclado c/lana o pelo fino	15
55095301 Poliester mezclado c/algodon	15
55095901 Los demas poliester	15
55096101 Acrílica mezclado c/lana o pelo fino	15
55096201 Acrílica mezclado c/algodon	15
55096901 Los demas acrílica	15
55099101 Los demas mezclados c/lana o pelo fino	15
55099201 Los demas mezclados c/algodon	15
55099901 Los demas	15

FRACCION ARANCELARIA		ARANCEL (%)
55101101	Artificiales 85% en peso sencillos	15
55101201	Artificiales 85% en peso retor o cab	15
55102001	Los demas mezclados c/lana o pelo fino	15
55103001	Los demas mezclados c/algodon	15
55109001	Los demas	15
HILADOS ACONDICIONADOS		
55111001	Sinteticas contenido de 85% en peso	15
55112001	Sinteticas contenido inf 85% en peso	15
55113001	Artificiales	15
TEJIDOS DE FAS DISCONTINUAS		
TEJIDOS FIBRAS SINT DISC CONT IGUAL O SUP A 85%		
55121101	Poliester crudos o blanqueados	15
55121999	Los demas poliester	15
55122101	Acrlicas crudos o blanqueados	15
55122999	Los demas acrilicas	15
55129101	Demas fibras sinteticas crudos o blanq	15
55129999	Los demas fibras sinteticas	15
TEJIDOS FIBRAS SINT DISC CONT INF A 85% MEZCLADA CON ALGODON DE GRAMAJE INF O IGUAL A 170 G/M2		
55131101	Poliester lig tafetan crudos o blanq	15
55131201	Poliest zarga crudos o blanq curso inf 4	15
55131399	Los demas de poliester crudos o blanq	15
55131901	Los demas de fibras sint crudos o blanq	15
55132101	Poliester lig tafetan teñidos	15
55132201	Poliest zarga teñidos curso inf 4	15
55132301	Los demas de poliester teñidos	15
55132901	Los demas de fibras sint teñidos	15
55133101	Poliester lig tafetan con hil dist color	15
55133201	Poliest zarga hil dist color curso inf 4	15
55133399	Los demas de poliester hilad dist color	15
55133901	Los demas de fibras sint hil dist color	15
55134101	Poliester lig tafetan estampados	15
55134201	Poliest zarga estampados curso inf 4	15
55134301	Los demas de poliester estampados	15
55134901	Los demas de fibras sint estampados	15
TEJIDOS FIBRAS SINT DISC CONT INF A 85% MEZCLADA CON ALGODON DE GRAMAJE SUPERIOR A 170 G/M2		
55141101	Poliester lig tafetan crudos o blanq	15
55141201	Poliest zarga crudos o blanq curso inf 4	15
55141301	Los demas de poliester crudos o blanq	15
55141999	Los demas de fibras sint crudos o blanq	15
55142101	Poliester lig tafetan teñidos	15
55142201	Poliest zarga teñidos curso inf 4	15
55142301	Los demas de poliester teñidos	15
55142999	Los demas de fibras sint teñidos	15
55143101	Poliester lig tafetan con hil dist color	15
55143201	Poliest zarga hil dist color curso inf 4	15
55143399	Los demas de poliester hilad dist color	15
55143999	Los demas de fibras sint hil dist color	15
55144101	Poliester lig tafetan estampados	15
55144201	Poliest zarga estampados curso inf 4	15
55144301	Los demas de poliester estampados	15
55144999	Los demas de fibras sint estampados	15
LOS DEMAS DE FIBRAS SINTET DISCONTINUAS		
55151101	Poliester mezcl c/fibras disc viscose	15
55151201	Poliester mezcl c/filamentos sint o art	15
55151301	Poliester mezcl c/lana o pelo fino	15
55151901	Los demas de poliester	15
55152101	Acrlicas mezcl c/filamentos sint o art	15
55152201	Acrlicas mezcl c/lana o pelo fino	15
55152901	Los demas de acrilicas	15

FRACCION ARANCELARIA	ARANCEL (%)
55159101 Los demas mezcl c/filamentos sint o art	15
55159201 Los demas mezcl c/lana o pelo fino	15
55159999 Los demas de fibras sintet	15
TEJIDOS DE FIBRAS ARTIFICIALES DISCONT CONTENID INF O IGUAL A 85% EN PESO	
55161101 Crudos o blanqueados	15
55161201 Teñidos	15
55161301 Con hilados de distintos colores	15
55161401 Estampados	15
TEJIDOS DE FIBRAS ARTIFICIALES DISCONT CONTENID INF A 85% EN PESO, MEZC C/FIL SINT O ART	
55162101 Crudos o blanqueados	15
55162201 Teñidos	15
55162301 Con hilados de distintos colores	15
55162401 Estampados	15
TEJIDOS DE FIBRAS ARTIFICIALES DISCONT CONTENID INF A 85% EN PESO, MEZC C/LANA O PELO FINO	
55163101 Crudos o blanqueados	15
55163201 Teñidos	15
55163301 Con hilados de distintos colores	15
55163401 Estampados	15
TEJIDOS DE FIBRAS ARTIFICIALES DISCONT CONTENID INF A 85% EN PESO, MEZC C/ALGODON	
55164101 Crudos o blanqueados	15
55164201 Teñidos	15
55164301 Con hilados de distintos colores	15
55164401 Estampados	15
TEJIDOS DE FIBRAS ARTIFICIALES DISCONTINUAS	
55169101 Crudos o blanqueados	15
55169201 Teñidos	15
55169301 Con hilados de distintos colores	15
55169401 Estampados	15
GUATAS Y ARTS, TUNDIZNOS, NUDOS Y MOTAS	
56011001 Toallas, tapones, pañales y art sim	10
56012101 Guata de algodón	10
56012199 Los demas artículos de guata	10
56012201 Guata de fibra sintetica o artificial	10
56012299 Los demas artículos de FAS	20
56013001 Motas de seda, de acetato, rayon-viscosa	10
56013099 Tundiznos, nudos y motas de mat text	10
56021002 Filtros lana o fibras artif a/recubrir	15
56022001 Filtros de fibras artificiales a/rec	15
56030099 Las demas telas sin tejer	15
56081101 Redes con luz malla inf a 3.81 cm de FAS	20
56081102 Redes con luz malla sup a 3.81 cm de FAS	20
ALFOMBRAS Y REVESTIMIENTOS	
57019099 De nudo de materias textiles (FAS)	20
57023201 Aterciopelados de FAS a/confeccionar	20
57024201 S/aterciopelar de FAS confeccionados	20
57025201 Los demas de FAS a/confeccionar	20
57029201 Los demas de FAS confeccionados	20
57032001 Con pelo insertado de nylon	20
57033001 Con pelo insertado demas FAS	20
57041001 De superficie inf o igual a 0.3 m2	20
57049099 Los demas s/pelo insertado ni floccados	20
57050001 Demas alfombras y revestimientos	20

FRACCIÓN		ARANCEL
ARANCELARIA		(N)
TERCIOPELO Y FELPA TEJIDOS		
TEJIDOS DE CHENILLA		
58013101	Terciopelo y felpas por trama de FAS	15
58013201	Pana rayada de FAS	15
58013301	Los demas terciop y felpas trama de FAS	15
58013401	Terciopelo y felpa urdimbre FAS rizado	15
58013501	Terciopelo y felpa urdimbre FAS cortado	15
58013601	Tejidos de chenilla de FAS	15
58022001	Tejidos con bucles para toallas (FAS)	15
58039001	Tejidos gasa vuelta fibras sint crudos	15
58042101	Tul, tul-bobinet de FAS	20
58063201	Cintas FAS, con apariencia afeltrada	20
58063299	Las demas cintas de FAS	20
58071001	Tejidos de etiquetas	20
58071099	Los demas tejidos	20
58109201	Bordados FAS sobre tejidos seda	20
58109299	Los demas bordados de FAS	20
TEJIDOS IMPREGNADOS, RECUBIERTOS		
59039001	Cintas o tiras adhesivas	20
TEJIDOS DE PUNTO		
60011001	Tejidos de pelo largo	20
60011099	Los demas	20
60012101	Tejidos con bucles de algodón	20
60012201	Tejidos con bucles de FAS	20
60012901	Tejidos con bucles de seda	20
60012201	Tejidos con bucles de lana, pelo o crin	20
60012999	Los demas tejidos con bucles	20
60019101	Los demas de algodón	20
60019201	Los demas de FAS	20
60019901	Los demas de seda	20
60019902	Los demas de lana, pelo o crin	20
60019999	Los demas	20
DE ANCHURA INF O IGUAL A 30 CM, CON CONTENIDO DE ELASTOMEROS SUP O IGUAL A 85% EN PESO		
60021001	De seda	20
60021002	De FAS	20
60021003	De lana, pelo o crin	20
60021004	De algodón	20
60021099	Los demas	20
DE ANCHURA INFERIOR O IGUAL A 30 CM		
60022001	De seda	20
60022002	De FAS	20
60022003	De lana, pelo o crin	20
60022004	De algodón	20
60022099	Los demas	20
DE ANCHURA SUPERIOR A 30 CM, CON CONTENIDO DE ELASTOMEROS SUP O IGUAL A 85% EN PESO		
60023001	De seda	20
60023002	De FAS	20
60023003	De lana, pelo o crin	20
60023004	De algodón	20
60023099	Los demas	20
DE PUNTO POR URDIMBRE		
60024101	De lana o pelo fino	20
60024201	De algodón	20
60024301	De FAS	20
60024901	De pelo o crin	20
60024999	Los demas	20
60029101	LOS DEMAS	20
60029101	De lana o pelo fino	20
60029201	De algodón	20

FRACCION	ARANCEL
ARANCELARIA	(%)
60029301 De FAS	20
60029901 De pelo o crin	20
60029999 Las demas	20
PRENDAS DE VESTIR DE PUNTO ABRIGOS, CHAQUETONES, ANORAKS, CAZADORAS Y ART SIMILARES P/HOMBRES Y NIÑOS	
61011001 De lana o pelo fino	20
61012001 De algodón	20
61013001 De FAS	20
61019099 Las demas materias textiles	20
ABRIGOS, CHAQUETONES, ANORAKS, CAZADORAS Y ART SIMILARES P/MUJERES O NIÑAS	
61021001 De lana o pelo fino	20
61022001 De algodón	20
61023001 De FAS	20
61029099 Las demas materias textiles	20
TRAJES, CONJUNTOS, SACOS, PANTALONES PARA HOMBRE Y NIÑO	
61031101 Trajes de lana o pelo fino	20
61031201 Trajes de fibras sinteticas	20
61031999 Trajes de las demas materias textiles	20
61032101 Conjuntos de lana o pelo fino	20
61032201 Conjuntos de algodón	20
61032301 Conjuntos de fibras sinteticas	20
61032999 Conjuntos de las demas materias textiles	20
61033101 Sacos de lana o pelo fino	20
61033201 Sacos de algodón	20
61033301 Sacos de fibras sinteticas	20
61033999 Sacos de las demas materias textiles	20
61034101 Pantalones de lana o pelo fino	20
61034201 Pantalones de algodón	20
61034301 Pantalones de fibras sinteticas	20
61034999 Pantalones de las demas materias text	20
TRAJES-SASTRE, CONJ, SACOS, VESTIDOS, FALDAS FALDAS-PANTALON, PANTALONES P/MUJER Y NIÑA	
61041101 Trajes-sastre de lana o pelo fino	20
61041201 Trajes-sastre de algodón	20
61041301 Trajes-sastre de fibras sinteticas	20
61041999 Trajes-sastre de las demas materias text	20
61042101 Conjuntos de lana o pelo fino	20
61042201 Conjuntos de algodón	20
61042301 Conjuntos de fibras sinteticas	20
61042999 Conjuntos de las demas materias textiles	20
61043101 Sacos de lana o pelo fino	20
61043201 Sacos de algodón	20
61043301 Sacos de fibras sinteticas	20
61043999 Sacos de las demas materias textiles	20
61044101 Vestidos de lana o pelo fino	20
61044201 Vestidos de algodón	20
61044301 Vestidos de fibras sinteticas	20
61044401 Vestidos de fibras artificiales	20
61044999 Vestidos de las demas materias textiles	20
61045101 Faldas, falda-pantalón lana o pelo fino	20
61045201 Faldas, falda-pantalón algodón	20
61045301 Faldas, falda-pantalón fibras sinteticas	20
61045999 Faldas, falda-pantalón demas mat textil	20
61046101 Pantalones de lana o pelo fino	20
61046201 Pantalones de algodón	20
61046301 Pantalón de fibras sinteticas	20
61046999 Pantalones de las demas materias textil	20

FRACCION ARANCELARIA	ARANCEL (%)
CAMISAS PARA HOMBRE Y NIÑO	
61051001 Camisas de algodón	20
61052001 Camisas fibras sintéticas o artificiales	20
61059099 Camisas de las demás materias textiles	20
CAMISAS Y BLUSAS PARA MUJER Y NIÑA	
61061001 Camisas y blusas de algodón	20
61062001 Camisas y blusas de fibras sint o artif	20
61069099 Camisas y blusas demás materias textiles	20
CALZONCILLOS, CAMISIONES, PIJAMAS, ALBORNOCES, BATAS Y ART SIMILARES PARA HOMBRE Y NIÑO	
61071101 Calzoncillos de algodón	20
61071201 Calzoncillos de fibras sint o artif	20
61071999 Calzoncillos demás materias textiles	20
61072101 Camisones y pijamas de algodón	20
61072201 Camisones y pijamas de FAS	20
61072999 Camisones y pijamas demás materias text	20
61079101 Los demás de algodón	20
61079201 Los demás de fibras sintéticas o artif	20
61079999 Los demás de las demás materias text	20
COMBINACIONES, ENAGUAS, BRAGAS, CAMISIONES, SALTOS DE CAMA, ALBORNOCES, BATAS P/MUJER Y NIÑA	
61081101 Combinaciones y enaguas de FAS	20
61081999 Combinaciones y enaguas demás mat textil	20
61082101 Bragas de algodón	20
61082201 Bragas fibras sintéticas o artificiales	20
61082999 Bragas de las demás materias textiles	20
61083101 Camisones y pijamas de algodón	20
61083201 Camisones y pijamas de FAS	20
61083999 Camisones y pijamas las demás mat text	20
61089101 Los demás de algodón	20
61089201 Los demás fibras sintéticas o artificial	20
61089999 Los demás de las demás materias textiles	20
61091001 Camisetas de algodón	20
61099099 Camisetas de las demás materias textiles	20
SUETERES, JERSEIS, CHALECOS Y ART SIMILARES	
61101001 De lana o pelo fino	20
61102001 De algodón	20
61103001 De fibras sintéticas	20
61109099 De las demás materias textiles	20
PRENDAS Y COMPLEMENTOS DE VESTIR PARA BEBES	
61111001 De lana o pelo fino	20
61112001 De algodón	20
61113001 De fibras sintéticas	20
61119099 De las demás materias textiles	20
PRENDAS DE DEPORTE, OVEROLES, CONJ ESQUI, TRAJES Y PANTALONES PARA BAÑO	
61121101 Prendas de deporte de algodón	20
61121201 Prendas de deporte de fibras sintéticas	20
61121999 Prendas de deporte demás mat textiles	20
61122001 Overoles y conjuntos de esquí	20
61123101 Trajes y pant baño fibras sint p/m y n	20
61123999 Trajes y pant baño demás mat text p/m y n	20
61124101 Trajes y pant baño fibras sint p/m y n	20
61124999 Trajes y pant baño demás mat text p/m y n	20
OTRAS PRENDAS DE VESTIR	
61130001 Prendas confeccionadas c/tej Part	20
61130999 Prendas confeccionadas c/tej Part	20
61141001 Demás prendas de vestir lana o pelo fino	20
61142001 Demás prendas de vestir de algodón	20
61143001 Demás prendas de vestir de FAS	20
61149099 Demás prendas de vestir demás mat textil	20

FRACCION ARANCELARIA	ARANCEL (%)
PANTY-MEDIAS, MEDIAS, CALCETINES Y ART SIMIL	
61151101 Pantimedias de fibras sint lnt a 67 dtex	20
61151201 Pantimedias de fibras sint 67 dtex o eup	20
61151999 Pantimedias demas materias textiles	20
61152001 Medias mujer inferior a 67 dtex	20
61159101 Los demas de lana o pelo fino	20
61159201 Los demas de algodn	20
61159301 Los demas de fibras sinteticas	20
61159999 Los demas de las demas materias text	20
GUANTES Y ARTICULOS SIMILARES	
61161001 Guantes impregnados de caucho	20
61169101 Los demas de lana o pelo fino	20
61169201 Los demas de algodn	20
61169301 Los demas de fibras sinteticas	20
61169999 Los demas de las demas materias textiles	20
61171001 Chal, bufanada, pasamontaa, mantilla	20
61172001 Corbatas y lazos similares	20
61179099 Los demas complementos de vestir	20
61179999 Partes de prendas	20
PRENDAS Y COMPLEMENTOS DE VESTIR ABRIGOS, CHAQUETONES, CAPAS, ANORAKS, CAZADORAS Y ART SIMILARES P/HOMBRE Y NIÑO ABRIGOS, IMPERM, CHAQUETONES, CAPAS Y ART	
62011101 De lana o pelo fino	20
62011201 De algodn	20
62011301 De FAS	20
62011999 De las demas materias textiles	20
62019101 Los demas de lana o pelo fino	20
62019201 Los demas de algodn	20
62019301 Los demas fibra sintetica o artificial	20
62019999 Los demas de las demas materias textiles	20
ABRIGOS, CHAQUETONES, CAPAS, ANORAKS, CAZADORAS Y ART SIMILARES P/MUJER Y NIÑA ABRIGOS, IMPERM, CHAQUETONES, CAPAS Y ART	
62021101 De lana o pelo fino	20
62021201 De algodn	20
62021301 De FAS	20
62021901 De las demas materias textiles	20
62029101 Los demas de lana o pelo fino	20
62029201 Los demas de algodn	20
62029301 Los demas fibra sintetica o artificial	20
62029901 Los demas de las demas materias textiles	20
TRAJES, CONJ, SACOS, PANTALONES P/HOMBRE Y NIÑO	
62031101 Trajes de lana o pelo fino	20
62031201 Trajes de fibras sinteticas	20
62031301 Trajes de las demas materias textiles	20
62032101 Conjuntos de lana o pelo fino	20
62032201 Conjuntos de algodn	20
62032301 Conjuntos de fibras sinteticas	20
62032901 Conjuntos de las demas materias textiles	20
62033101 Sacos de lana o pelo fino	20
62033201 Sacos de algodn	20
62033301 Sacos de fibras sinteticas	20
62033901 Sacos de las demas materias textiles	20
62034101 Pantalones de lana o pelo fino	20
62034201 Pantalones de algodn	20
62034301 Pantalones de fibras sinteticas	20
62034901 Pantalones de las demas materias text	20

FRACCION ARANCELARIA	ARANCEL (%)
PRENDAS Y COMPLEMENTOS DE VESTIR PARA BEBES	
62091001 De lana o pelo fino	20
62092001 De algodón	20
62093001 De fibras sintéticas	20
62099001 De las demás materias textiles	20
PRENDAS CONFECCIONADAS CON PROD DE LAS PARTIDAS 5002, 5003, 5903, 5906 O 5907	
62101001 Con productos de partidas 5002 o 5003	20
62102099 Demas prendas partida 6201.11 a 6201.19	20
62103099 Demas prendas partida 6202.11 a 6202.19	20
62104001 Las demas prendas para hombre o niño	20
62105099 Las demas prendas para mujer o niña	20
PRENDAS DE DEPORTE, OVEROLES, CONJ ESQUI, TRAJES Y PANTALONES PARA BAÑO	
62111101 Trajes y pant baño p/hombre y niño	20
62111201 Trajes y pant baño p/mujer y niña	20
62112001 Overoles y conjuntos de esquí	20
LAS DEMAS PRENDAS PARA HOMBRE O NIÑO	
62113101 De lana o pelo fino	20
62113201 De algodón	20
62113301 De fibras sintéticas o artificiales	20
62113999 De las demás materias textiles	20
LAS DEMAS PRENDAS PARA MUJER O NIÑA	
62114101 De lana o pelo fino	20
62114201 De algodón	20
62114301 De fibras sintéticas o artificiales	20
62114999 De las demás materias textiles	20
SOSTENES, FAJAS, CORSES, TIRANTES, LIGAS Y ART	
62121001 Sostenes	20
62122001 Fajas y fajas-braga	20
62123001 Faja-sosten	20
62129001 Copas de tejidos de fibras artificiales	20
62129099 Los demás	20
PAÑUELOS	
62131001 De seda o de desperdicios de seda	20
62132001 De algodón	20
62139099 De las demás materias textiles	20
CHALES, PAÑUELOS, PASAMONTAÑAS, BUFANDAS, MANTILLAS	
62141001 De seda o de desperdicios de seda	20
62142001 De lana o pelo fino	20
62143001 De fibras sintéticas	20
62144001 De fibras artificiales	20
62149099 De las demás materias textiles	20
62151001 Corbatas de seda o desperdicios de seda	20
62152001 Corbatas de FAS	20
62159099 Corbatas de las demás materias textiles	20
62160001 Guantes y similares	20
62171001 Complementos de vestir	20
62179099 Partes	20
LOS DEMAS ARTICULOS TEXTILES CONF., CONJUNTOS O SURTIDOS; PRENDERIA O TPAPOS LOS DEMAS ARTICULOS CONFECCIONADOS	
63011001 Mantas eléctricas	20
63012001 Mantas de lana o pelo fino	20
63013001 Mantas de algodón	20
63014001 Mantas de fibras sintéticas	20
63019099 Las demás mantas	20
63021001 Ropa de cama, de punto	20
63022101 Ropa de cama estampada de algodón	20
63022201 Ropa de cama estampada de FAS	20
63022999 Ropa de cama estampada demás mat textil	20

FRACCION	ARANCEL
ARANCELARIA	(%)
TRAJES-SASTRE, CONJ, SACOS, VESTIDOS, FALDAS FALDAS-PANTALON, PANTALONES P/ MUJER Y NIÑA	
62041101 Trajes-sastre de lana o pelo fino	20
62041201 Trajes-sastre de algodón	20
62041301 Trajes-sastre de fibras sintéticas	20
62041901 Trajes-sastre de las demás materias text	20
62042101 Conjuntos de lana o pelo fino	20
62042201 Conjuntos de algodón	20
62042301 Conjuntos de fibras sintéticas	20
62042901 Conjuntos de las demás materias textiles	20
62043101 Sacos de lana o pelo fino	20
62043201 Sacos de algodón	20
62043301 Sacos de fibras sintéticas	20
62043901 Sacos de las demás materias textiles	20
62044101 Vestidos de lana o pelo fino	20
62044201 Vestidos de algodón	20
62044301 Vestidos de fibras sintéticas	20
62044401 Vestidos de fibras artificiales	20
62044901 Vestidos de las demás materias textiles	20
62045101 Faldas, falda-pantalón lana o pelo fino	20
62045201 Faldas, falda-pantalón algodón	20
62045301 Faldas, falda-pantalón fibras sintéticas	20
62045901 Faldas, falda-pantalón demás mat textil	20
62046101 Pantalones de lana o pelo fino	20
62046201 Pantalones de algodón	20
62046301 Pantalón de fibras sintéticas	20
62046901 Pantalones de las demás materias textil	20
CAMISAS PARA HOMBRE Y NIÑO	
62051001 Camisas de lana o pelo fino	20
62052001 Camisas de algodón	20
62053001 Camisas fibras sintéticas o artificiales	20
62059009 Camisas de las demás materias textiles	20
CAMISAS Y BLUSAS PARA MUJER Y NIÑA	
62061001 De seda o de desperdicios de seda	20
62062001 Camisas de lana o pelo fino	20
62063001 Camisas de algodón	20
62064001 Camisas fibras sintéticas o artificiales	20
62069009 Camisas de las demás materias textiles	20
CAMISETAS, CALZONCILLOS, CAMISIONES, PIJAMAS, ALOBORNOCES BATAS Y ART SIM P/ HOMBRE Y NIÑO	
62071101 Calzoncillos de algodón	20
62071901 Calzoncillos demás materias textiles	20
62072101 Camisones y pijamas de algodón	20
62072201 Camisones y pijamas de FAS	20
62072909 Camisones y pijamas demás materias text	20
62079101 Los demás de algodón	20
62079201 Los demás de fibras sintéticas o artf	20
62079909 Los demás de las demás materias text	20
CAMISETAS, COMBINACIONES, ENAGUAS, BRAGAS, CAMISIONES, PIJAMAS, SALTOS DE CAMA, BATAS, PARA MUJER Y NIÑA	
62081101 Combinaciones y enaguas de FAS	20
62081901 Combinaciones y enaguas demás mat textil	20
62082101 Camisones y pijamas de algodón	20
62082201 Camisones y pijamas de FAS	20
62082901 Camisones y pijamas las demás mat text	20
62089101 Los demás de algodón	20
62089201 Los demás fibras sintéticas o artificial	20
62089901 Los demás de las demás materias textiles	20

APPENDIX D

PRINCIPAL PRODUCTS OF MEXICO'S CHEMICAL-FIBRE INDUSTRY

<i>In Rayon:</i>	filament for textiles staple filament for industrial use
<i>In Acetate:</i>	filament for textiles staple and tow
<i>In Nylon:</i>	filament for textiles nylon staple filament for industrial use
<i>In Polyester:</i>	filament for textiles staple filament for industrial use
<i>In Polypropylene:</i>	filament and staple
<i>In Acrylic:</i>	staple

APPENDIX E

MAJOR MEXICAN CHEMICAL FIBRE PRODUCERS

1. Akra
2. Celanese Mexicana, S.A.
3. Celulosa Derivados, S.A.
4. Fibras Sinteticas, S.A.
5. Finacril, SA.
6. Industrial Polifil, S.A. de C.V.
7. Inpctmex, S.A.
8. Kimex, S.A.

APPENDIX F

PLANT OWNERSHIP AND LOCATION, CHEMICAL FIBRE PRODUCERS

Plant Location	Filament Nylon Yarn (Textiles)	Nylon Staple	Filament Nylon Yarn (Industrial)	Filament Polyester Yarn (Textiles)	Polyester Staple	Filament Polyester Yarn (Industrial)	Polypropylene Filament (Textiles)	Polypropylene Staple	Filament Rayon Yarn (Textiles)	Filament Rayon Yarn (Industrial)	Filament Acetate Yarn (Textiles)	Acetate Staple and Tow	Filament Yarn
Celanese Mexicana, S.A. Toluca, Edo. de México		*	*		*	*							
Celanese Mexicana, S.A. Ocotlán, Jal	*	*		*							*	*	
Celanese Mexicana, S.A. Querétaro, Oro			*	*	*								
Celulosa y Derivados, S.A. Monterrey, N. L.									*	*			
Celulosa y Derivados, S.A. El Salto, Jal													
Fibras Químicas, S.A. Monterrey, N.L.	*		*	*		*							
Fibras Sintéticas, S.A. México, D.F.	*			*	*								
Fibras Sintéticas, S.A. Cotaxtla, Tlax				*									
Inpetmex, S.A. El Salto, Jal				*									
Industrias Polifil, S.A. Tlaxcala, Tlax							*	*					
Kimex, S.A. Edo de México	*			*	*								
Nylon de México, S.A. Monterrey, N.L.	*	*		*	*								*
Finacril, S.A. Akamira, Tamps													

Source: ANIQ

APPENDIX G

PRODUCTION (1984-1989, TONNES)

	1984	1985	1986	1987	1988	1989	Growth 84-89	AAG 84-89
Rayon								
Filament (textiles)	3,099	3,074	3,138	3,349	3,500	3,610	16%	3.1%
Staple	0	0	0	0	0	0	0%	
Filament (industrial)	2,336	2,344	2,093	2,392	2,484	2,283	-2%	-0.1%
Acetate								
Filament (textiles)	5,828	7,028	6,834	5,903	6,170	6,458	11%	2.7%
Staple and Tow	6,133	7,506	6,645	8,325	9,102	10,896	78%	13.0%
Nylon								
Filament (textiles)	28,157	20,445	25,615	26,606	20,627	28,470	1%	3.5%
Staple	4,672	3,731	5,171	4,424	1,471	794	-83%	-21.8%
Filament (industrial)	20,091	21,777	19,598	21,572	23,365	21,410	7%	1.7%
Polyester								
Filament (textiles)	93,821	98,401	84,122	92,510	95,278	92,420	-1%	0.1%
Staple	71,733	75,491	73,549	95,735	100,165	99,104	38%	7.3%
Filament (industrial)	2,610	3,502	4,762	4,381	6,477	7,399	183%	24.8%
Polypropylene								
Filament and Staple	7,900	8,801	7,903	8,993	7,104	9,722	23%	6.2%
Acrylic								
Staple	74,380	82,896	96,424	107,662	112,246	107,935	45%	8.0%
TOTAL	320,760	334,996	335,854	381,852	387,989	390,501	22%	4.1%

Source: Anuario Estadístico Química Mexicana Edición 1990

APPENDIX H

APPARENT CONSUMPTION (1984-1989, TONNES)

	1984	1985	1986	1987	1988	1989	Growth 84-89	AAG 84-89
Rayon								
Filament (textiles)	1,932	2,310	2,296	2,398	2,318	2,049	6%	1.7%
Staple	4,603	7,280	4,902	5,346	9,195	8,254	0%	0.0%
Filament (industrial)	2,253	2,411	2,169	2,364	2,173	2,120	-6%	-0.9%
Acetate								
Filament (textiles)	5,803	7,012	6,564	5,617	5,425	6,122	5%	1.9%
Staple and Tow	4,926	5,590	4,277	3,937	4,023	4,781	-3%	0.6%
Nylon								
Filament (textiles)	25,293	28,801	23,283	23,867	17,029	25,796	2%	4.0%
Staple	3,046	3,417	2,307	2,405	2,603	1,951	-36%	-6.6%
Filament (industrial)	18,675	21,173	15,286	15,777	17,608	16,980	-9%	-0.6%
Polyester								
Filament (textiles)	70,794	80,497	59,458	66,505	72,933	71,947	2%	1.5%
Staple	55,955	68,675	66,043	83,945	93,580	91,251	63%	11.0%
Filament (industrial)	2,328	3,348	3,438	2,973	4,731	4,744	104%	18.5%
Polypropylene								
Filament and Staple	4,307	5,547	6,948	7,411	6,849	8,958	108%	16.8%
Acrylic								
Staple	61,128	75,285	68,971	77,241	85,962	89,001	46%	8.3%
TOTAL	261,043	311,346	265,942	299,786	324,429	333,954	28%	5.7%

Source: Anuario Estadístico Química Mexicana Edición 1990

APPENDIX I

CHEMICAL FIBRE INDUSTRY EMPLOYMENT 1986-89

	1986	1987	1988	1989	(%)
1. technical personnel	1,281	1,270	1,308	1,360	6%
2. office/administrative	3,372	3,293	3,393	3,496	4%
3. other employees	13,334	14,012	14,326	14,570	9%
TOTAL	17,987	18,575	19,027	19,426	8%

APPENDIX J

INSTALLED CAPACITY (1984-1989, TONNES)

	1984	1985	1986	1987	1988	1989	Growth 84-89	AAG 84-89
Rayon								
Filament (textiles)	3,000	3,390	3,390	3,390	3,390	3,800	27%	5.0%
Staple	0	0	0	0	0	0	0%	
Filament (industrial)	2,700	2,600	2,600	2,600	2,600	2,550	-6%	-1.1%
Acetate								
Filament (textiles)	9,100	9,100	9,100	9,100	9,100	6,600	-27%	-5.5%
Staple and Tow	9,600	9,600	9,600	9,600	9,600	9,600	0%	0.0%
Nylon								
Filament (textiles)	41,828	42,000	42,000	42,000	42,000	42,000	0%	0.1%
Staple	5,500	5,500	5,500	5,500	7,000	7,000	27%	5.5%
Filament (industrial)	21,700	21,700	23,900	25,000	25,000	25,000	15%	2.9%
Polyester								
Filament (textiles)	129,000	129,000	133,000	133,000	133,000	133,000	3%	0.6%
Staple	82,800	82,800	82,800	106,800	106,800	106,800	29%	5.8%
Filament (industrial)	5,000	5,000	7,700	7,700	7,700	7,700	54%	10.8%
Polypropylene								
Filament and Staple	14,000	14,000	14,000	14,000	14,000	15,882	13%	2.7%
Acrylic								
Staple	91,600	135,600	125,000	128,000	128,000	128,000	40%	8.5%
TOTAL	415,828	460,290	458,590	486,690	488,190	487,932	17%	3.3%

Source: Anuario Estadístico de la Industria Química Mexicana Edición 1990

APPENDIX K

CAPACITY UTILIZATION RATES

	MEXICO					U.S.		
	1981	1983	1985	1986		1981	1983	1985
Polyester								
Filament (textiles)	61	63	76	72		85	91	94
Filament (industrial)	55	48	70	65		98	88	78
Staple	75	84	91	87		83	81	72
Acrylic	69	77	71	78		83	81	95
Nylon								
Filament (textiles)	76	67	68			83	84	76
Filament (industrial)	76	72	100	68	*	80	71	79
Staple	87	82	68			74	91	78
TOTAL	69	60	63			65	65	71

*includes all nylon

Source: Estudio para el Gobierno de Mexico por Boston Consulting Group y Bufete Industrial, 1988

APPENDIX L
RELATIVE PRICES (MEXICO/US)

	1981	1986
Polyester 1.5 den	1.50	1.11
Acrylic 3 den	1.35	0.99
Nylon 18 den	1.32	1.15
Nylon 40 den	1.06	0.94
PES POY 255	1.46	1.39
PES TEX 75	1.26	1.07
PES TEX 170	1.27	1.00

*Source: Estudio para el Gobierno de Mexico por
Boston Consulting Group y Bufete Industrial,
1988*

APPENDIX M

MEXICAN CHEMICAL FIBRE EXPORTS (1984-1989, TONNES)

	1984	1985	1986	1987	1988	1989	Growth 84-89	AAG 84-89
Rayon								
Filament (textiles)	14	22	42	31	189	129	821%	120.0%
Staple	4,603	7,280	4,902	5,346	9,195	8,254	79%	19.3%
Filament (industrial)	0	67	158	86	132	339		60.1%
Acetate								
Filament (textiles)	0	0	0	0	12	35		
Staple and Tow	1	4	3	1	65	0	-100%	1301.7%
Nylon								
Filament (textiles)	230	464	703	626	685	3,418	1386%	110.1%
Staple	303	364	287	450	1,132	1,157	282%	41.9%
Filament (industrial)	37	1,259	300	253	252	291	686%	645.2%
Polyester								
Filament (textiles)	474	532	487	674	1,531	1,093	131%	28.1%
Staple	97	658	3,065	1,502	5,971	3,968	3991%	231.4%
Filament (industrial)	4	60	70	59	318	247	6075%	363.5%
Polypropylene								
Filament and Staple	181	1,255	3,654	3,634	2,262	2,089	1054%	147.7%
Acrylic								
Staple	56	237	77	684	985	3,424	6014%	267.1%
TOTAL	6,000	12,202	13,748	13,346	22,729	24,444	307%	38.2%

Source: Anuario Estadístico Química Mexicana Edición 1990

APPENDIX M

MEXICAN CHEMICAL FIBRE EXPORTS (1984-1989, TONNES)

	1984	1985	1986	1987	1988	1989	Growth 84-89	AAG 84-89
Rayon								
Filament (textiles)	1,181	786	884	982	1,371	1,690	43%	10.6%
Staple	0	0	0	0	0	0	0%	0.0%
Filament (industrial)	83	0	82	114	443	502	505%	
Acetate								
Filament (textiles)	25	16	270	286	757	371	1384%	334.2%
Staple and Tow	1,208	1,920	2,371	4,309	5,144	6,115	406%	40.5%
Nylon								
Filament (textiles)	3,094	100	3,035	3,365	4,283	6,092	97%	583.7%
Staple	1,929	678	3,151	2,469	0	0	-100%	
Filament (industrial)	1,453	1,683	4,612	6,048	6,009	4,721	225%	39.8%
Polyester								
Filament (textiles)	23,501	18,436	25,151	26,670	23,876	21,566	-8%	0.2%
Staple	15,875	7,474	10,571	13,291	12,556	11,821	-26%	0.6%
Filament (industrial)	286	214	1,394	1,917	2,064	2,902	915%	122.4%
Polypropylene								
Filament and Staple	3,774	4,509	4,609	5,216	2,517	2,853	-24%	-0.7%
Acrylic								
Staple	13,308	7,848	27,530	31,105	27,269	22,358	68%	38.5%
TOTAL	65,717	43,664	83,660	95,772	86,289	80,991	23%	11.3%

Source: Anuario Estadístico Química Mexicana Edición 1990

APPENDIX N

LOCATION OF TEXTILE PRODUCTION IN MEXICO, by State (1990, units)

	Spindles	Rotors	Textur- izing	Flat	Recti- linear	Full Fashion	Large Diametre	Small Diametre	Socks	Hose	Raschel	Tricot	Trenzado	Cintas	Tufting
Aguascalientes	74,728	100		339	394	2	36	7	10		7		74	54	
Baja California	11,044	400								90					
Chiapas	7,200			168											
Chihuahua	54,772	400		152											
Coahuila	69,652	6,560		1,152											
Durango	6,176			37											7
Federal District	458,372	436	535	7,691	2,180	103	2,336	560	3,189	1,227	276	205	7,589	2,448	4
Guanajuato	222,490		12	1,456	73		99	9	24	296	8	31	8	12	1
Hidalgo	138,450	5,224	92	2,796	292	11	245	30	1,964	907	96	241	947	130	
Jalisco	597,276	2,608	285	9,477	622	34	2,234	193	553	1,916	676	516	1,362	960	81
Michoacan	2,582			181	37								36	3	
Morelos	51,604			933	2				2				1	1	13
Nuevo Leon	92,928	800		1,228	45	4	80	38	30				97	38	5
Oaxaca	7,880														
Puebla	1,251,128	25,678	10	10,706	196	4	184	254	2,412		15	28	105	117	2
Queretaro	75,048	1,200	10	1,263			44		210				171		
San Luis Potosi	53,991			674			11				18	18	3,073	4	
Sinaloa					8										
Sonora	9,072														
State of Mexico	77,008	600		1,106	552	1	31	5	128				1,745	35	
Tlaxcala	142,930			2,703	30		12		10		19	28	290	14	
Veracruz	144,185	1,512		2,791	12								39		
Yucatan	2,100	200		4	2		3	6						1	
Zacatecas					14		1								
TOTAL	3,550,616	45,718	944	44,857	4,459	150	5,316	1,102	8,532	4,436	1,115	1,067	15,537	3,817	113

Source: Camara Nacional de la Industria Textil, 1991

APPENDIX O

MEXICAN TEXTILE PRODUCTION (1985-88, millions 1980 C\$)

	1985	1986	1987	1988	Growth 85-88
Total	3,045	2,922	2,898	2,965	-3%
Yarn and Fabric (Soft Fibres)	2,081	1,940	1,970	2,000	-4%
Yarn and Fabric (Hard Fibres)	229	262	248	242	6%
Other Textile Products	736	721	698	723	-2%

Source: Camara Nacional de la Industria Textil, 1991

APPENDIX P



Source: Camara Nacional de la Industria Textil

APPENDIX Q

MEXICAN IMPORTS OF TEXTILE MACHINERY AND PARTS (1984-1989, US\$M)

	1984	1985	1986	1987	1988	1989
TOTAL	67,560	122,947	126,223	90,249	258,145	239,864
Machinery & Equipment	54,643	99,215	99,799	65,726	220,449	202,628
Parts & Components	12,917	23,732	26,424	24,523 ^c	37,696	37,236

Source: Camara Nacional de la Industria Textil, 1991

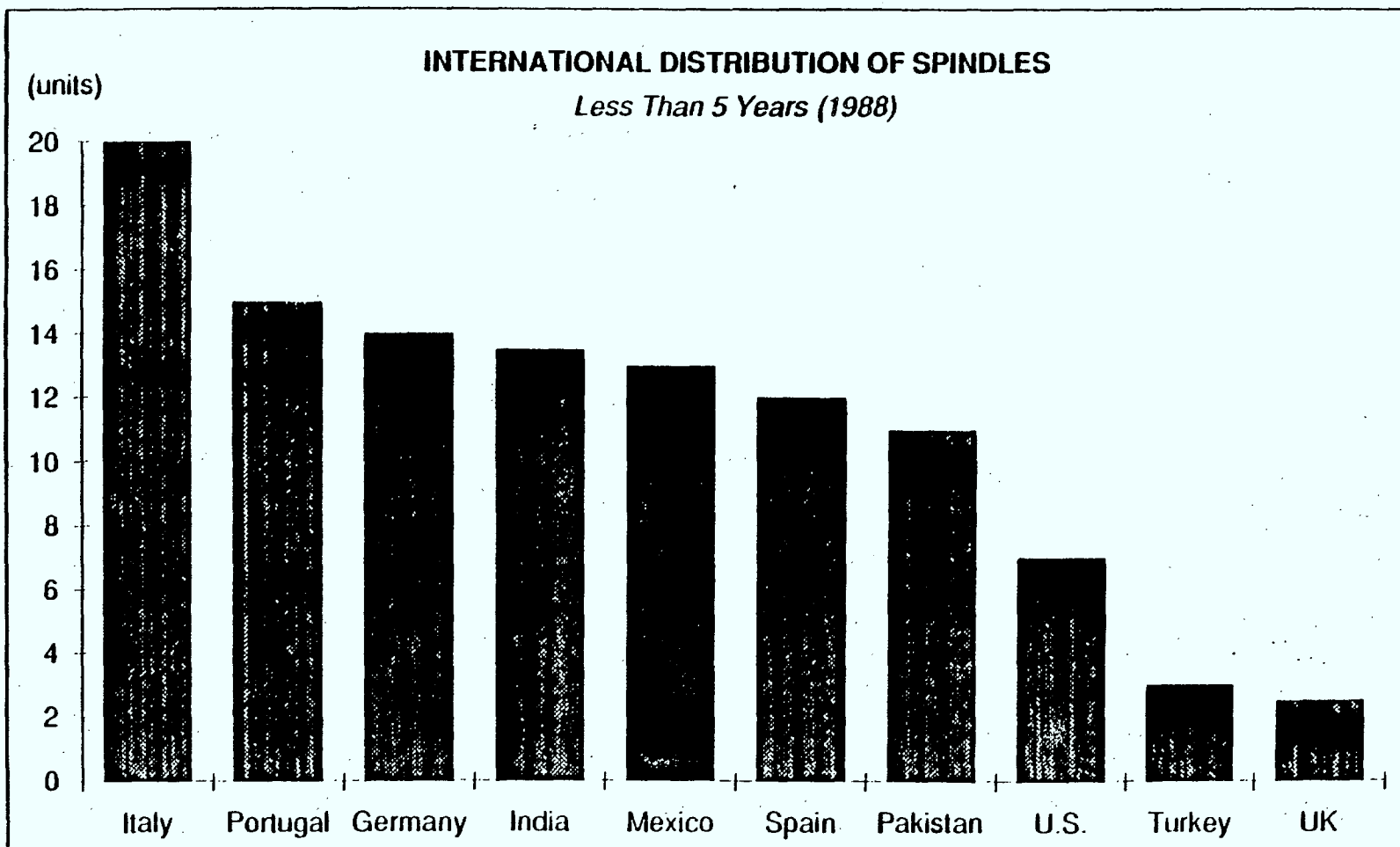
APPENDIX R

MEXICAN IMPORTS OF TEXTILE MACHINERY, by type (1980-1989) US\$M)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total	288,142	340,561	209,524	22,392	54,643	99,216	99,799	65,726	220,449	202,628
Preparatory Machinery	12,222	9,975	948	1,474	3,195	209	12,309	14,451	34,037	23,260
Con. Spinning (ringframes)	32,283	33,529	18,340	814	208	10,337	11,359	9,882	17,106	7,200
Winders	22,826	24,964	19,194	1,250	1,770	6,319	3,785	5,441	23,757	12,966
Twisting	14,634	21,930	8,682	544	720	1,131	4,049	1,568	5,465	3,388
Looms	50,966	71,649	54,529	6,838	5,685	24,293	34,791	8,200	69,418	51,478
Knitting Machinery	44,393	36,858	28,985	2,441	5,270	16,209	11,592	12,395	39,123	53,118
Dyeing & Finishing	31,878	36,128	26,380	2,773	10,824	5,650	11,693	8,700	24,255	40,966
Other	78,940	105,528	52,466	6,258	26,971	35,068	10,221	5,089	7,288	10,252

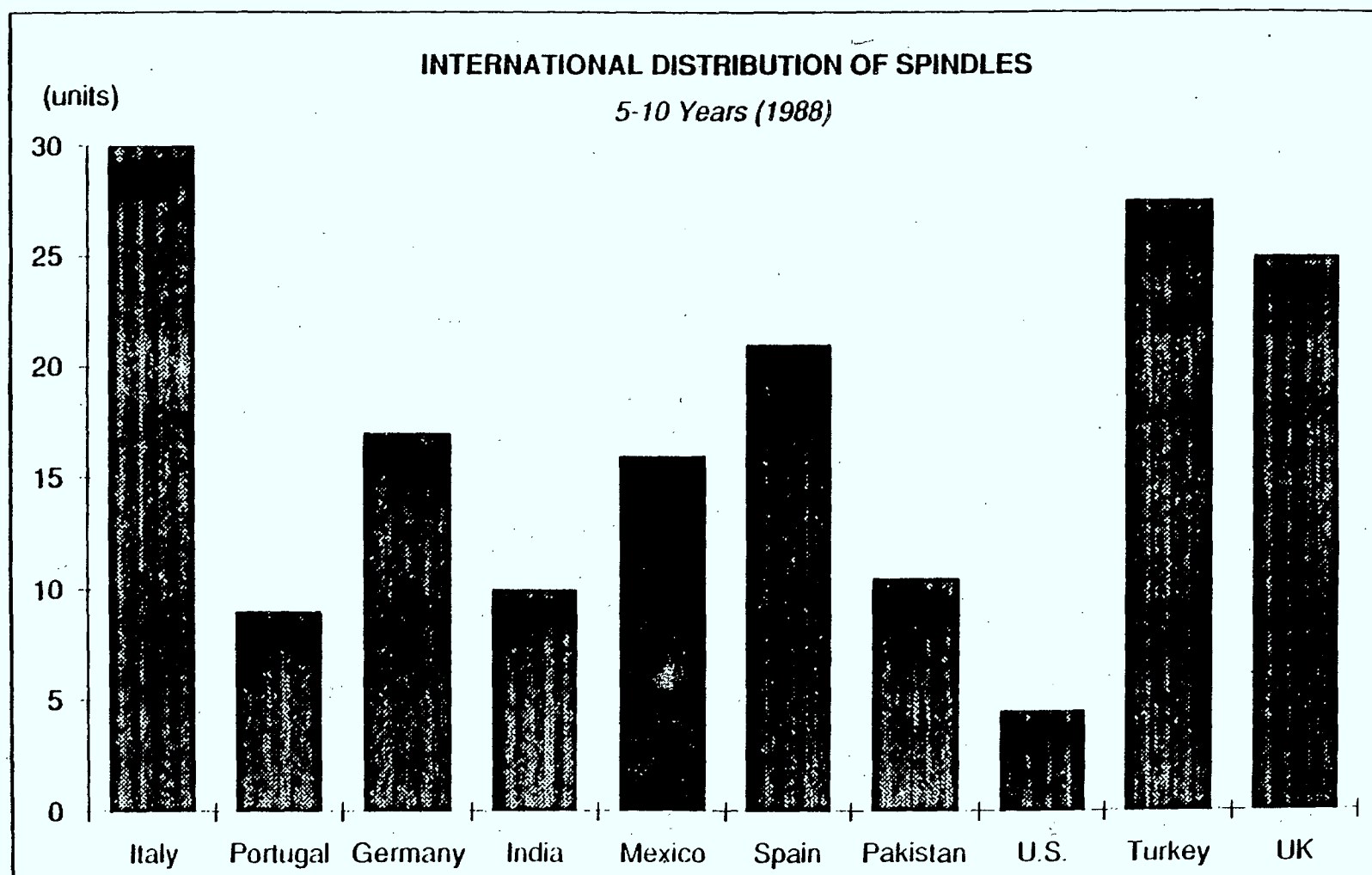
Source: Camara Nacional de la Industria Textil, 1991

APPENDIX S



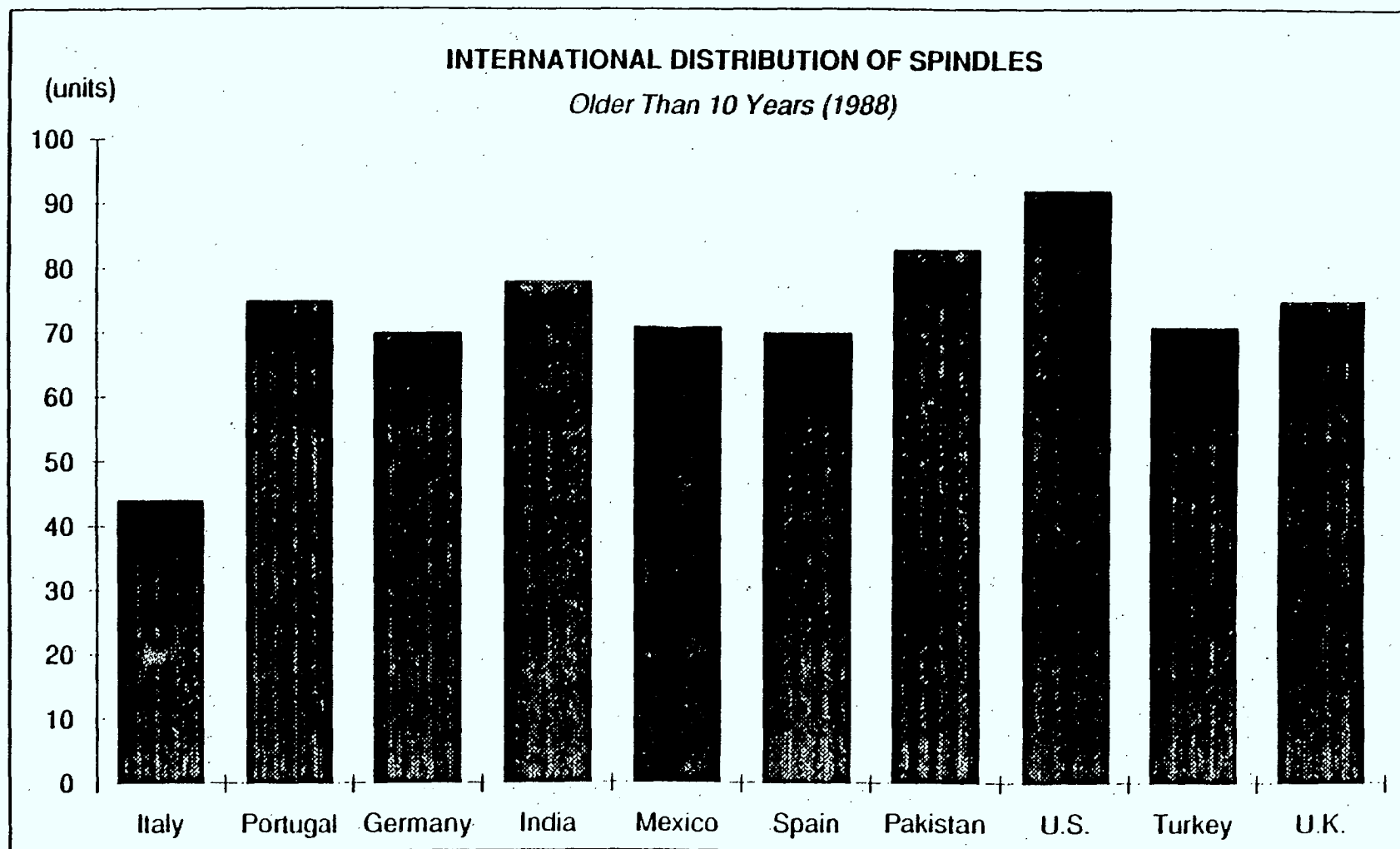
Source: Estudio para el Gobierno de Mexico por Boston Consulting Group y Bufete Industrial, 1988

APPENDIX S



Source: Estudio para el Gobierno de Mexico por Boston Consulting Group y Bufete Industrial, 1988

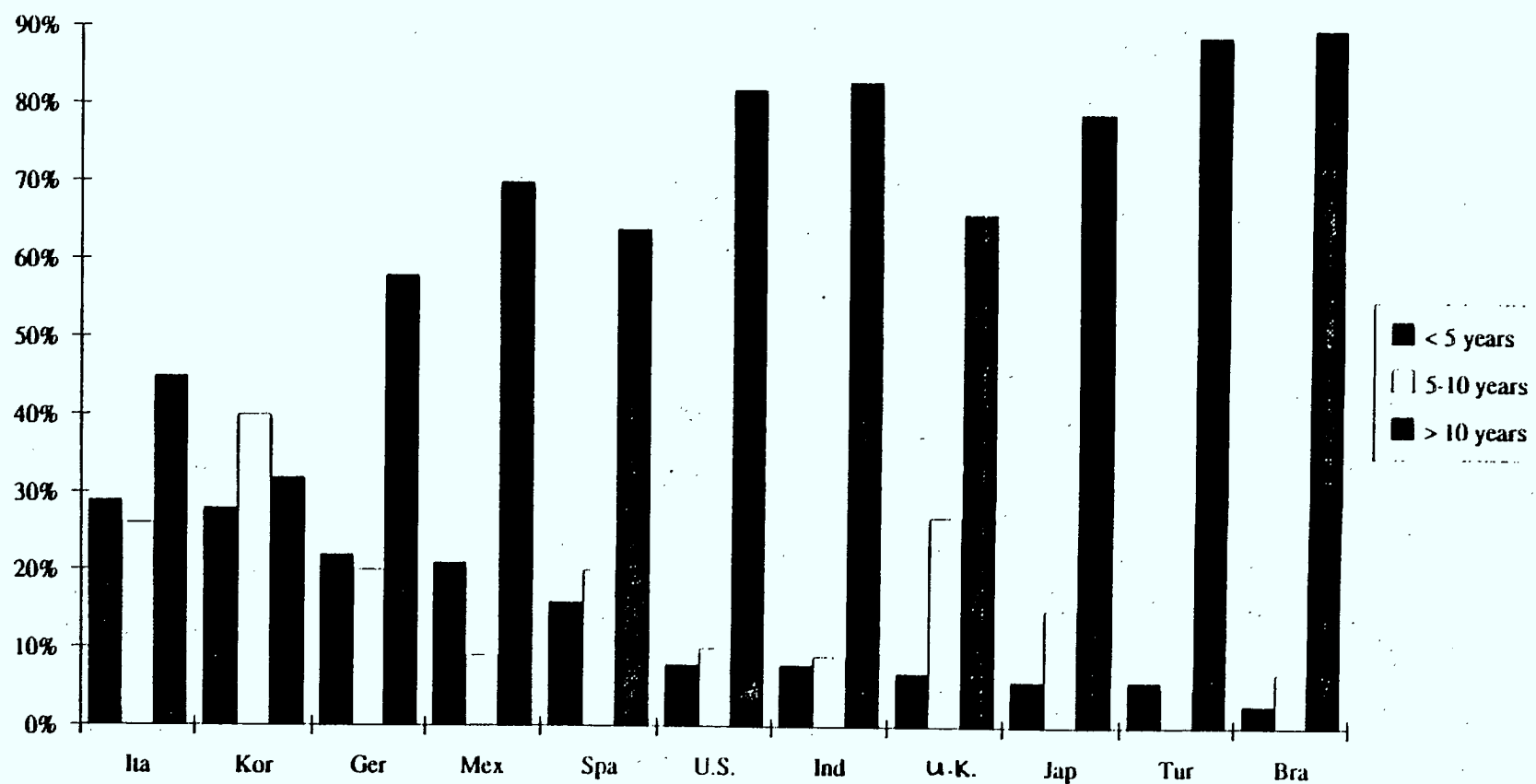
APPENDIX S



Source: Estudio para el Gobierno de Mexico por Boston Consulting Group y Bufete Industrial, 1988

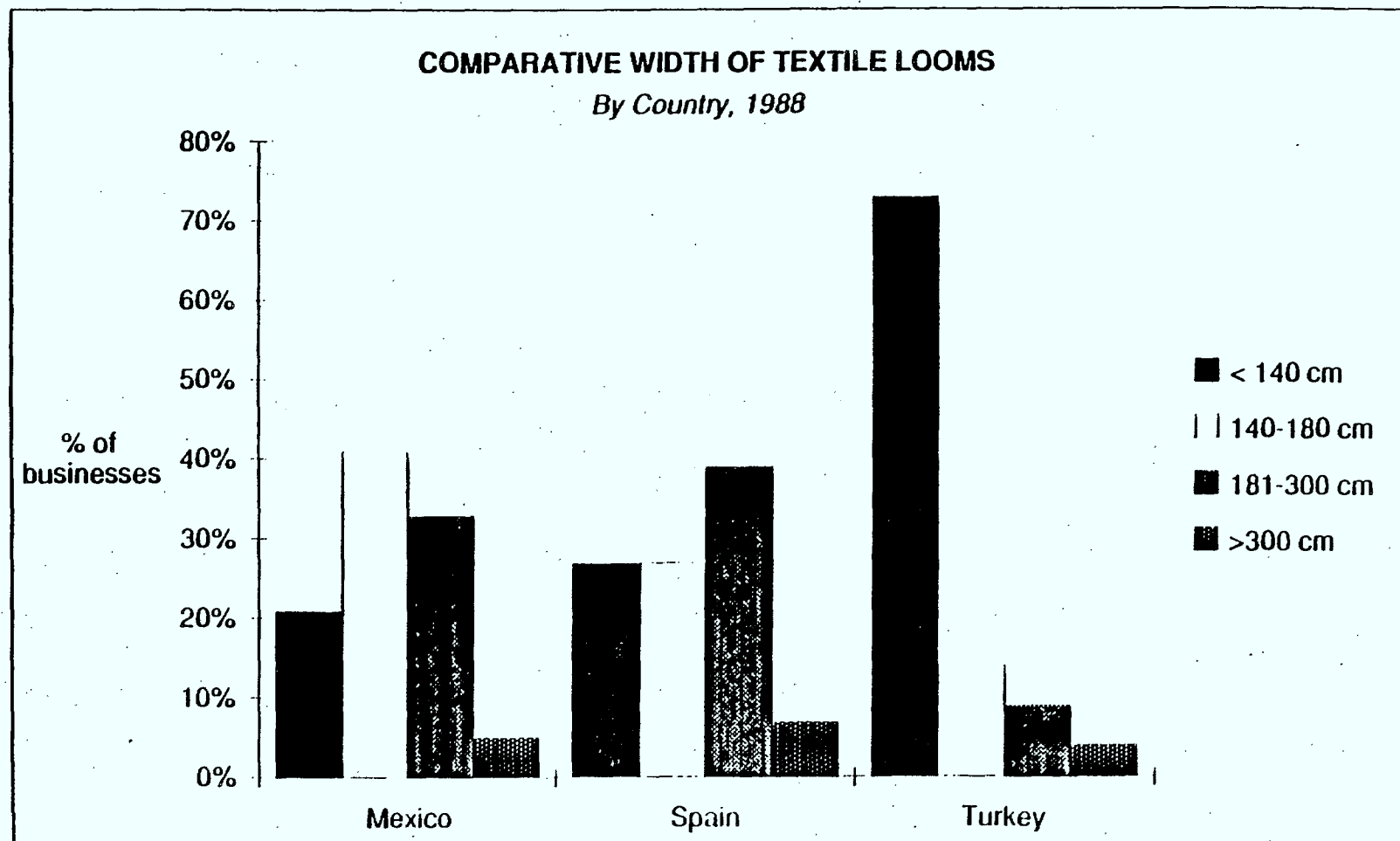
APPENDIX T

COMPARATIVE AGE OF TEXTILE LOOMS, by country (1988)



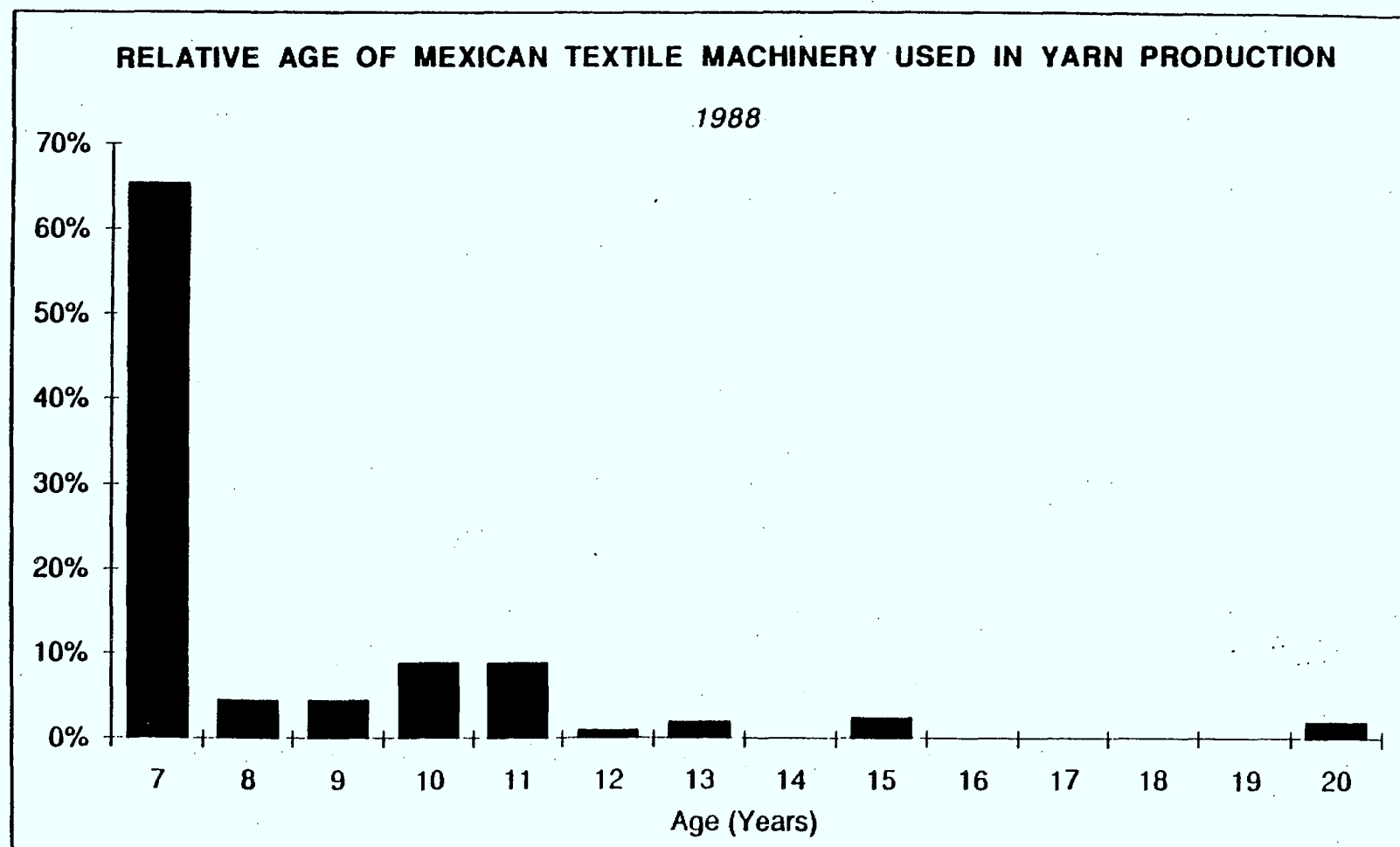
Source: Estudio para el Gobierno de Mexico por Boston Consulting Group y Bufete Industrial, 1988

APPENDIX U



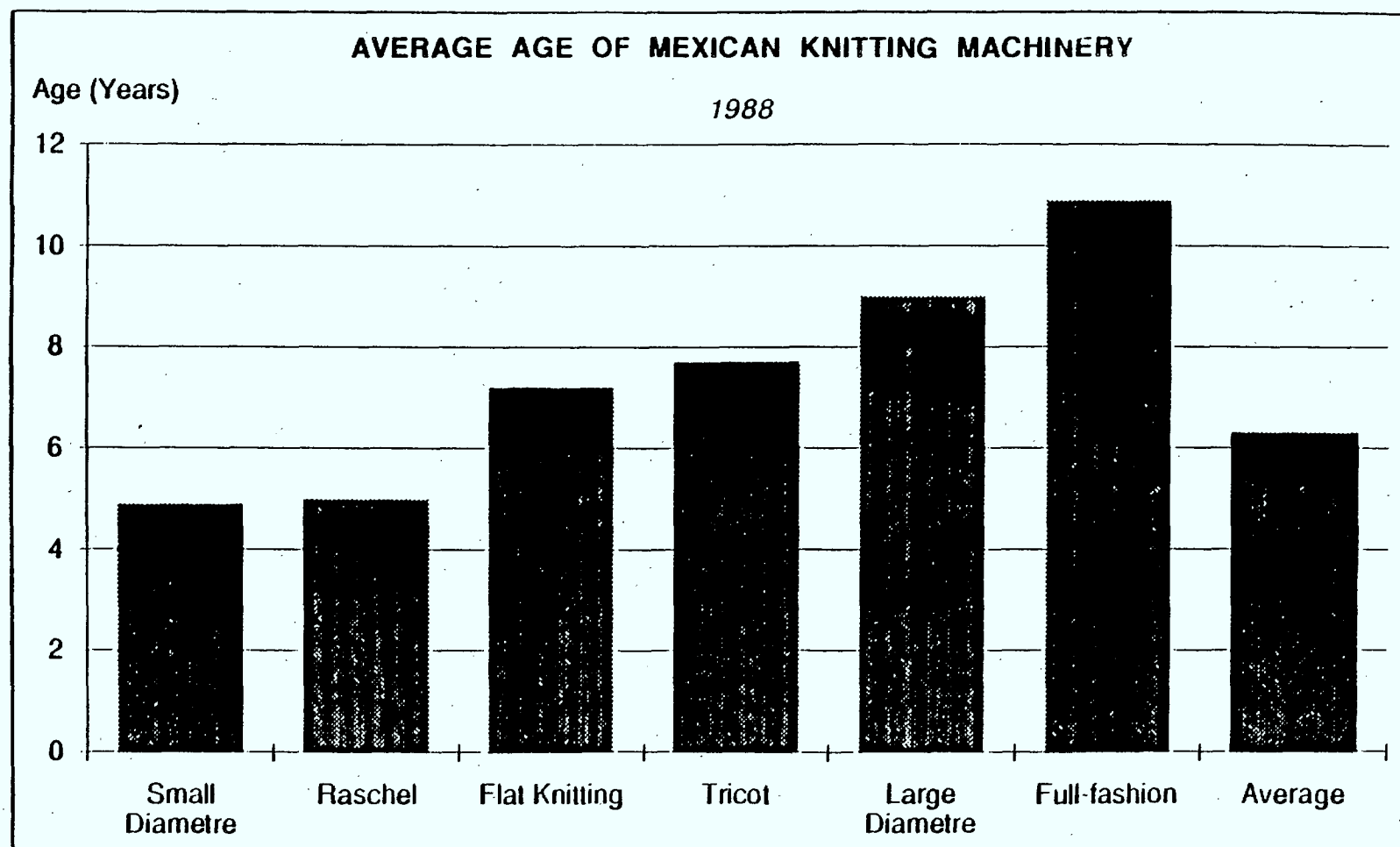
Source: Estudio para el Gobierno de Mexico por Boston Consulting Group y Bufete Industrial, 1988

APPENDIX V



Source: Estudio para el Gobierno de Mexico por Boston Consulting Group y Bufete Industrial, 1988

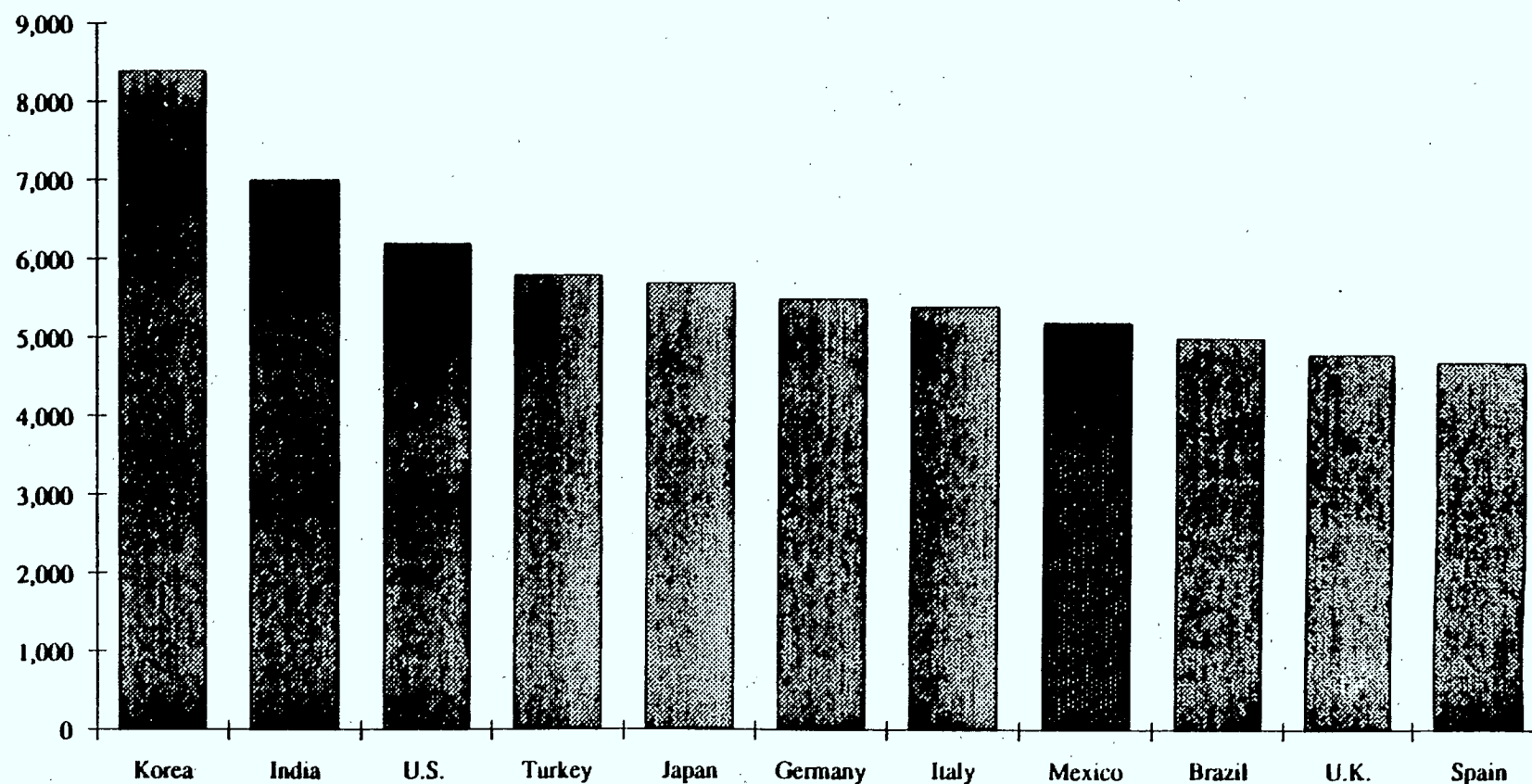
APPENDIX W



Source: Estudio para el Gobierno de Mexico por Boston Consulting Group y Bifete Industrial, 1988

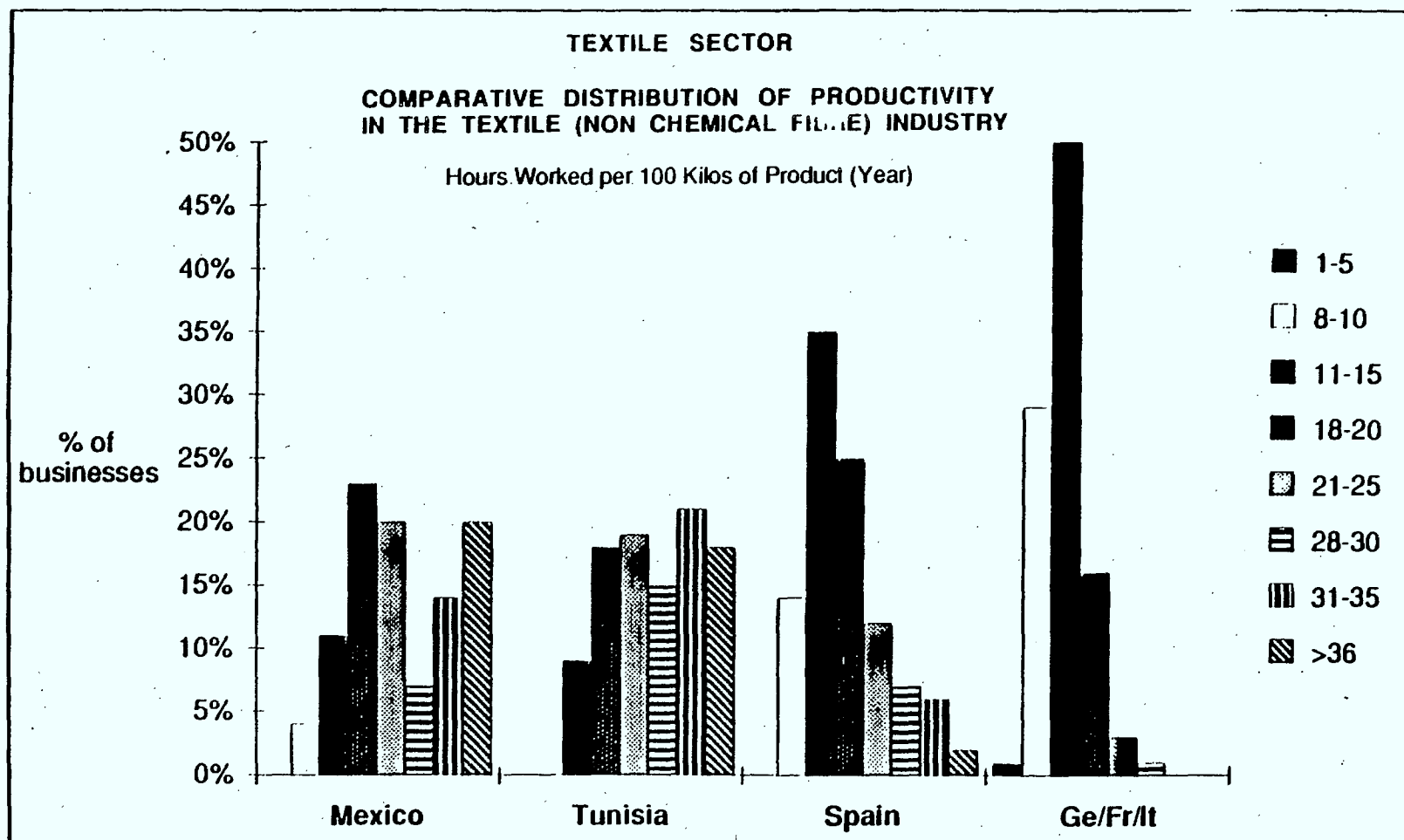
APPENDIX X

CAPACITY UTILIZATION: Annual Operating Hours for Spinning Machinery



Source: Estudio para el Gobierno de Mexico por Boston Consulting Group y Bufete Industrial, 1988

APPENDIX Y



Source: Estudio para el Gobierno de Mexico por Boston Consulting Group y Bufete Industrial, 1988

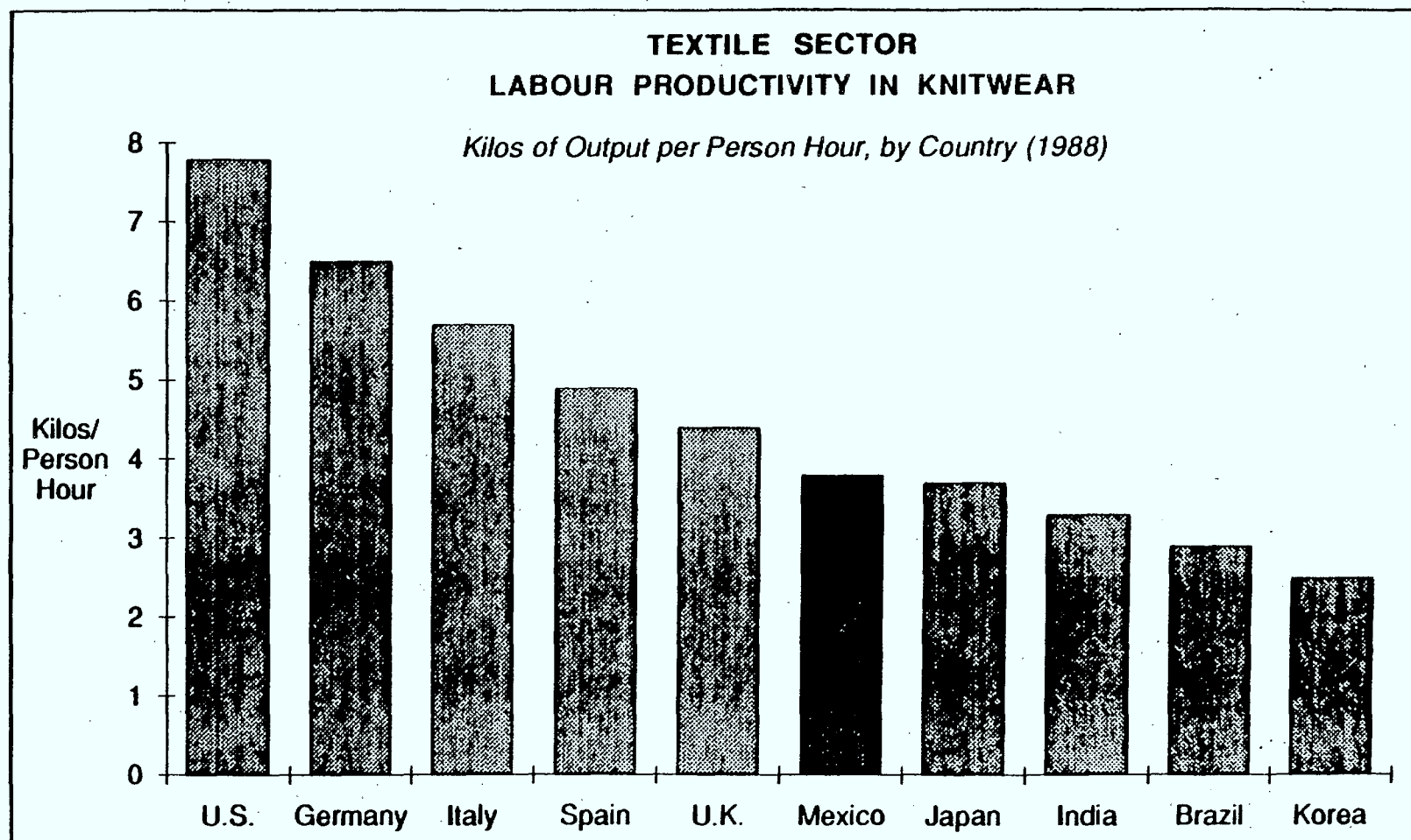
APPENDIX Z

STRUCTURE OF THE MEXICAN KNITWEAR SUBSECTOR

	Capacity (t/yr)	Capacity %	Firms (#)	Avg Size (t/yr)
Circular Looms				
<i>Large Diameter</i>	115,885	48.4%	368	315
<i>Small Diameter</i>	20,874	8.7%	249	84
Tricot	28,404	11.9%	42	676
Raschel	21,937	9.2%	51	430
Flat Knitting	43,521	18.2%	649	67
Full-fashion	8,925	3.7%	54	165
TOTAL	239,546	100.0%	1,413	1,737

Source: Estudio para el Gobierno de Mexico por Boston Consulting Group y Bufete Industrial, 1988

APPENDIX AA



Source: Estudio para el Gobierno de Mexico por Boston Consulting Group y Bufete Industrial, 1988

APPENDIX BB
TEXTILE SECTOR
MEXICAN WAGE AND BENEFIT STRUCTURE

A. Basic Wage

First Shift (48 hours per week)

Base Daily Salary	26,689 Pesos
Times 6 working days	160,134
Plus Sunday pay	26,689
Total Basic Weekly Pay	186,823
<i>Basic Hourly Pay (divide by 48)</i>	3,892

Shifts 2-3(40 hours per week each)

Total Basic Weekly Pay: (as per 1st shift plus 10% bonus per shift)	205,505
<i>Basic Hourly Pay (divide by 40)</i>	5,138

<i>Weighted Average Hourly Pay (assuming average plant operation of 3 shifts)</i>	4,722
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APPENDIX BB

MEXICAN WAGE AND BENEFIT STRUCTURE (Continued)

B. Plus Fringes

Plus 11% "savings fund"(paid by employer)	5,242
Plus 24% benefits (these include social security, workers compensation, unemployment insurance, health insurance, vacation pay and Christmas bonus (Mexico's anti-inflation tripartite business-government-labour agreement calls for this 24% to be divided 18% employer share, 5% employee share and 1% government share; however, our interview group reported that in practice, by private agreement, 80% of employers cover employee contributions, bringing employer share to 23%).	
We have accordingly applied a premium of 18.4%, equal to 23% x 80%)	6,206
Plus 5% housing benefit (paid by employer)	6,517
Plus 13% retirement fund (paid by employer)	7,364
Plus 5% average cost to employer of uniforms, transport and other fringes	7,732
Plus 5% average cost to employer of "automation payments"	8,119
Using a 1990 prevailing average exchange rate of 2,500 pesos = C\$1, this hourly rate equals	C\$3.25

Source: Ernst & Young

APPENDIX CC

MEXICAN TEXTILE EXPORTS (1980-1990, US\$M)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
TOTAL	78,701	74,940	63,789	114,347	124,081	72,536	66,935	147,806	134,187	202,668	128,638
Cotton	29,220	7,669	9,249	9,572	12,036	5,978	23,403	52,969	8,734	22,243	37,036
Yarn	18,462	5,607	8,185	7,143	6,475	2,871	6,905	23,354	2,687	5,437	4,139
Fabric	10,758	2,062	1,063	2,429	5,561	3,107	16,498	29,615	6,048	16,806	32,897
Wool	867	48	29	71	624	426	22	1,636	4,339	4,554	3,055
Yarn	31	15	12	2	19	1	4	12	199	19	8
Fabric	837	33	17	70	605	425	18	1,624	4,140	4,535	3,047
Synthetic Fibres Yarn & Fabric	16,657	26,551	28,568	76,633	84,069	52,953	32,907	82,412	78,417	173,539	87,206
Hard Fibres	31,956	40,672	25,945	28,070	27,352	13,178	10,604	10,789	2,453	2,332	301
Other									40,244	n.d.	1,040

Source: Camara Nacional de la Industria Textil, 1991

APPENDIX DD

U.S. TOTAL IMPORTS OF MFA FIBRES (1988-90, million m²)

	1988	1989	1990
World	10,746	12,144	12,190
China	1,342	1,672	1,692
Taiwan	1,159	1,378	1,262
Korea	1,013	1,058	977
Hong Kong	897	957	972
Canada	512	644	773
Mexico	422	432	453
Phillipines	308	361	438
Pakistan	312	374	435

Source: U.S. Commerce Department

APPENDIX EE

MEXICAN TEXTILE IMPORTS (1980-1990, US\$M)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
TOTAL	152,070	184,442	137,209	35,818	76,285	86,843	91,269	99,102	259,171	376,559	349,898
Cotton	6,038	8,329	6,414	7,592	11,694	5,012	16,843	35,303	42,739	54,436	66,763
Woolens	32,846	37,228	26,883	11,794	18,302	27,139	18,644	14,554	35,273	35,023	27,318
Synthetic Fabrics	49,613	46,190	34,490	5,371	17,129	21,559	25,525	17,623	71,669	99,390	118,939
Discontinuous Syn. Fabrics	20,119	21,848	20,921	5,482	13,650	16,755	16,475	19,078	53,808	78,363	94,309
Silk	4,118	5,737	2,216	237	647	1,059	1,538	1,105	2,412	2,973	3,666
Linen & Ramie	1,217	1,864	962	95	414	282	35	247	580	1,523	3,966
Knitwear	10,590	20,485	16,429	1,031	2,231	1,786	1,891	3,376	28,592	62,239	5,520
Other	20,837	35,222	24,519	3,231	7,540	8,400	7,049	4,827	15,170	23,460	10,736

Source: Camara Nacional de la Industria Textil, 1991

APPENDIX FF

MEXICAN APPAREL PRODUCTION (1988-1989)
(**'000 units**)

	1988	1989	88-89
Women and Girls	327,257	322,131	-1.6%
Women's Dresses & Suits	105,066	105,593	0.5%
Women & Girls' Shirts & Blouses	108,281	111,144	2.6%
Women & Girls Pants	51,284	42,264	-17.6%
Girls' Dresses & Suits	29,807	30,779	3.3%
Women & Girls' Skirts	28,978	29,298	1.1%
Coats & Jackets	3,841	3,053	-20.5%
Men and Boys	238,752	245,524	2.8%
Pants	34,033	34,736	2.1%
Jackets	20,323	20,754	2.1%
Suits & Blazers	4,459	4,278	-4.1%
Shirts	93,594	96,796	3.4%
Sport Shirts	86,343	88,960	3.0%
Outerwear	234,636	251,323	7.1%
Uniforms	30,952	32,133	3.8%
Coats & Raincoats	4,931	6,403	29.9%
Sportwear	41,308	42,606	3.1%
Underwear & Sleepwear	142,773	155,156	8.7%
Other	14,672	15,025	2.4%
TOTAL	800,645	818,978	2.3%

Source: CANAINVEST

APPENDIX GG

US APPAREL IMPORTS FROM MEXICO (1989-1990, Metres² Millions)

	1989	%	1990*	%	Growth
Total	176.3		175.6		0%
Mexican Origin	24.1	14%	29.0	17%	21%
807	48.8	28%	43.8	25%	-10%
807-A	103.5	59%	102.8	59%	-1%

***estimate**

Source: CNIV

APPENDIX HH

MEXICAN IMPORTS AND EXPORTS OF APPAREL (1985-1990, US \$000s)

	1985	1986	1987	1988	1989	1990*
Imports	31,917	43,903	27,859	105,748	231,758	310,000
Exports	15,788	16,589	47,395	62,495	57,747	72,000
Balance	-16,129	-27,314	19,536	-43,253	-174,011	-238,000

* estimate

Source: CNIV

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Ernst & Young (Firm)

A study of the

competitiveness of the

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