

# UNITED STATES INTERNATIONAL TRADE COMMISSION

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This report was principally prepared by Office of Economics

Jose A. Mendez, Project Leader Hugh M. Arce Gerald Berg Kathy Rehbein Maura Robinson Lee Tuthill

Office of Tariff Affairs and Trade Agreements

Janis Summers

Leo Webb

and

Office of Industries

Aaron Chesser, Coordinator William Cunningham Peggy MacKnight Ruben Mata Eric Nelson John Reeder Carl Seastrum

Office of Economics John W. Suomela, Director

Address all communications to
Kenneth R. Mason, Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

#### PREFACE

On January 23, 1986, at the request of the Senate Committee on Finance (see app. A), and in accordance with section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)), the United States International Trade Commission instituted investigation No. 332-223. This study covers a multitude of issues and is intended to be used as a source manual on United States-Mexico trade in general and border trade in particular. Broadly, this study presents data on United States-Mexico trade, reports on the trade programs of both countries that affect that trade, and examines the economic effects of United States-Mexico trade on the communities along the United States-Mexico border. Specifically, the study contains the following material: (i) an investigation of the impact of U.S. imports from Mexico and U.S. exports to Mexico on U.S. communities near the border; (ii) a report on the nature of trade benefits Mexico receives under current U.S. trade programs; (iii) a report on the value and volume of imports from Mexico that benefit from each program identified under (ii) for the period 1975 to 1985, and the reasonably anticipated value and volume of such imports from 1985 to 1990; (iv) a report of Mexican programs, including programs of States of Mexico, to encourage imports from the United States and to encourage industrial and other development along the border; (v) a report of U.S. programs, including programs of States of the United States, designed to encourage development along the border; and (vi) a discussion of possible cooperative programs to encourage development along the border, including industrialization and processing, through increased merchandise trade along the border.

Notice of the investigation was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, and by publication of the notice in the <u>Federal Register</u> of February 6, 1986 (51 F.R. 4665), (app. B).

Public hearings in connection with the present investigation were held in McAllen, Texas, on April 7, 1986; in El Paso, Texas, on April 8, 1986; and in San Diego, California, on April 10, 1986.

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#### EXECUTIVE SUMMARY

This study presents data on United States-Mexico trade, reports on the trade programs of both countries that affect that trade, and examines the economic effects of United States-Mexico trade on the communities along the United States-Mexico border. This study covers a multitude of issues and is intended to be used as a source manual on United States-Mexico trade in general and border trade in particular.

### The U.S.-Mexico Border Region

#### Overview

The population and economic activity of the United States-Mexico border region is concentrated in 14 twin cities. These twin cities (each one is a U.S. city with a Mexican counterpart) are closely integrated. In most cases, each pair of twin cities is the center of economic activity in its subregion. Cross-border purchases are an important part of the economic base of each twin city.

The twin cities provide an important link between the economies of Mexico and the United States, since a large portion of import and export traffic between the two countries passes through these pairs of cities. Maquiladora plants ("maquiladoras") are another important factor in the economies of some twin cities. These are assembly plants that are located on the Mexican side of the twin city in order to take advantage of Mexico's lower wages and various provisions in the tariff schedules of both countries. Maquiladoras are allowed to import raw materials into Mexico duty free and then re-export the finished products to the United States paying duty only on the value added in Mexico. That portion of the product's value consisting of U.S.-made components is exempted from duties. Analysts indicate that the maquiladoras present the greatest prospect for the future growth of the twin cities.

The United States-Mexico border separates two countries with very different wages and per capita income levels. Part of the U.S.-border region is characterized by per capita income levels below the national and state averages. However, the region is not uniformly a low income area. San Diego County, with 46.3 percent of the U.S.-border region population, had a per capita income above the U.S. national average. Low per capita incomes did appear to be concentrated along the Texas-border region, in particular South-Texas, and among the Mexican-American population. However, even among the latter, the period between 1969 and 1979 was a period of increasing per capita income. In contrast, the Mexico-border region has income levels that are uniformly above the Mexican national average.

## U.S. and Mexican Trade Programs

### Overview

In 1985, the United States was Mexico's most important trading partner. U.S. exports to Mexico were \$13.0 billion in 1985 and represented 66 percent of Mexico's total imports, whereas Mexican exports to the United States were \$18.9 billion and represented 70 percent of Mexico's total exports. Mexico was the third largest market for U.S. exports (6.6 percent) and the fourth largest source of U.S. imports (5.5 percent).

U.S.-Mexican bilateral trade is affected by a number of trade programs in each country. U.S. imports from Mexico are encouraged under such programs as the Generalized System of Preferences (GSP), items 806.30 and 807.00 of the Tariff Schedules of the United States (TSUS), and the existence of foreign trade zones (FTZ's). Conversely, they are restrained by the Multifiber Arrangement (MFA), steel emport restraints, and restrictions on certain Mexican agricultural products. Generally, U.S. exports to Mexico have been subject to heavy Government regulation. However, in 1985, the Mexican Government accelerated the reduction of import controls that began in 1984, major changes were made in the customs tariff schedules, and the overall level of tariff protection was reduced. Mexico has also encouraged imports of raw materials destined for maquiladora plants by exempting them from many of the tariff and nontariff barriers that face Mexican imports. Finally, Mexico recently became a member of the General Agreement on Tariffs and Trade (GATT).

#### Mexican trade programs

Overview .-- Generally, U.S. exports to Mexico have been subject to heavy Government regulation. This is less true for imports into the northern zone along the border with Mexico. For example, imports destined for the maquiladora plants have been exempted from many of the tariff and nontariff barriers that face imports into the Mexican interior. This has greatly encouraged the development of these plants along the United States-Mexico border. Although Mexico has recently relaxed its restrictions on foreign investment, particularly for maquiladora plants, it has traditionally limited the role of foreign capital in its markets and has reserved certain sectors exclusively for Mexican ownership. Taxation of business entities by the Mexican Government has traditionally been oriented toward promotion of manufactured exports and import substitution. The intent of these tax incentives is to improve Mexico's balance-of-payments position, but the export tax rebates have, in some cases, constituted the basis for subsidy investigations under U.S. trade law by the U.S. Department of Commerce. Measures taken by Mexico in the automotive and transportation sectors, as well as pharmaceutical production, have been the basis for concern by the U.S. Government in the past. Many of these concerns could be resolved by Mexico's accession to the GATT.

Free zones.--Mexico's free zones were established to encourage development in the once remote regions in the States of northern Mexico. A perimeter zone (formerly known as a "free perimeter") 20 kilometers wide parallels the U.S. border and includes the border cities. Certain items may be shipped to these zones at reduced duties or free of duty. Duty-free goods brought into the free zones may not be transferred to the rest of the country without payment of duties. This is enforced by checkpoints at the boundaries of the zones.

Maquiladoras.--In 1965. Mexico began encouraging the establishment of in-bond production facilities in the border region, commonly known as maquiladoras. Mexico waived a number of its restrictions on foreign investment and allowed duty-free importation of components and materials used in the maquiladoras, provided that the output of the maquiladoras is exported from Mexico. Later Mexico permitted the establishment of maquiladoras in most of the interior of Mexico and allowed some of their output to be sold within Mexico. However, 90 percent of the maquiladoras are located in northern Mexico. At the end of 1985, there were an estimated 735 maquiladoras employing over 200,000 persons.

GATT accession.--Mexico formally applied to accede to the GATT in November 1985. By August 24, 1986, Mexico was a full member, or contracting party to the GATT. To join the GATT, Mexico agreed to bind or lower many tariffs, continue to phaseout many quotas and import license requirements, administer nontariff measures and development programs in a GATT consistent manner, and sign on to a number of the Tokyo Round codes.

On tariffs, Mexico agreed to a number of tariff concessions of interest to the United States:

- o Mexico agreed to establish a maximum tariff of 50 percent on all 8,413 of its tariff lines.
- o Mexico is also granting bound duty rates of lower than 50 percent on 373 tariff lines, representing 16 percent (or \$1.9 billion) of total Mexican imports in 1985.
- o Items bound at rates lower than 50 percent include 210 items imported from the United States. They represented \$1.2 billion or 15.7 percent of total Mexican imports from the United States in 1985.

On nontariff barriers, Mexico has committed to adhere to five of the Tokyo Round nontariff barriers codes within 6 months of accession. These codes include those on import licensing, customs valuation, antidumping, subsidies, and standards.

- The United States obtained the bound elimination of licenses of 175 of the 210 priority items.
- o Membership in the Subsidies Code, under which export subsidies are illegal, reinforces Mexico's bilateral commitments to the United States to phase out export subsidies.

o Accession to the Customs Valuation Code should remedy trade problems associated with Mexico's minimum import pricing system. Under the code, import duties would have to be based on customs value rather than on the Government's calculated "official value" that has been used in the past.

## U.S. trade programs with Mexico

Overview.--U.S. Government programs affecting trade with Mexico range from statutory provisions designed to implement bilateral agreements of the two governments to broad trade policies and programs used by or benefiting many countries. The latter group includes the granting of most-favored-nation (MFN) duty status and the extension of preferential tariff treatment under the GSP. In addition, both U.S. and Mexican firms and their trading communities can make use of U.S. FTZ's and of items 806.30 and 807.00 of the TSUS. The benefits of all these programs extend beyond the border area.

The United States uses trade-regulating devices such as the MFA (controlling textile and apparel imports) and cooperative programs (such as regimes for the control of transborder pollution) in its dealings with Mexico. State and local programs also attempt to provide a basis for communication and cooperation with Mexico. Many of these programs affect primarily the border area, but both countries use them to attempt to direct and expand overall bilateral trade and development.

Federal regulatory measures have particularly strong effects on transborder trade, especially on shipments from Mexico. U.S. regulation of Mexican motor carriers and agricultural/horticultural products are frequently cited as areas of concern. Border trade is also said to be hindered by the inadequacy of present international bridges and customs ports of entry, as well as by delays in customs clearances because of inspection programs or the lack of personnel. Such infrastructure and procedural problems were almost universally decried by those commenting or testifying before the Commission.

Most-favored-nation tariff treatment.--MFN principle requires that the same tariff rate apply to imports from all trading partners with MFN status. Its intent is to establish equality in international dealings among the grantees by ensuring that a commodity is treated uniformly, regardless of origin. The MFN principle has led to a reduction in the level of tariffs in the post-World War II period since the lowest duty rate must be granted to all of the grantor's best or "most favored" allies or trading partners.

Among its 91 member countries, the GATT largely replaced the traditional, bilateral "friendship, commerce, and navigation" (FCN) agreements that had been the principal means of establishing MFN treatment. Mexico formally acceded to the GATT in August 1986. Nor does the United States have a FCN agreement in force with Mexico, after a 1943 reciprocal trade agreement was terminated in 1950 and replaced with various more specific agreements. However, Mexico continued to receive MFN treatment from the United States. Thus, with the exception of articles receiving preferential GSP treatment, Mexican exports to the United States are assessed the MFN rates.

The Generalized System of Preferences..-The GSP, established in title V of the Trade Act of 1974, is a nonreciprocal duty elimination granted by the United States on designated products of developing countries. Mexico was designated as a beneficiary developing country (BDC) in 1975, the first year of the program, and has continued as a designated BDC.

In 1985, merchandise valued at \$1.2 billion, or 6.6 percent of U.S. imports from Mexico, entered duty free under this program. The GSP percentage of U.S. imports from Mexico is the smallest among all beneficiaries of the U.S. GSP program because petroleum, which dominates Mexico's exports, is not GSP eligible. The two most significant GSP-eligible products imported from Mexico are chemicals and related products and machinery and equipment. Total imports from Mexico under the GSP are projected to increase at an average annual rate of 8 percent, from \$1.2 billion in 1986 to \$1.6 billion in 1990. The Commission estimates that the border region accounted for 34 percent of total GSP imports in 1985 from Mexico.

The total duties foregone under the GSP program are an overstatement of the benefits that exporters receive from the program. The total duties foregone as a result of GSP imports are estimated to have increased irregularly from \$23.3 million in 1976 to \$47.4 million in 1985, an average annual rate of 8 percent.

Whereas the GSP program has potentially encouraged the industrial development of certain sectors in Mexico, other factors may have lessened the benefits to Mexico. Many of the products for which Mexico has a comparative advantage are not eligible for GSP treatment. These include petroleum products, and certain textiles and apparel, which are not GSP eligible due to their regulation by the Multifiber Arrangement. Many other items are suspended from eligibility for duty-free treatment under the GSP and under the competitive-need limits rule. Important examples are certain fresh vegetables, ceramics, glass products, and certain electronic products.

Machinery and equipment account for the largest volume of GSP imports from the border region, and most of these are produced in maquiladoras. There does not appear to be any other significant manufacturing sector of the Mexican economy located along the border that uses GSP extensively.

Foreign trade zones.--FTZ's, have been permitted in the United States since the enactment of the Foreign-Trade Zones Act of 1934. A U.S. FTZ is a relatively small, enclosed area located in or near a customs port of entry, often comprising only a few buildings or even part of a single structure. The FTZ's are outside the customs territory of the United States and goods may be brought into an FTZ, returned to the country of origin, or exported to third countries without payment of U.S. customs duties or taxes. Once within the zone, foreign articles may be stored, manufactured, processed, combined with U.S. components, shown, or otherwise manipulated in accordance with the operating grant given by the Foreign Trade Zones Board. Goods from an FTZ may

also be given lower U.S. customs duty treatment, depending on their condition as imported, any changes while in the FTZ, and the pertinent tariff provisions.

Three of the nine FTZ's in the border area are active, and six--all in Texas--are located at the U.S.-Mexican border customs ports of entry. (The latter are McAllen, El Paso, Brownsville, Laredo, Del Rio, and Eagle Pass.) Thus far, zone operations appear to have focused on storage and distribution rather than manufacturing.

Items 806.30 and 807.00 of the United States Tariff Schedule.--Items 806.30 and 807.00 of the TSUS exclude from U.S. customs duties the portion of the imported article's value that is eligible and of U.S. origin. In general, for articles assembled abroad using fabricated components manufactured in the United States, duty is paid only on the value of the foreign assembly or other foreign processing.

Mexico is a leading source of 806.30 and 807.00 imports, accounting for 14 percent of the total of such imports in 1985 (\$3.9 billion). These imports are also a major export for Mexico, accounting for 21.3 percent of the total Mexican exports to the United States in 1985.

In 1985, machinery and equipment products accounted for the majority of 806.30 and 807.00 imports from Mexico: the \$3.8 billion in imports represented 97 percent of these imports from Mexico. The Commission estimates that \$3.2 billion of those imports were from the Mexican border region. The total of 806.30 and 807.00 imports from Mexico are projected to increase at an average annual rate of 8 percent, rising from \$3.9 billion in 1986 to \$6.8 billion in 1990.

Although the 806.30 and 807.00 provisions are not considered regional or unilateral provisions, they have provided benefits to Mexico and the border region, particularly in conjunction with the incentives that Mexico has provided for the development of maquiladoras. Mexican authorities do not levy import duties on U.S. shipments to the in-bond plants, similarly, they do not levy export duties on outbound shipments from these plants. Mexico has become an important partner in assembly operations because of its geographical location, which permits easy access to transportation routes leading to and from almost anywhere in the United States and helps to ensure lower transportation costs compared with most other foreign sources of imports. The maquiladoras in Mexico's border communities help the economies on both sides of the border.

Multifiber Arrangement.--The United States and Mexico are both parties to the MFA and maintain a bilateral agreement covering many Mexican exports to the United States of textiles and apparel. The agreement currently in effect with Mexico, signed in February 1979, was subsequently extended through December 1987. This agreement currently provides for quotas only on apparel items, including trousers, coats, coveralls, shirts, blouses, and brassieres

of cotton or manmade fibers. These garments accounted for slightly more than 60 percent of the value of total imports of MFA-covered products from Mexico in 1985. The remaining, nonquota MFA product imports from Mexico may be brought under quota when the United States finds that imports of a particular product are disrupting or threatening to disrupt the U.S. market. In addition to quotas, designated consultation levels, which cannot be exceeded without prior consultation between the two countries, cover many other apparel products from Mexico, including yarn and suits.

In 1985, U.S. imports from Mexico of textile and apparel products subject to MFA control were valued at \$275 million and represented 1.5 percent of Mexico's exports to the United States. The overall growth of MFA-controlled imports from Mexico was substantially lower than the growth in U.S. imports of MFA products from all countries; during 1976-85, MFA imports from Mexico rose by 69 percent in value, whereas imports from all other countries rose by 267 percent in value during the same period, primarily because of the growth in imports from Hong Kong, Taiwan, Republic of Korea (Korea), China, Japan, and Italy, the six largest suppliers. U.S. MFA imports from Mexico are projected to grow by 34 percent during 1985-90 to \$368 million, and those from the border areas are expected to increase by 35 percent to \$258 million.

Although the benefits to Mexico might increase if access to the U.S. market were unrestricted, as a less competitive world supplier Mexico benefits from the tight U.S. import restraints on the major low-cost apparel producers such as Taiwan, Hong Kong, and Korea. The MFA and the United States-Mexico bilateral agreement also reduce the risk that Mexican producers' access to the U.S. market would be denied abruptly.

The most significant factor affecting border developments has been the growth of the in-bond apparel industry. The Commission estimates that in 1985, 65 percent of all textile and apparel imports from the border entered under the MFA. This quantity, \$191.6 million, also represented 70 percent of all textile and apparel imports from all locations in Mexico entering under the MFA in 1985.

Voluntary Restraint Agreement on the exports of Mexican steel.--In December 1984, Mexico agreed to limit steel shipments to the U.S. market for a 5-year period, beginning October 1984. For 1986, the agreement limits Mexico to 0.36 percent of U.S. apparent consumption and to 100,000 tons of semifinished steel. Steel products manufactured in Mexico's maquiladoras remain outside the scope of restrictions. In exchange, the United States made a commitment to seek the termination of unfair trade investigations on steel items subject to the agreement.

Agriculture. -- One of the more critical issues of U.S.-Mexican trading relations relates to agricultural, fishery, and forest products. In 1985, Mexico was the fourth largest source of U.S. imports of these products, accounting for \$2.1 billion, or about 5 percent of these imports. Mexico was also the fourth largest market for U.S. exports of these products in 1985, purchasing \$2.2 billion, or 6 percent of these exports.

Prior to the mid-1970's, Mexico generally exported more to the United States in agricultural goods than it imported; however, beginning in the mid-1970's, this situation reversed with the United States generally supplying more agricultural goods to Mexico than it imported from that country.

The leading agricultural imports from Mexico are fruit, nut, and vegetable products, which together accounted for one-third of U.S. agricultural imports from Mexico in 1985. The U.S. duty rates on fruits, nuts, and vegetables were higher than the rates on U.S. imports of any other group of agricultural products from Mexico in recent years. In 1985, about 86 percent of the \$676 million in U.S. imports of fruits, nuts, and vegetables from Mexico were dutiable at an ad valorem equivalent (AVE) duty of 10.4 percent. Overall, about one-half of total U.S. imports of agricultural products from Mexico were dutiable in 1985, and the average AVE duty rate was 7.5 percent. The other half either entered under the GSP or came in under categories (shrimp and crude coffee) that are duty free for all countries.

A variety of sanitary requirements and quotas affect the import into the United States of agricultural products from Mexico. For example, there are quotas on imports of most dairy products from all countries, there are inspection requirements for Mexican and all other foreign slaughtering plants pertaining to meat imports, and there are limits on the amounts of herbicide and insecticide residues in food products as well as requirements pertaining to the presence of certain insects or botantical diseases on fresh or unprocessed agricultural products. In 1984, for example, the Food and Drug Administration began rejecting the entry of Mexican fresh pineapples because of carbaryl pesticide residues in the fruit. It is difficult to quantify the impact of these nontariff import barriers on these Mexican products because even in their absence, it is unlikely that Mexico would be exporting sizable quantities to the United States because of supply and demand considerations for these products within Mexico and the United States.

The Commission staff estimates that less than one-sixth of U.S. imports of agricultural goods from Mexico are produced in Mexican border areas.

#### Cooperative and other trade programs: existing and proposed

A number of new programs have been proposed to stimulate investment spending or to encourage the relocation of businesses to the border region. Generally, the proposals would either reduce taxes or eliminate trade barriers for the products of firms that locate within the border region.

#### Productivity zones

Overview.--According to the Productivity zone proposal, businesses would have the option of investing in productivity zones, areas 15 miles in radius established on either side of the United States-Mexico border. Firms that locate in the zones would be permitted to hire Mexican labor at the higher of the prevailing market wage or the Mexican minimum wage. However, three restrictions would be placed on firms that locate on the U.S. side. First, they would be required to hire U.S. workers in fixed proportion to the number of Mexican laborers employed (i.e., for each 10 Mexican workers, one U.S. citizen would have to be employed). Second, the firms would have to ensure that Mexican workers have adequate working conditions. Third, firms would be required to pay an additional income tax, which would be remitted to the Mexican Government.

<u>Comment.</u>--There are a number of legal, administrative, and economic issues raised by this proposal. First, legally, the suggestion that taxes be collected on firms located within the U.S. zones and then remitted by the U.S. Government to the Mexican Government is an unusual and certainly unprecedented measure. Second, the notion that Mexican workers be paid the prevailing Mexican wage while employed in zones on the U.S. side may be controversial. This provision is likely to generate opposition not only among labor groups, but also among individuals who feel that paying different wages to workers that are working side by side and performing the same task is unfair.

The third set of issues is economic: the effect on investment, wages, employment, land rents, and illegal immigration.

- o Depending on the size of the income tax and the required hiring ratio, the creation of the productivity zone could raise the level of investment in the border region.
- o The proposal would not attract additional U.S. investment into Mexico. U.S. firms already have the option of locating in Mexico in order to have access to Mexican labor.
- o The impact on the Southwest labor market for unskilled workers would be mixed. Both employment and wages for U.S. unskilled workers would probably decline. Mexican laborers, on the other hand, would likely benefit from this program; although their wages would not improve much, income earning opportunities should increase.
- o Other beneficiaries of this proposal are likely to be property owners. Rents in the border area would be stimulated by firms seeking land in which to locate.

## Enterprise zones

Overview.--According to its proponents, U.S. enterprise zones are designed to provide income and employment to individuals by creating incentives for businesses, primarily small businesses, to locate within distressed areas. The package of incentives, which include the elimination of Government regulatory burdens and the provision of income and investment tax

credits, are intended to counter the business risks associated with locating within depressed areas. Other incentives of the program are designed to encourage businesses to provide training for disadvantaged individuals whose lack of skills make them difficult to employ,

<u>Comment.--The bill will have implications for the level and location of investment within the United States.</u>

- o The creation of the enterprise zones would stimulate investment in the zones located in the border region. Investment outside the zone may, however, decline.
- o Generally, U.S. laborers in the border region are likely to experience an increase in income and employment opportunities.
- o Landowners within and contiguous to the zones would benefit: the demand for land by firms would increase rents.
- o As structured, the bill may lead to an inefficient allocation of resources since firms within enterprise zones would be subsidized relative to those outside the zones. Firms in the enterprise zone are favored only because of their location.
- o The incentives provided for the training of workers are an important provision of the enterprise zone proposal.

### H.R. 3199, "United States-Mexico Border Revitalization Act"

Overview.--According to its proponents, H.R. 3199 is designed to stimulate economic growth and development along the United States-Mexico border. The bill also has the long-term objective of moving the United States and Mexico towards the creation of a free-trade area between the two countries.

The principal feature of the bill is the provision of trade and tax incentives to (U.S.-Mexican) joint ventures that locate in an area 200 miles along either side of the border. Specifically, the proposal calls for the elimination of duties on products produced by eligible firms and traded between Mexico and the United States, and for these firms to receive tax credits for investments and increases in their payrolls. Individuals employed by the firms would also be eligible for income tax credits.

Unlike other proposals, the eligibility criteria of this proposal requires that a firm be a U.S.-Mexican joint venture, with the nationals of the country in which the firm is located holding the controlling interest and with a minimum of 35 percent of the equity held by citizens of the other country. Thus, to be eligible, at least 35 percent of the equity of a U.S. firm located in the United States must be held by Mexican citizens, whereas a Mexican firm located in Mexico must have at least 35 percent of the equity held by U.S. nationals.

Comment. -- Of the proposals on which testimony was given at the hearings, this proposal is the most ambitious both in terms of the geographic area to be targeted and in terms of the potential cost of implementation. The U.S. side of the zone would include major nonborder cities such as Los Angeles,

Tucson, Phoenix, Albuquerque, Austin, San Antonio, and Corpus Christi. In addition, the equity-sharing provision of the bill may be controversial and may also have a number of unintended consequences. These and other effects are discussed below.

- The creation of the coproduction zones would stimulate investment in the border region. However, the bill would lead to a reduction in investment outside the 200 mile region.
- o Generally, U.S. workers in the border region are likely to experience an increase in income and employment opportunities.
- o Landowners within the 200 mile area would benefit. As firms expand, the demand for land by firms would increase, increasing rents.
- o The bill may lead to an inefficient allocation of resources. Since the tax abatements would act as a subsidy to firms located within the 200 mile region, firms would be rewarded and encouraged to expand on the basis of geographical location rather than economic efficiency. They also would be rewarded on the basis of their willingness to share equity with Mexican investors.

The bill raises a number of important questions for Mexico. First, what impact will a program that consists principally of tax abatements have on Mexico's efforts to resolve its present fiscal crisis? Second, a major objective of the bill is to encourage the inflow of capital, particularly U.S. capital, into the border region. There is some evidence that equity-sharing provisions discourage U.S. investors. Most observers argue that the recent relaxation of the equity requirements by Mexico has been instrumental in attracting U.S. investors to the border region.

The bill may have the following effects on Mexico.

- o The proposal may intensify the infrastructure problems that currently plague border cities in Mexico. At the same time the Government is to be asked to reduce taxes, greater demands will be placed on already over burdened roads, public utilities, schools, and other public services.
- o The bill may facilitate and promote capital flight from Mexico to the United States, since to be eligible for the bill's trade and tax incentives, U.S. firms must sell at least 35 percent of their equity to Mexican citizens. To do so, the Mexican Government must relax its controls on capital outflows.

## Increasing the number of FTZ's along the border .

Overview.--During the hearings, it was proposed that the number of FTZ's along the border be increased to stimulate trade between Mexico and the United States. It was argued that such zones would also generate benefits for border area communities.

<u>Comment.</u>.--Fourteen border ports of entry are eligible for FTZ's: three are located in Texas, one in New Mexico, and five each in Arizona and California. However, virtually all of these ports in Texas, New Mexico and Arizona are located in isolated rural areas with very small populations and

none has a city of any size located across from it in Mexico. Since the zones in the border area exist primarily to facilitate cross-border trade, the absence of an adjacent large city in Mexico reduces the likelihood of new zones in these ports.

Of the five border ports of entry in California, San Diego and Calexico are the most promising. San Ysidro could have promise also. San Diego and San Ysidro are across the border from Tijuana, Mexico, and Calexico is across the border from Mexicali, Mexico. Both of these Mexican cities have large concentrations of maquiladora plants, which suggests that a large potential might exist for U.S. firms to take advantage of FTZ benefits in connection with their plant operations in Mexico. Experience in other zones along the border suggests that the success of any new zones and their contribution to economic activity and job creation will be dependent upon the prior existence of economic activity such as the existence of the maquiladoras and the utilization of the provisions of TSUS items 806.30 and 807.00.

# Methodology for estimating the level of imports from the border and nonborder regions of Mexico under various U.S. trade policies

The figures given in this repor on U.S. imports from the border region of Mexico were based on data supplied by Direccion General Estadistica, Instituto Nacional de Estadistica, Geografia e Informatica. Such data included production statistics for broad categories of products for border and nonborder Mexican regions. Also, information was gathered from analysts, other Government agencies (such as the U.S. Department of Agriculture), Mexican officials, and knowledgeable industry persons. Nevertheless, the reader is cautioned that even though every effort was made to calculate such imports, the results remain estimates.

# ECONOMIC EFFECTS OF UNITED STATES-MEXICO TRADE ON U.S. BORDER COMMUNITIES

The purpose of this section is to examine the economic effects of U.S.-Mexican trade on U.S. border communities.  $\underline{1}$ / It is divided into two parts. Part one focuses on the importance of intraregional trade, i.e., commodity flows between U.S. border communities and their contiguous Mexican cities. This trade consists primarily of sales by the retail, wholesale, and services sectors to Mexican consumers and of purchases of tourist services in Mexican border communities by Americans. The importance of these flows is illustrated by reviewing the impact of the peso devaluation on the economies of the U.S. border communities. The second part of the analysis examines the effect of extraregional or total U.S.-Mexican commodity and factor flows on U.S. border communities. The former are commodity and service flows whose origin or destination may be external to the region, whereas the latter is the movement of capital and labor between the two countries. Included is an extensive discussion of the maquiladora program, consisting of trade-related investment flows, and a brief discussion of Mexican immigration to the United States.  $\underline{2}$ / This section begins by defining the border region (also see appendix D) and by providing a brief overview of the economic linkages between twin cities.

## Definition of the Region

In this study the "Border" refers to the demarcation line separating the United States and Mexico. This international border extends 1933 miles from the Pacific Ocean to the Gulf of Mexico. On the U.S. side, it touches the states of California, Arizona, New Mexico, and Texas; on the Mexican side, it touches the states of Baja California, Sonora, Chihuahua, Coahuila, Nuevo Leon, and Tamaulipas. (This area is depicted in Figure 1.) The 25 counties on the U.S. side of this demarcation line define the U.S.-border region, 3/ and the 35 "municipios" that lie adjacent to the border on the Mexican side define the Mexican-border region. 4/ "Borderlands" refers to the area

<sup>1/</sup> The border region's economic history, the social and demographic characteristics of its population, and the structure of its economy are discussed more extensively in appendix E.

<sup>2/</sup> Appendix H contains an exercise that illustrates the economic interdependence of the border communities by calculating the effect of Mexican maquiladora investment on the level of economic activity in U.S. twin cities.

<sup>3/</sup> This is the definition used in Robert R. Nathan Associtates, <u>Industrial</u> and <u>Employment Potential of the United States-Mexico Border</u>, Washington, D.C., U.S. Department of Commerce, Economic Development Administration, 1968.

<sup>4/</sup> James Peach, Demographic and Economic Change in Mexico's Northern Frontier: Evidence from the X Censo General de Poblacion y Vivienda, New Mexico State University, November 1984. Professor Peach used this definition in his demographic and economic study of Mexico's northern border. In addition to the municipios adjacent to the border, the municipio of Ensanada is included in the definition since it is traditionally included in studies of the border region. The Mexican municipios or municipalities are more similar conceptually and geographically to counties in the United States than to what is generally thought of as a municipality in the United States.

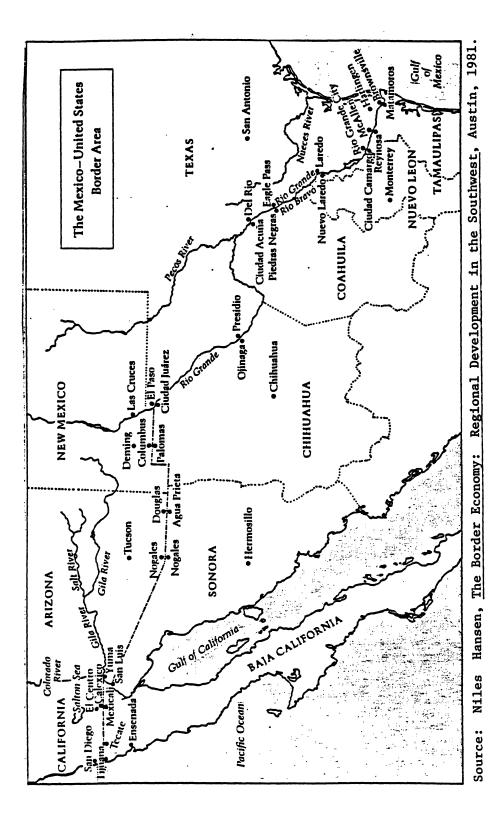


Figure 1.--United States-Mexico border area

surrounding the border region and is defined as the states on both sides of the border.  $\frac{1}{2}$  (This area is depicted in Figure 2.)

### Description of Economic Linkages between Twin Cities

The twin cities that are adjacent to each other on opposite sides of the United States-Mexico border play an important economic role in the border region. 2/ In most cases, the twin cities are the centers of economic activity for their respective subregions. The main economic activity of the twin cities centers on processing the flow of goods and persons between the two countries. One consequence of this flow is that over time the twin cities have developed a symbiotic relationship. This interdependence has also generated much scholarly research. (See the references listed in the bibliography.) Some of the characteristics of the economic linkages are described below.

2/The 14 twin city communities are:--

- (1) San Diego-San Ysidro, CA / Tijuana, Baja California
- (2) Calexico, CA / Mexicali, Baja California
- (3) Yuma-San Luis, AZ / San Luis Rio Colorado, Sonora
- (4) Nogales, AZ / Nogales, Sonora
- (5) Douglas, AZ / Agua Prieta, Sonora
- (6) Columbus, NM / Palomas, Chihuahua
- (7) El Paso, TX / Ciudad Juarez, Chihuahua
- (8) Presidio, TX / Ojinaga, Chihuahua
- (9) Del Rio, TX / Ciudad. Acuna, Coahuila
- (10) Eagle Pass, TX / Piedras Negras, Coahuila
- (11) Laredo, TX / Nuevo Laredo, Tamaulipas
- (12) Rio Grande City, TX / Camargo, Tamaulipas
- (13) Hidalgo-McAllen, TX / Reynosa, Tamaulipas
- (14) Brownsville, TX / Matamoros, Tamaulipas

The twin cities are listed in geographical order from west to east. With the exception of the San Diego-Tijuana twin city, all of the Mexican cities are larger than their U.S. counterparts. On the whole, the majority of economic activity centers in the twin cities of San Diego-Tijuana, El Paso-Juarez, McAllen-Reynosa, and Brownsville-Matamoros.

<sup>1/</sup> There is no agreement among policymakers or scholars on how to define the border region. The definition used in this study was chosen on the hypothesis that those areas immediately adjacent to the border are the ones most strongly influenced by its location. See Kenneth Nowotny and James Peach, "The Economics of Border Areas," <u>Teaching about International Boundaries</u>, Las Cruces, October 1985, and Appendix D for a more detailed discussion of this issue.

25. Cameron Maverick 24. Hidalgo Dimmit 22. Zapata 21. Webb 23. Starr **TAMAULIPAS** UNITED STATES COUNTIES 13. Jeff Davis 14. Presidio 16. Terrel 17. Val Verde 5. Brewster 18. Kinney COAHUILA 7. Hidalgo 8. Luna 9. Doña Ana 11. Hudspeth 12. Culberson O. El Paso 3 20 8 **NEW MEXICO** 1. San Diego
2. Imperial
3. Yuma
4. Pima
5. Santa Cruz
6. Cochise 26. Anshuac 27. Nuevo Laredo 28. Guerrero 29. Mier 30. Miguel Alemán 31. Camargo 32. Reynosa 33. Rio Bravo 34. Valle Hermoso 35. Matamoros CHIHUAHUA Guerrero 25. Hidalgo MEXICO MUNICIPIOS SONORA 14. Janos 15. Ascensión 16. Juárez 17. P.G. Guerrero 18. Guadalupe 19. Ojinaga 22. Jiménez 23. Piedras Negras ARIZONA 13. Agua Prieta 20. Ocampo 21. Acuña CANTOGRAPHIC LAB CALIFORN Puerto Peñasco NEW MEXICO STATE UNIVERSITY San Luis R.C. Santa Cruz Cananea CALIFORNIA 3. Mexicali Caborca Nogales Tijuana 2. Tecate 8. Saric 12. Naco 7. Altar

Figure 2.--U.S. border counties and Mexican muncipalities

The cities provide an important link between the economies of Mexico and the United States since a large portion of import and export traffic between the two countries passes through the customs districts of the twin cities. Because of the difficulty of shipping goods from seaports on Mexico's eastern coast, many Mexican firms prefer to transport their products overland to the U.S. side of the border, then ship their products from the Port of Brownsville. The most recent statistics for U.S. Mexico trade (presented in table 1) indicate that approximately 55 percent of Mexican exports to the United States in 1984 entered through border ports of entry. The largest border port, in terms of the value of imports from Mexico, is El Paso. In addition, the border region has become an important tourist destination for the residents of both countries. For instance, in 1985, expenditures by Mexican tourists accounted for 17 percent of total expenditures by foreign tourists in the United States. Of this amount, over half were made in the border region. 1/

On a regional level, a flow of income has evolved between the twin cities where income is passed from the U.S. side to the Mexican side in the form of wages and then is returned to the U.S. side in the form of cross-border

Table 1.--Customs value of U.S. imports from Mexico, by border ports of entry, 1984

(In dollars)

Port of entry	Customs value	No. of entries
El Paso	\$2,225,445,897	99,450
Laredo	2,114,686,151	97,698
Brownsville		44,808
Nogales	1,042,517,807	111,622
Hidalgo		50,780
San Ysidro	770,676,616	112,072
Eagle Pass	514,374,430	11,767
Calexico	497,039,319	63,159
San Diego	263,179,186	23,893
Douglas	142,708,098	11,773
Del Rio	71,254,478	5,082
Total		.,
from Mexico	\$18,020,000,000	

Source: Letter of July 7, 1986, U.S. Customs Service, Commercial Compliance Division; total obtained from U.S. Department of Commerce, Bureau of the Census, Highlights of U.S. Export and Import Trade, FT990, December 1985.

<sup>1/</sup> U.S. Dept. of Commerce, Survey of Current Business, May 1986.

purchases by Mexican consumers. 1/ Indeed, for many of the U.S. cities, such as Calexico, CA; Nogales, AZ; and Laredo, TX, these cross-border purchases account for a major portion of retail sales.

Another important factor in the economies of some twin cities is the existence of the maquiladoras. These are assembly plants that are mostly owned and managed by U.S. firms and are located in the Mexican twin city to take advantage of Mexico's lower wages. The firms have also been attracted by changes in the tariff schedules of both countries. For instance, maquiladoras are allowed to import U.S.-made raw materials into Mexico duty free and then re-export the finished products to the United States where duty is paid only on the value added in Mexico. That portion of the product's value derived from using U.S.-made components is exempt from duties. Many analysts believe that the maquiladoras present the greatest prospect for the future growth of twin cities along the border.

Another important and particularly controversial factor is the effect of undocumented migration to the United States by Mexican nationals. Although the legal (possessing green cards) daily crossing of Mexican nationals to work in the U.S. twin city is a permanent feature of the twin city economies, the implications of Mexican illegal immigration are major issues under debate for the United States as a whole and for the U.S. border region in particular. Because such immigration is comparable with an increase in the resource base of the United States, it can under certain conditions contribute to U.S. national income. In addition, partial data indicates that illegal immigrants contribute more in tax payments than the cost associated with their using free social services (with the possible exception of education). Yet, illegal immigrants do have certain distributional consequences. For instance, if U.S. communities along the border provide such public services as health care and education without receiving a proportionate share of the tax contributions made by such immigrants, then it is argued that by bearing a disproportionate share of the costs, the counties provide a subsidy to the Federal Government. In addition, the presence of undocumented workers may reduce wage and job opportunities for those Americans who directly compete with them in the unskilled labor market.

#### Description of Border Intraregional Commodity Flows

This analysis of the border region commodity markets is divided into two sections. The first section describes the retail, wholesale, and services sectors, emphasizing the importance of the sectors for the border communities in terms of number of establishments and employment generated. The second examines the importance of the Mexican consumer to the economies of the border cities of each State.

<sup>1</sup>/ The flow of goods and services between the two countries has been facilitated by the cultural as well economic overlap of the two regions (culturally, both sides of the border form a near homogeneous region).

#### Importance of cross-border expenditures

Retail trade and service industries.--The retail and wholesale trade and selected services sectors are important to the economies of the U.S. border region both in terms of number of establishments and employment. (For data, see tables in app. E). For instance, in 1980, trade and services provided almost 50 percent of the employment opportunities in the border region. The establishments were concentrated in the major population centers of San Diego County (CA), Pima County (AZ), El Paso County (TX).  $\underline{1}/$ 

Mexican expenditures in U.S. border communities.—Businesses in the border region are dependent upon sales to Mexican consumers as well as U.S. consumers. Mexican consumers can be categorized into three basic types. The first are Mexicans who live in neighboring cities along the border and shop regularly in the United States. The majority of their expenditures are for retail goods, services, and real estate. The second are Mexican tourists from the interior of Mexico visiting the United States. The third are runners or brokers who do not formally import from Mexico, but have well-established credit relations between Mexican customers and U.S. stores that serve as their source of supply. 2/ This section focuses on the first two types of Mexican consumers because of their cross-border shopping and tourist expenditures, and because these expenditures, in terms of size, make a more important contribution to the economies of U.S. border communities.

Border commerce is certainly important for Mexican consumers. This is illustrated by the fact that border area purchases by Mexicans are significantly larger than total Mexican tourist expenditures abroad. (See table 2.) In fact, as illustrated in table 3, Mexican border purchases in the U.S. border have exceeded similar expenditures by foreigners in Mexico in each of the last six years.

Mexican purchases of U.S. goods are motivated by a number of factors. It is widely believed that Mexican consumers consider goods made in the United States to be higher in quality, more diverse, and lower priced than similar products made in Mexico. 3/ For instance, Helena Bordie estimated that 40 to 75 percent of Mexican expenditures abroad in 1979 occurred in the United States primarily because of the superiority of U.S. processed goods. 4/ Mexican consumer choices are restricted in Mexico because of the lack of

<sup>1/</sup> Jerry R. Ladman, "The U.S. Border Regional Economy: Interdependence, Growth, and Prospects for Change," <u>Views Across the Border</u>, Albuquerque, NM, University of New Mexico Press, 1985.

<sup>2/</sup> Niles Hansen, The Border Economy: Regional Economy in the Southwest, Austin: University of Texas Press, 1981.

<sup>3/</sup> Op. cit., Martinez. Statement by Dr. Gilbert Cardenas, McAllen transcript at 207. Statement by Michael Herrera III, McAllen transcript at 232.

<sup>4/</sup> Helena Robin Bordie, "The Effect of the 1982 Peso Devaluations on Retail Sales in El Paso, Texas," Congressional Hearings on the Impact of Peso Devaluations on U.S. Small Business and Adequacy of SBA's Peso Pack Program, May 20, 1983, pp. 442 and 443.

Table 2.--A comparison of Mexican spending in the U.S. border area and Mexican expenditures abroad, 1979-84

	Mexican spending	Mexican tourists
	in the U.S. border	spending abroad
Year	area	
	Millions of	Millions of
	dollars	dollars
1979	\$2,246	\$ 684
1980	2,018	1,043
1981	2,493	1,571
1982	1,421	788
1983	1,141	441
1984	1,520	646

Source: Banco de Mexico.

Table 3.--Border transactions in the border area, 1979-84

	Foreign spending	Mexican spending
	in Mexico's border	in the U.S. border
Year	area	area
	Million	<u>Million</u>
•	dollars	dollars
1979	\$2,919	\$2,246
1980	1,520	2,018
1981	1,559	2,493
1982	1,237	1,421
1983	1,104	1,141
1984	1,329	1,520

Source: Banco de Mexico.

retail development in Mexican border towns.  $\underline{1}/$  Some Mexicans have also developed a preference for food products that are only available on the U.S. side.

The importance of sales to Mexican consumers by U.S business along the border, and in turn for employment, is illustrated by the following data for several of the larger U.S. communities along the border. The four largest Texas communities along the United States-Mexico border are El Paso, Brownsville, Laredo, and McAllen. Twenty-five percent of El Paso's labor

<sup>1/</sup> Statement by William L. Mitchell El Paso transcript at 38. In their statements, William L. Mitchell and Dr. Cardenas also emphasized the effect of inflation on Mexican's consumption of U.S. goods.

force is employed in wholesaling and retailing. Thirty-seven percent of total sales in these sectors is estimated to have been purchases by Mexicans; the percentage is even larger for businesses located closer to the border.  $\underline{1}/$  For example, for some of El Paso's downtown merchants, 90 percent of their sales were to Mexicans.  $\underline{2}/$ 

Like the retail sector, El Paso's health and tourist industries are also dependent on expenditures by Mexicans crossing the border. Mexican nationals comprise 20 to 50 percent of the clientele of El Paso's physicians and dentists. 3/ In the case of tourism, for the county of El Paso in 1983, total travel expenditures (consisting of transportation expenditures, food, and entertainment) were estimated to have generated 7,371 jobs and a payroll of \$73 million. Although, no estimates exist of the percentage of travel expenditures in El Paso attributable to Mexicans, it is believed to be significant. Mexicans are important contributors to the tourist trade in El Paso through expenditures on hotels and restaurants. 4/

Brownsville is the second largest Texas border city. Mexican expenditures prior to the 1982 devaluations accounted for about 68 percent of Brownsville's retail sales. The real estate sector prior to 1982 also depended on Mexican purchases; 40 percent of the condominiums on South Padre Island located off the coast near Brownsville were bought by Mexican nationals. 5/ Tourism is also an important source of income for Brownsville. For Cameron County, which includes Brownsville, total travel expenditures were \$293,272 in 1983. An estimated 6,824 jobs were generated in the county by these expenditures. Industry officials believe that tourist expenditures in Brownsville are significant, although no precise estimates are available.

The economies of two other Texan cities, Laredo and McAllen, also rely heavily on Mexican expenditures. In Laredo, in 1982, Mexican consumers bought 80 percent of the goods sold by Laredo retailers. 6/ Through the payment of city sales taxes, Mexican purchases of retail goods also provided one-half of the city government's revenues. During the same period, Mexican consumers were also important consumers in the Laredo housing market, accounting for 70 percent of the \$34 million in purchases in the Laredo housing market. 7/ In

<sup>1/</sup> The estimate is inferred from the drop in retail sales that resulted from the 1982 peso devaluation. Congressional hearings, p. 354.

<sup>2/</sup> Op. cit., Bordie, p. 476.

<sup>3/</sup> Ellwyn Stoddard, "Manifesto and Latent Consequences of Mexico's Economic Policies," Presented to the Academy of International Business, Mar. 18, 1983.

<sup>4/</sup> Texas Tourist Development Agency, Texas County Travel Economic Model, 1983

<sup>5/</sup> Niles Hansen, "The Nature and Significance of Border Development Patterns," The U.S. and Mexico: Borderland Development and the National Economies, Boulder and London: Westview Press, 1985, p. 7.

<sup>6/</sup> Robert Bullock, "The Effects of the Mexican Peso Devaluations on the Texas Economy," Fiscal Notes 1983, Congressional Hearings on the Impact of Peso Devaluations on U.S. Small Business and Adequacy of SBA's Peso Pack Program, May 20, 1983.

<sup>7/</sup> Phillip N. Diehl, "The Effects of the Peso Devaluations on Texas Border Cities," Texas Business Review, May/June 1983, pp. 120-125.

McAllen, 30 percent of total retail sales were made to Mexican consumers. According to testimony presented at the hearings, most of McAllen's hotels and its tourist industry are dependent on Mexican tourists.  $\underline{1}$ / Construction in the lower Rio Grande Valley, which includes McAllen and Brownsville, was also dependent on Mexican purchases of building permits.  $\underline{2}$ /

Mexican expenditures are also important for Arizona's border economy. In 1981, total Mexican expenditures in Arizona were estimated at \$622 million, a 20.3-percent increase above the 1980 estimate. In 1981, \$603.34 million or 97 percent of total expenditures were spent in border counties. Nearly one-half of Mexican expenditures were made in Nogales and surrounding areas. The second largest share of Mexican expenditures, \$154 million, were spent in the Yuma area. 3/

Table 4 presents a breakdown of Mexican expenditures by category. The largest category was retail trade, excluding gasoline, which accounted for \$284 million in sales, or 45.6 percent of total Mexican expenditures. Business purchases, including supplies and inventory, accounted for \$140 million, or 22.5 percent of the total. Other expenditures by Mexicans included groceries, transportation, medical expenses, and recreation.

The majority of Mexicans purchasing goods and services in Arizona's border region cross over daily to Arizona's border communities. In 1977, 78 percent of Mexican expenditures were by residents in Sonora.

Table 5 provides information on Mexican expenditures in 1981 in each of Arizona's border counties by type of expenditure. The majority of Mexican expenditures in Arizona's border region were accounted for by the retail and food sector. In Santa Cruz and Cochise Counties, at least one-half of Mexican expenditures were for retail goods. In Santa Cruz County, 62 percent of Mexican expenditures were spent in the retail sector. The second largest category, purchase of food, was 14.4 percent. In Yuma, 25 percent of Mexican expenditures were on food and 24 percent on retail goods. In Pima County, 126.7 percent of total expenditures were accounted for by the retail trade sector, 12 percent by food. In Cochise County, 49.8 percent of the Mexican expenditures were on retail trade, whereas food was the second largest category, comprising 23.4 percent of Mexican expenditures in Cochise County.

<sup>1/</sup> Statement on behalf of McAllen's Chamber of Commerce, McAllen Transcript at 162.

<sup>2/</sup> Niles Hansen, p. 7.

<sup>3/</sup> Analysis of Mexican expenditures is based on a study done by Dr. Nat De Gennaro in 1977 to assess the effect of Mexican expenditures on Arizona. This study has been used to make estimates of Mexican expenditures in subsequent years. The extensions through 1982 are based on secondary data such as border crossings and vehicle counts. Also, it is assumed that the quantity purchased remains the same for each Mexican party so that the only factors assumed to affect total expenditures by Mexicans are the total number of Mexicans crossing the border and inflation. The study understates Mexican expenditures since it does not include Mexican expenditures over \$4,000 because these expenditures were difficult to assess using survey methods.

Table 4.--Estimated expenditures of Mexican visitors to Arizona by type of purchase, 1981

(In thousands of dollars) Total expenditures Percentage of Type of purchase in each category total expenditures Lodging..... 17,779 2.9 17.3 Food..... 107,646 Transportation................. 25,380 4.1 Retail trade..... 283,690 45.6 2.3 Medical or health..... 14,187 Business expenditures..... 140,074 22.5 Other..... 33,639 5.4

Source: Division of Economic and Business Research, College of Business and Public Administration, University of Arizona.

Table 5--Estimated expenditures of Mexican visitors in border counties, by types of expenditures, 1981

(In thousands of dollars)							
Border country	Lodging	Food	Transpor- tation	Retail trade	Medical or health	Business expendi- tures	Other
Santa Cruz Yuma Pima Cochise	1,262	42,814 38,714 11,521 13,240	9,300 8,428 5,270 1,722	185,309 8,479 25,714 28,252	2,709 77 8,030 3,324	43,707 61,200 25,229 9,224	12,305 6,184 7,176 877

Source: Division of Economic and Business Research, College of Business and Public Administration, University of Arizona.

In contrast to Texas and Arizona, the degree of interaction between New Mexico and Mexico is small. New Mexico's economic base consists primarily of copper mining and U.S. defense facilities. Border towns are relatively small in size. Las Cruces, the largest city, is dependent on El Paso for communication services and some goods. The lack of any major border crossing points between New Mexico and Mexico is also an indication that the level of interaction is lower.

In California, there are two border counties, San Diego and Imperial. Restaurants, tourist facilities, new shopping malls, and retail businesses cater to Mexican consumers. In San Diego County in 1983, it was estimated that 4.4 percent, or \$51.0 million, of San Diego County's shopping center sales were to Mexicans. The importance of Mexican expenditures varies in San Diego County's shopping areas. Like business in El Paso, the volume of sales to Mexican nationals varies directly with the distance of the shopping areas from the border. In San Ysidro, one of San Diego County's four major shopping areas closest to the border, 49.2 percent of retail sales were to Mexican

nationals. By contrast, in downtown La Jolla, another shopping area further from the border, only 6.6 percent of La Jolla's retail sales were to Mexican nationals.  $\underline{1}/$ 

The largest city in Imperial County is Calexico. Calexico's economic activities operate to serve its Mexican twin city, Mexicali. Retailers indicate that sales to Mexican nationals are important. 2/

# The Effect of peso devaluations on the border region economy

The dependence of U.S. border communities on expenditures by Mexican consumers was illustrated by the abrupt decrease in Mexican purchases that occurred after the peso devaluations in 1976 and 1982. The peso devaluations caused a decrease in border communities' total sales, with retail sales being the most affected. The decrease in Mexican purchases also had a depressing effect on other sectors of the border economy. Hotel occupancy rates fell sharply. Real estate sales declined and new construction, such as condominiums purchased by Mexican tourists as vacation homes, was halted or postponed. U.S. banks and credit-retail establishments also found that many Mexican consumers were unable to repay loans that were denominated in dollars. In addition to decreases in city sales tax revenue associated with the overall decline in the level of economic activity, city government funds also fell as a result of a decline in international bridge receipts. The decrease in economic activity along the U.S. border was reflected most by the decline in employment. 2/

The following section discusses the relationship between inflation and the peso devaluation and the impact of the 1982 devaluation on U.S. border cities.

<u>Inflation rates and the peso devaluation.</u>--The exchange rate between two countries is determined by several factors. The determinants range from a difference in the current account balance to real-interest-rate differentials between two countries. 4/ However, in the long run, the exchange rate is

<sup>1/ &</sup>quot;Impact of the Peso Devaluation in Retail Sales in San Diego County," San Diego Economic Profile, 1984.

<sup>2/</sup> Op. cit., Congressional hearings, p. 348.

<sup>3/</sup> Carlos E. Restrepo, "The Effects of the Mexican Peso Devaluation on the Mexican Northern Border Regions," <a href="Executive Form">Executive Form</a>, spring 1983, <a href="Congressional Hearings">Congressional Hearings</a> on the Impact of Peso Devaluations on U.S. Small Business and <a href="Adequacy of SBA's Peso Pack Program">Adequacy of SBA's Peso Pack Program</a>, May 20, 1983, p. 376

<sup>4/</sup> Alberto E. Davila, Ronald H. Schmidt, and Gary M. Ziegler, "Industrial Diversification, Exchange Rate Shocks, and the Texas-Mexico Border," Economic Review, Federal Reserve Bank of Dallas, May 1984.

expected to reflect the difference in price levels between the two countries. 1/

From 1954 until 1976, the Mexican Government pegged the exchange rate at 12.5 pesos to the dollar. However, during this period, inflation was relatively higher in Mexico than the United States, especially during the early 1970's. Specifically, wholesale prices in Mexico increased by 3 percent in 1972, 16 percent in 1973, and 22 percent in 1974, whereas producer prices in the United States increased by 3.8 percent in 1972, 11.8 percent in 1973, and 18.3 percent in 1974. As a result, the peso was overvalued during this 22-year period. 2/

The overvalued peso allowed Mexican consumers to purchase more U.S. goods and services at the official exchange rate than would have been possible if the peso had been allowed to float freely, or had been set at an equilibrium rate. The overvalued peso acted as an indirect subsidy to Mexican consumers for the purchase of U.S. goods and services. Because the nominal exchange rate did not adjust more frequently to reflect the true value of the peso, the subsidized Mexican purchases provided an incentive for U.S. firms along the border to overallocate resources into wholesale and retail trade with Mexico.

<sup>1/</sup> The relationship between nominal exchange rates and differences in national inflation rates can be illustrated as follows. For two countries, A and B, assume that country A experiences an increase in its price level (for example, because of an increase in rate of growth of its money supply). Country B, on the other hand, experiences no change in its price levels. Although the purchasing power of a unit of A's currency has decreased in terms of domestic goods, it has risen in terms of foreign goods. A's residents are then induced to purchase goods and services from B. Under a flexible exchange rate, the increased demand for B's, goods and services would cause A's exchange rate to depreciate relative to B's and the initial balance between the real purchasing power of each currency would be restored. However, if A's government maintains a pegged exchange rate, then residents of A can continue to purchase B currency at preinflationary prices. In real terms, A's currency continues to be overvalued. By maintaining the overvalued exchange rate, A's government is in effect providing its citizens an indirect subsidy on purchases of goods and services from B. A similar situation existed for 22 years along the United States-Mexico border prior to the 1976 and 1982 devaluations. Change and Challenge in the World Economy, New York, St. Martin's Press, 1985, ch. 7.

<sup>2/</sup> Between 1956 and 1970, wholesale prices increased by 52 percent in Mexico compared with an increase of 26 percent in the United States. Between 1956 and 1967, the peso appreciated in real terms by 17 percent relative to the dollar, and the nominal exchange rate remained fixed. See Bela Balassa, Change and Challenge.

<sup>3/</sup> Davila, et al., "Industrial Diversification, Exchange Rate Shocks, and the Texas-Mexico Border," <a href="Economic Review"><u>Economic Review</u></a>, May 1984, pp. 1-9.

Between 1971 and 1974, the Mexican real exchange rate increased by 4 percent relative to the dollar. In 1975, as a result of a continued Mexican inflation rate which was high relative to inflation in the United States, the Mexican real exchange rate (relative to the dollar) appreciated by 5 percent. During April-June 1976, it appreciated another 13 percent. Unable to support the pegged exchange rate, the Mexican Government devalued the peso by setting the nominal rate at 20 pesos to the dollar on September 1, 1976. A second devaluation took place a few months later. 1/ Overall, the peso was devalued by 45 percent in terms of the dollar in 1976. 2/ (See table 6.)

Table 6.--U.S.-Mexican exchange rates  $\underline{1}/:$  Nominal-exchange-rate equivalents of the Mexican peso in U.S. dollars, real-exchange-rate equivalents, and producer price indicators in the United States and Mexico,  $\underline{2}/$  indexed by calendar year, 1975-85

		(1975 <del>-</del> 100)		,
Year	U.S. Producers Price Index	Mexican Producers Price Index	Nominal- exchange- rate index	Real- exchange- rate index 3/
	11100 1110011	11100 1110011		er Mex\$
1975	100.0	100.0	100.0	100.0
1976	104.6	122.4	81.2	94.8
1977	111.1	172.4	55.4	85.9
1978	119.7	199.7	54.9	91.6
1979	133.9	236.2	54.8	96.2
1980	153.6	294.1	54.5	104.3
1981	167.6	365.9	51.0	111.3
1982	171.0	571.2	22.2	74.0
1983	173.1	1,184.4	10.4	71.2
1984	177.3	2,017.6	7.4	84.8
1985		4/ 2,922.4	4.9	<u>4</u> / 80.6

<sup>1/</sup> Exchange rates expressed in U.S. dollars per Mexican peso.

Source: International Monetary Fund, <u>International Financial Statistics</u>, May 1981 and March 1986.

<sup>2/</sup> Producer price indicators--intended to measure final product prices--are based on average quarterly indexes presented in line 63 of <u>International Financial Statistics</u>.

<sup>3/</sup> The real value of a currency is the nominal value adjusted for the difference between inflation rates as measured here by the Producer Price Index in the United States and Mexico. Producer prices in the United States increased 6.8 percent during the period January 1981 through September 1985 compared with an 850.3-percent increase in Mexico during the same period.
4/ Derived from Mexican producer price data for January through September only.

<sup>1/</sup> Bela Balassa, Change and Challenge.

<sup>2/</sup> Louis Harrell and Dale Fischer, "The 1982 Mexican Peso Devaluation and Border Area Employment," The Monthly Labor Review, December 1985.

The abrupt peso devaluation in 1976 caused a severe economic shock to the U.S. border-region communities. In effect, the devaluation eliminated the indirect subsidy to firms on the U.S. side of the border. As U.S. goods and services became prohibitively expensive for Mexican consumers, cross-border shopping on the part of Mexicans decreased dramatically.  $\underline{1}/$  The economic impact was severe enough to qualify some of the U.S. border counties for Federal economic disaster aid.  $\underline{2}/$ 

The fall in U.S. border-region income caused by the peso devaluation in 1976 was relatively short term as Mexican consumers resumed cross-border shopping. The return of Mexican consumers was the result of the following two factors: (1) an increase in disposable income attributed to economic growth in Mexico, 3/ and (2) Mexican inflation rates that continued to remain higher than inflation rates in the United States. The peso again became overvalued. Wholesale prices in Mexico increased by 16 percent in 1977 and 1978, 18 percent in 1979, 24 percent in 1980, and 25 percent in 1981. 4/ In comparison, producer prices in the United States increased by 6.9 percent in 1977, 9.2 percent in 1978, 12.8 percent in 1979, 11.8 percent in 1980, and 7.1 percent in 1981. 5/ Since the nominal exchange rate was pegged in the range of 22.5 to 26.2 pesos to the dollar, the peso appreciated (relative to the dollar) by 29 percent between 1977 and 1981. 6/

- (1) least affected: San Diego, CA, and Tucson, AZ
- (2) partially affected: Douglas, AZ; and, El Paso and Del Rio, TX
- (3) moderately affected: San Ysidro and Calexico, CA and McAllen, TX
- (4) most affected: Nogales, AZ, and Eagle Pass, Laredo, Hidalgo, and Brownsville, TX

See Ellwyn Stoddard and Jonathan P. West, <u>The Impact of Mexico's Devaluation</u> on Selected U.S. Border Cities, Tucson, AZ, SW Borderlands Consultants, 1977.

<sup>1/</sup> A 1977 study of the impact of the 1976 peso devaluation on 11 U.S. border cities found that, after the peso devaluation, cross-border purchases by Mexican consumers fell dramatically in all cities. Cities whose unemployment rates were affected most adversely were more dependent on cross-border purchases by Mexican consumers. The study classified the border communities according to the impact of the devaluation:

<sup>2/</sup> Harrell and Fischer, "The 1982 Mexican Peso Devalutation."

<sup>3/</sup> During the 1960's, Mexican Gross Domestic Product increased 7 percent annually. During much of the 1970's, Mexican (GDP) increased by over 6 percent per year. However, with the discovery of vast deposits of oil, GDP increased by over 8 percent annually between 1978 and 1981. See James D. Rudolph, Mexico: A Country Study, Washington DC, 1985.

<sup>4/</sup> Bela Balassa, Change and Challenge in The World Economy, New York, St. Martin's Press, 1985, ch. 7.

<sup>5/</sup> U.S. Department of Labor, Bureau of Labor Statistics.

<sup>6/</sup> Balassa, Change and Challenge.

During this period, the U.S. border retail and wholesale trade sector began to recover because of the increase in cross-border shopping by Mexican consumers, who were spurred by increases in their disposable income and the overvalued peso. 1/ However, the border region was buffeted again when the peso was abruptly devalued in 1982. Until 1982, Mexico supported the overvalued peso through oil revenues and foreign borrowing. 2/ However, in 1982, Mexican oil revenues declined as world oil prices fell. To remedy the resulting trade imbalance and to obtain sufficient foreign exchange to service its foreign debt, Mexico devalued the peso by 30 percent in February 1982. Because of the peso devaluation, the equivalent peso price of U.S. goods and services increased by 70 percent for Mexican cross-border shoppers. During this period, all but two Texas border communities experienced decreases in retail sales relative to those in the previous year.

Unable to obtain sufficient foreign exchange to service its debt and unable to adjust its trade imbalance, Mexico again devalued the peso by an additional 75 percent in August 1982. A two-tiered exchange rate was implemented where customers buying pesos with dollars were given 69.5 pesos for each dollar, and limited amounts for certain Government-sanctioned purposes were allowed for purchase at the rate of 49.5 pesos to the dollar. However, even after this devaluation, the peso remained overvalued. 3/

With a continuing inflation rate of more than 100 percent per year, the differential in the official exchange rate and the unofficial market exchange rate remained. For example, by exchanging dollars for pesos on the U.S. side of the border rather than on the Mexican side, U.S. tourists traveling to Mexico were able to obtain 15 to 30 more pesos to the dollar. In an attempt to regain Mexican customers, U.S. retailers accepted pesos at above-market rates, thus absorbing exchange losses when the pesos were deposited in U.S. banks. During this period, Mexico acquired almost no dollars, whereas U.S. banks were flooded with pesos. U.S. banks eventually refused to accept additional pesos. On the Mexican side of the border, the inability of Mexico to acquire dollars and the lack of peso-dollar convertibility made it extremely difficult for Mexican manufacturers to import components and raw materials from the United States. In many instances, manufacturing operations came to a halt. 4/

Acquiring only 12 percent of the foreign-exchange dollars necessary for trade and debt service, the Mexican Government revised its exchange controls in November 1982. The revised two-tiered exchange structure that resulted allowed border region merchants and money changers to convert pesos for dollars at rates similar to market-determined rates on the U.S. side of the border. However, the exchange rate for the Mexican interior remained fixed at

<sup>1/</sup> The importance of sales for the retail and wholesale trade sector is exemplified by the border city of Laredo, TX. In 1981, Mexican consumers spent \$1.5 billion in Laredo, representing the third highest retail sales in the United States (\$22,000 per person). Louis Harrell and Dale Fischer, "The 1982 Mexican Peso Devaluation and Border Area Employment," The Monthly Labor Review, December 1985.

<sup>2/</sup> Harrell and Fischer, "The 1982 Peso Devaluation."

<sup>3</sup>/ Ibid.

<sup>4/</sup> Ibid.

the official rate of 70 pesos to the dollar. The rule changes allowed Mexico to acquire additional dollars, and thus permitted Mexican manufacturers to resume the purchase of U.S. components and raw materials and Mexican retailers and consumers to purchase U.S. goods.  $\underline{1}/$ 

To summarize, the peso devaluations in 1976 and 1982 were the result of Mexico's inability to maintain a pegged exchange rate as the peso became overvalued relative to the dollar. 2/ Undoubtedly, a flexible exchange rate would have resulted in a less destabilizing change, and the economic impact on U.S. border communities would have been less severe. 3/ Without the distortions created by the pegged exchange rate, fewer resources on the U.S. side of the border would have been allocated to retail and wholesale trade. It is worth noting that many U.S. border communities are attempting to diversify their economies away from wholesale and retail trade with Mexico and towards activities such as manufacturing.

Impact of the 1982 devaluation on U.S. border communities.--As expected, the 1982 devaluation had a dampening effect on economic activity in U.S. communities along the border. However, the effect of the devaluation varied with each border community. The empirical evidence confirms the obvious: border communities with a higher percentage of the labor force employed in the retail and wholesale trade sectors were affected more by changes in Mexican consumer demand than border communities whose economies had a smaller percentage of the labor employed in that sector. Therefore, cities such as San Diego and El Paso, which had a larger share of the labor force employed in the manufacturing sector, experienced smaller percentage increases in unemployment. For instance, unemployment rates for San Diego followed trends similar to the national economy, increasing in the summer of 1981 and then again in late 1982. Conversely, between 1982 and 1983, the unemployment rate for Laredo, whose economy is relatively more dependent on retail trade, increased by more than 2-1/2 times its level of January 1980.

As noted, the border cities whose economies were more dependent on retail sales to Mexican consumers, such as Laredo and McAllen, were injured most by the devaluation. However, the entire border region was affected adversely, although unevenly. Although employment declined in Texas as a whole in 1982, the decline in the Texas border communities was relatively more severe. Table 7 contrasts the employment decline in four Texas border communities to the statewide employment decline. Employment fell 1.6 percent overall for the State, whereas it fell 11.3 percent in Brownsville and 18.8 percent in Laredo.

In addition, the percentage change in unemployment rates in the four border communities also exceeded the percentage change in the unemployment rate for the State. Statewide unemployment increased from 5.9 to 8.5 percent

 $<sup>\</sup>underline{1}/$  Harrell and Fischer, "The 1982 Peso Devaluation."

<sup>2/</sup> Davila, et al., "Industrial Diversification."

<sup>3/</sup> A question that arises is, "Why would Mexico support an overvalued peso?" Although an overvalued exchange rate can also result from a protectionist policy, the pegged exchange rate, coupled with exchange controls, was used by Mexico to support its import substitution development strategy. Balassa presents a succinct discussion of this topic and its implications for Mexico in Change and Challenge, ch. 7.

between 1982 and 1983, an increase of 44 percent, However, unemployment in El Paso, McAllen, Brownsville, and Laredo increased by 45, 46, 55, and 148 percent, respectively. The sharpest increase in unemployment was experienced by Laredo whose unemployment rate increased from 11 percent in 1982 to 27.3 percent in 1983.

Of the four Texas border Standard Metropolitan Statistical Areas (SMSA's), Laredo was the only community to experience a decline in total personal income between 1982 and 1983. (See table 8.) However, total personal income in McAllen increased by only 4.3 percent between 1982 and 1983 as compared with an increase of 9.1 percent between 1981 and 1982. In Brownsville and El Paso, total personal income changed by approximately the same percentage as the previous year.

Personal income earned in the retail sector appears to have been more adversely affected than total income by changes in Mexican expenditures. Except for El Paso, each community experienced a decline in the personal income earned in the retail sector. In El Paso, the increase in income earned in the retail sector was much lower than the preceding year. The most severe decline in the retail income, 23 percent, occurred in Laredo.

Employing data from 1979 and 1984, the Economic Research Bureau of the Greater San Diego Chamber of Commerce examined the effect of the peso devaluation on retail sales in the following four shopping areas in San Diego County: (1) San Ysidro, (2) San Diego central business district, (3) downtown La Jolla, and (4) Seaport Village. 1/ Following the 1982 peso devaluations, the percentage of sales to Mexican nationals fell substantially in each shopping area. (Table 9 presents data on retail sales to Mexican nationals in the four San Diego shopping areas for the period 1979 through 1983.)

Table 7.--Nonagricultural wage and salary employment and percent unemployed in Texas border standard metropolitan statistical areas, January 1982 and January 1983

<u>Item</u>	Brownsville	McAllen	Laredo	El Paso	Texas
Employment					
1982number	65,700	83,150	37,500	170,400	6,271.700
1983number		79,300	30,450	162,900	6,168.700
Decline percent	11.3	4.6	18.8	4.4	1.6
Unemployment Rate		·			
1982number	11.4	14.0	11.0	9.2	5.9
1983number	17.7	20.5	27.3	13.3	8.5
Increasepercent	55.3	46.4	148.2	44.6	44.1

Source: Texas Employment Commission, 1983.

<sup>1/</sup> Harrell and Fischer, "The 1982 Peso Devaluation."

Table 8.--Changes in personal income in Texas border standard metropolitan statistical areas, 1981-83

		Percentage change,		Percentage change, 1983 over
1981	1982		1983	1983 GVEI 1982
1701	1702			Percent
149,208	152,382	2.0	143,581	6.0
•	•	7.1	1,548,299	7.0
329,423	346,557	5.2	348,399	0.5
3,674,899	3,930,882	7.0	4,231,800	7.7
, ,				
186,996	201,016	7.5	188,792	-6.1
	1,860,889	9.1	1,940,271	4.3
, ,				
116,315	110,307	-5.1	85,231	-22.8
627,707	•		668,304	-0.5
	329,423 3,674,899 186,996 1,705,865 116,315	1981 1982 149,208 152,382 1,346,882 1,442,382 329,423 346,557 3,674,899 3,930,882 186,996 201,016 1,705,865 1,860,889 116,315 110,307	change, 1982 over 1981 1982 1981  Percent  149,208 152,382 2.0 1,346,882 1,442,382 7.1  329,423 346,557 5.2 3,674,899 3,930,882 7.0  186,996 201,016 7.5 1,705,865 1,860,889 9.1  116,315 110,307 -5.1	change, 1982 over 1981 1982 1981 1983  Percent  149,208 152,382 2.0 143,581 1,346,882 1,442,382 7.1 1,548,299  329,423 346,557 5.2 348,399 3,674,899 3,930,882 7.0 4,231,800  186,996 201,016 7.5 188,792 1,705,865 1,860,889 9.1 1,940,271  116,315 110,307 -5.1 85,231

Source: Texas Employment Commission, 1983.

Table 9.--Retail sales to Mexican nationals in selected city shopping areas in San Diego.

(In percent)

(In percent)					
Area	1981	1982	1983		
San Ysidro San Diego Central Business	72.2	56.5	49.2		
District	22.9	15.4	10.9		
Downtown LaJolla	13.5	7.8	6.6		
Seaport Village	6.6	5.6	4.3		

Source: San Diego Economic Bulletin, vol. 33, No. 3, March 1985.

The bureau found that merchants adjusted to the decline in the peso in several different ways. One way was to reduce operating expenses by reducing employee hours and benefits, laying off workers, or returning merchandise to manufacturers. Some merchants relocated their merchandise to outlets in other areas or converted firms to money-exchange houses that exchanged pesos and dollars on the open market. Firms that were forced to close were generally located in the immediate border area.

Generally, U.S. border communities have shown modest signs of recovery from the 1982 peso devaluations. Of the five cities profiled in the Bureau of Labor Statistics (BLS) study, four had increases in total nonagricultural employment and declines in unemployment from the previous year, as of December 1984. Between 1983 and 1984, Laredo had the largest decline in unemployment

among all U.S. metropolitan areas. However, in December 1984, McAllen and Laredo had the highest and second highest unemployment rates in the Nation. 1/2

## Description of Interregional Commodity Flows

Trade and factor movements between the U.S. and Mexico also affect U.S. border communities. Employment opportunities and income are created by activities that emerge to facilitate trade between the United States and Mexico. Examples of such activities are custom services, custom brokers, and foreign trade zones (FTZ's). 2/ Capital and labor flows also affect employment opportunities and income in the border area. Thus, this section includes a discussion of the maquiladora program, which is trade-related capital movements, and a discussion of undocumented immigration to the United States.

## Customs and brokerage services

One example of a trade-related industry is customs services. The border region consists of two customs regions, one in Los Angeles and one in Houston. The regional offices are responsible for custom services along the border where there are 22 customs ports of entry. Persons are employed along the border in several different capacities. Customs inspectors are hired to inspect commodities and perform immigration duties. There are 800 customs inspectors working in San Diego, Nogales, Laredo, and El Paso, the main points of entry from Mexico. Specialists on importing are also employed to appraise merchandise. There are also custom officials responsible for providing different types of screening and bonded warehousing for goods that have entered illegally.

Another service whose existence is due to border trade is customs brokers. Customs brokers are licensed by the U.S. Customs Service, but they are not customs employees. Customs brokers perform commercial transactions between the U.S. importer of Mexican merchandise and the U.S. Customs Service. Importers are required to post a bond for their imported merchandise. However, instead of posting a bond, importers can pay a customs broker, who alrady has a bond posted, to perform the transaction. Customs brokers exist in or near every major port of entry. The number of customs brokers is directly related to the volume of cross-border shipments between Mexico and the United States.

#### The maquiladoras

The maquiladoras, established in 1965 under Mexico's Border Industrialization Program, are in-bond production facilities. Many of their operations receive favorable tariff treatment from the United States under the Generalized System of Preferences (GSP) and items 806.30 and 807.00 of the

<sup>1/</sup> Greater San Diego Chamber of Commerce, San Diego Economic Bulletin, vol. 33, No. 3, March 1985.

<sup>2</sup>/ Foreign trade zones are discussed extensively in another section. The employment effects are presented in a table in this section.

Tariff Schedules of the United States (TSUS). 1/ The maquiladoras are primarily engaged in labor-intensive assembly operations that combine Mexican labor with foreign capital and technology. Maquiladora operations benefit from relatively low wages in Mexico and proximity to the United States. Proximity not only lowers transportation costs, compared with more distant low-wage countries, but also eases communication, facilitates supervision, and reduces leadtimes for delivery. 2/ Nearly all of the output of the maquiladoras is exported, primarily to the United States. At the end of 1985 there were an estimated 735 maquiladoras employing over 200,000 persons. 3/

Legal aspects of maquiladoras.--The maquiladora is described (in the Decree of Aug. 15, 1983) as a firm that temporarily imports goods for the purposes of dedicating itself, either in whole or in part, to the business of exportation. 4/ (The word reportedly stems from the Spanish verb "maquilar" 5/ as used in the term for the "portion of the flour [which is] retained by the miller in payment for grinding the wheat.") Articles brought into Mexico for the maquila program are considered to be "temporary importations." 6/ These are defined as those goods necessary for the operation of the maquiladora that are imported for a specific period of time and which, ultimately, must be exported to the country of origin.

Temporary importations under the maquila program include--

- a) Raw and auxiliary material necessary for performance of the manufacturing subcontractor's operation in accordance with the approved program and extensions thereof;
- Machinery, apparatus, instruments, and equipment for carrying out the manufacturing subcontractor's operations and that are also required for the quality control of its products;
- c) Replacement parts for the above;
- d) Tools and accessory production and safety equipment, work manuals, and industrial plans; and
- e) Containers, packing materials, labels, and bulletins.

 $<sup>\</sup>underline{1}$ / The Generalized System of Preferences and TSUS items 806.30 and 807.00 are described in other parts of this report.

<sup>2</sup>/ For example, many of the plant managers, typically appointed by parent companies to run wholly owned subsidiaries, live in the United States.

<sup>3</sup>/ U.S. Department of Commerce, "Investing in Mexico," December 1985, p. 10.

<sup>4/</sup> A maquila operation is defined as the industrial process or services to be used in the transformation, manufacture, or repair of merchandise of foreign origin temporarily imported for its later export. (art. 2 (VII)). A maquiladora is defined as the company, moral or individual entity through which, pursuant to the terms of these regulations, a program of operation of maquila is approved, and [which] exports its whole production. (art. 2 (VIII)).

<sup>5/</sup> A. de Leon, Border Industries, September 1981, p. 36.

<sup>6/</sup> See generally, J. Moctezuma, <u>Legal Aspects of the Maquiladora Program</u>, September 1982,.pp. 74-7

A maquiladora may begin importing within 6 months from the date of approval of its program application. Temporary import authorizations are allowed to remain in force for 12 months after issuance. Emergency importations are allowed if there is a showing of an urgent need for the goods in order to maintain the plant in operation.

Imported goods are allowed to remain in the border zone for 6 months from date of entry. This may be extended for another 6-month period on application to the customs authorities. Machinery and equipment are allowed to remain in Mexico for the period for which the corresponding maquiladora program has been authorized. Purchase of Mexican raw materials is encouraged by various fiscal incentives.

Maquilas may request permission to sell their products in the domestic market, if the following conditions can be satisfied--

- a) The product is not already produced in the country and it cannot be substituted by a wholly Mexican product;
- b) The maquila product can be shown to replace a foreign import; and
- c) The maquiladora has obtained a permanent import license for the foreign components included in the product.

In addition, foreign corporations in Mexico may qualify their maquila products within the Latin American Integration Association (LAIA, formerly LAFTA) market, thus enabling them to enter those countries under preferential conditions. LAIA requires a certain level of integration in Mexico before it will recognize such products as Mexican. Recognition is granted on a case-by-case basis.

Mexico encourages investment in maquiladoras by waiving several provisions of its strict foreign investment regulations. There is a general exemption from the Foreign Investment Law requirement of a minimum of 51 percent Mexican ownership. Thus, foreigners may establish wholly owned maquila subsidiaries. The capital equipment for the plants and the raw (and semifinished) materials are allowed duty-free entry under bond. Foreign management and technical personnel may be issued unlimited business visas to work in these facilities. There are few restrictions on what can be produced, although most apparel items are subject to control under the Textile Import Program when exported to the United States. (In general, maquilas involved in textiles and apparel operations must obtain the approval of the Foreign Investment Commission before taking certain actions with respect to the transfer or purchase of shares in the entity, or opening new establishments or manufacturing new lines of production.) A foreign-owned or foreign-controlled corporation may acquire a "beneficial interest" in the use of land in Mexico's "prohibited zones" under a 30-year trust arrangement with a Mexican fiduciary. The prohibited zones are defined as land within 100 kilometers of the border, or 50 kilometers of the coast.

In-bond plants were initially limited to the border zone. However, in 1972, authorization was given for the establishment of plants throughout

Mexico. Presently about 90 percent of the maquiladoras are located in the border zone. 1/

In-bond assembly plants must export the great majority of their output. In 1983, Mexico codified a previously informal relaxation of the export requirement by allowing a limited opportunity for domestic sales of maquila products. In theory, and under certain circumstances, it is possible for up to 20 percent of the maquiladora's production (on an item-by-item, rather than a total value, basis) to be sold in Mexico without payment of the bonded duties.  $\underline{2}/$ 

Supplementary exchange control regulations for maquila plants were issued on April 11, 1983, and March 1, 1984. The regulations stipulated that the export operations of these plants may obtain the necessary foreign exchange "on the free market and not the controlled market," unlike the foreign exchange that is obtained for other types of export operations.  $\underline{3}$ /

Twin plants.--The twin-plant concept is based almost entirely on operations in Mexico under the maquiladora program and the resulting customs treatment in the United States under items 806.30 and 807.00 of the TSUS. 4/Sometimes, the U.S. twin is located in an FTZ. Thus, products may be returned from Mexico and held for export (to a third country) without payment of U.S. or Mexican duties. 5/Similarly, products destined for consumption in the customs territory may be held in the zone until needed and U.S. customs duties can be delayed until the last moment. A recent amendment to the Foreign Trade Zones Act allows merchandise stored in the zone to remain free from State and local ad valorem (e.g., personal property) taxes as well. A typical twin-plant operation will include both a maquiladora in the border zone to perform the labor-intensive assembly work and a finishing installation (or office or marketing center) in a neighboring U.S. city. Twin-plant operations are considered "vital" to the continued growth of border cities such as El Paso and Juarez. 6/

Economic effects of the maquiladoras. -- The maquiladoras have drawn a considerable amount of capital to Mexico's northern border region, providing jobs and earning much needed foreign exchange. 7/ The maquiladoras have also

<sup>1/</sup> U.S. Department of Commerce, "Investing in Mexico," December 1985, p. 10.

<sup>2/</sup> Ibid

<sup>3/</sup> Foreign Trade Institute of Mexico, Mexico: Its In Bond Industry -- Your Investment Opportunity, Mexico, 1984, p. 11.

<sup>4/</sup> See, The Committee for 806.30 and 807.00 Inc., <u>Production Sharing: A Viable Option for Making U.S. Products More Competitive</u>, 1984, p. 18.

<sup>5/</sup> Note, "Developments in Mexican Border Industrialization," <u>Texas</u> <u>International Law Forum</u>, vol. 5, 1969, pp. 167-8.

<sup>6/</sup> See, e.g., City of El Paso, Application to the Department of State for a Presidential Permit to Expand the Zaragosa Bridge, Oct. 3, 1980, pp. 32-35; R. Haywood, A Strategy for Juarez/2000, Sept. 6, 1984, pp. 5-8; W. Mitchell, The Economic Impact of the Maquila Industry in Juarez on El Paso, Texas, and Other Sections of the United States for 1984, 1984, pp. 1-2.

<sup>7</sup>/ In 1985, the maquiladoras became Mexico's second largest earner of foreign exchange.

had substantial spillover effects on U.S. border communities. An estimated 40 to 60 percent of the wages earned in the maquiladoras are spent in retail outlets in the United States. 1/ Many of the managerial and technical personnel employed in the maquiladoras live in the sister city in the United States adding to the demand for retail services. In addition, the maquiladoras have created a demand for industries that support or contribute to their operations including wholesaling services and the production of industrial equipment such as tool and die manufacturing and metal cutting.

Continued growth of the maquiladoras is actively encouraged by the Mexican Government. Indeed, the maquiladoras figure prominently in Mexico's plans to rebuild its economy and pay off its sizable foreign debt. 2/ Some of the anticipated growth is expected to come from firms based outside of the United States and Mexico, a group not well represented among maquiladora owners at the present time. Notably, a number of major Japanese companies such as Sony, Hitachi, and Sanyo are expected to build new plants or expand existing ones. 3/

The maquiladoras have generated a degree of controversy in both the United States and Mexico. Opposition in the United States has come primarily from organized labor, which contends that maquiladora investment by U.S. firms has the effect of "exporting jobs." 4/ Proponents of the maquiladoras counter that northern Mexico is really competing with the rest of the world for labor-intensive production and that jobs "lost" to the maquiladoras would have been lost sooner or later anyway to other low-wage countries. Moreover, they argue that when jobs migrate to the border, a significant amount of employment is generated in U.S. border communities and elsewhere in the United States (besides creating demand for services, border production uses substantial quanitities of U.S. components 5/.

In Mexico, critics of the maquiladora program argue that since there is little linkage between the maquiladoras and the rest of the Mexican economy, few secondary benefits are generated. They contend that the maquiladoras have made Mexico's economy more dependent on the rest of the world since important decisions are made outside of Mexico, and maquiladora operations are sensitive

 $<sup>\</sup>underline{1}$ / Joseph Grunwald and Kenneth Flamm, <u>The Global Factory</u>, The Brookings Institution, Washington, DC, 1985, p. 142.

<sup>2/</sup> The New York Times, Jan. 19, 1986.

<sup>3/</sup> William L. Mitchell, testimaony to the Commission at the public hearing in El Paso, Texas, April 8, 1986, p. 47 and <u>Business Week</u>, Apr. 21, 1986, p. 40.

<sup>4</sup>/ In addition, some observers are concerned that the maquiladoras now include some processes that are closer to manufacturing than they are to assembly, testing the limits of 806.30 and 807.00.

<sup>5/</sup> Testimonies to the Commission at the public hearing in El Paso, Texas, April 8, 1986, of William L. Mitchell, pp. 37-40; Johnatha Rogers, Mayor of El Paso, pp. 101-102, and Antonio Sanchez, pp. 129-131; and <u>The Washington Post</u>, Apr. 20, 1986.

to the U.S. business cycle. Finally, they argue that the maquiladoras, which employ primarily young women, have done little to reduce Mexico's chronically high rate of unemployment and underemployment among adult males.  $\underline{1}/$  Nevertheless, the Mexican Government believes that the benefits of the maquiladoras outweigh their costs.

Most of the maquiladoras are clustered in the border cities. The largest concentration is in Ciudad Juarez, which accounts for 23 percent of the maquiladora establishments and 36 percent of maquiladora employment by latest estimates. Tijuana ranks second with 22 percent of establishments and 12 percent of employees. Mexicali ranks third with 10 percent and Nogales ranks fourth with 7 percent. In terms of employees, Matamoros ranks third with 10 percent and Nogales ranks fourth with 8 percent. 2/

The maquiladoras have employed so many people that in some border cities, notably Ciudad Juarez, there is a growing scarcity of skilled workers. As a result there has been an increase in "job hopping" from one employer to another, an increase in wages mainly in the form of nonwage compensation, a greater percentage of men being employed, and there have been some efforts of automation in order to conserve on labor. In addition the labor scarcity has induced some firms to locate plants farther into the interior of Mexico.

The most common maquiladora activity is the assembly of manufactured components into finished or semifinished goods. This is generally tedious work requiring a great deal of unskilled labor. The finished products are usually more expensive to transport than the components used to make them, especially over water. The two largest maquiladora activities are the assembly of electrical goods and the assembly of textiles into garments. Together, these accounted for over half of the value added in the maquiladoras in 1984. 3/ A list of products for which maquiladora plants have a significant comparative advantage, according to the Instituto Mexicano de Comercio Exterior, is provided in appendix F, along with detailed data on maquiladora operations and a roster of maquiladora establishments known to the U.S. International Trade Commission.

#### Labor market effects of Mexican immigration to the United States

The supply of Mexican labor to U.S. markets is determined by several factors. The primary determinant of labor migration from Mexico is the relative difference in U.S. and Mexican wages. The Mexican minimum wage in

<sup>1/</sup> Joseph Grunwald, "Restructuring Industry Offshore: the U.S.-Mexico Connection," The Brookings Review, Spring 1983, pp. 25-27.

 $<sup>\</sup>underline{2}/$  Direccion General de Estadistica, Instituto Nacional de Estadistica, Geografia e Informatica.

<sup>3/</sup> Ibid.

the border region is 1,650 pesos a day (approximately \$3.70 per day) compared with the \$3.35 per hour minimum wage in the United States. 1/

A second reason Mexican labor migrates to the United States is in response to Mexico's rates of economic and population growth. It is estimated that during the 1980's Mexico must create 8 to 9 million new jobs for new labor force entrants if it is to avoid further increases in unemployment. To do so, Mexico's gross domestic product must grow at an annual rate of 5 to 6 percent. However, since 1981, the Mexican economy has deteriorated sharply. In 1985, the Mexican economy had a zero rate of growth. 2/

<u>Profile of Mexican immigrants</u>.--Although statistics are not available on the total number of undocumented workers in the United States, the estimates range between 750,000 and 12 million. 3/ However, the numbers are subject to much criticism and are in fact only guesses. For instance, although the annual rate of illegal aliens caught along the border and deported now exceeds 1 million, this figure includes persons that are apprehended several times during the year. 4/

The majority of the undocumented Mexican workers tend to follow cyclical migration patterns. They arrive during slack periods in the Mexican economy, or during seasonal "off-periods," and return when conditions improve. According to one study, the ratio of workers who return on a seasonal basis to work and become permanent residents is 10 to 1. 5/ With respect to the border, some observers argue that the border region is probably used as a staging ground as workers prepare to move to higher paying jobs further north. Mexican immigrants that participate in the U.S. labor force are not homogeneous. According to McCarthy and Valdez, they can be differentiated into six categories. 6/ (These are depicted in table 10.) The six different

<sup>1/</sup> William Stockton, "Mexico's Grand 'Maquiladora' Plan," The New York Times, Jan. 19, 1985. The wage differential has attracted capital to the border region. By slowing wage growth in the border region, the supply of Mexican immigrants attracts U.S. firms to the region, especially southern California. This point is illustrated most graphically by U.S. plants, maquiladoras, located in Mexico, which are able to realize even larger savings in terms of wages and benefits. Although Mexican workers consider pay per hour of \$0.82 to be very good, a Mexican worker costs on average \$15,000 to \$18,000 less in terms of wages and benefits than a U.S. worker. See William L. Chaze, "One Main Street, USA, The Birth of a New Nation," U.S. News and World Report, Aug. 19, 1985.

<sup>2/</sup> James Peach, <u>Demographic and Economic Change in Mexico's Northern</u> Frontier, New Mexico State University, 1984.

<sup>3/</sup> John McDowell, "Labor Migration from Mexico to the U.S.", from The U.S. and Mexico: Borderland Development and the National Economies, Westview Press, 1985.

<sup>4/</sup> Hansen, The Border Economy.

<sup>5/</sup> Ibid.

<sup>6/</sup> Kevin F. McCarthy and K. Burciaga Valdez, <u>Current and Future Effects of Mexican Immigration in California</u>, Rand, 1985.

combinations of legal status and length of stay are highly correlated with the type of jobs held by Mexican immigrants. Specifically, Mexican immigrants work in the United States for different lengths of time and fall into the following three basic immigration patterns: (1) short-term immigrants work in the United States for only a short time period, approximately 10 to 12 weeks, and are more likely to take low-paying, entry-level jobs; (2) cyclical immigrants (bracero type) 1/ usually make several trips across the border and often have established ties with employers; and (3) permanent residents are more experienced workers and usually work in jobs with relatively higher pay than short term or cyclical immigrants. (An economic profile based on immigration patterns is presented in table 11.) All three of these types can be further differentiated on the basis of their legal status. McCarthy and Valdez found that, on average, permanent immigrants pass through a regular sequence to establish themselves in the United States, starting out as short-term immigrants, then becoming cyclical immigrants, and finally permanent immigrants. The process is outlined in figure 3.

Table 10. Economic Profile of immigrants from Mexico

Type of Immigrant	Motivation for Immigrating	Demographic Economic Classification Characterist	
Short-term	Mexico's Political Economy	Young Single males	Low-paying, entry- level jobs
Cyclical	Demand for temporary labor	Adult males and relatives	Somewhat higher pay
Permanent	Demand for regular labor; family reunification	Couples and children	More experienced; higher pay; many non-working wives

Source: Reproduced from Kevin F. McCarthy and R. Burciaga Valdez, <u>Current and</u> Future Effects of Mexican Immigration in California.

<sup>1/</sup> The term braceros originally refined to Mexican laborers who where allowed to enter the United States on a temporary basis under the Mexican Labor Program (1942-1964). The program, which was initiated in 1942, was intended to alleviate labor shortages in the southwestern United States which resulted from the Second World War, especially in the agriculture and railroad industries. In 1946, the railroad component of the program was ended; however, the farm program lasted until 1964. Under the bracero program, an estimated 4 million Mexican laborers were employed in the United States between 1942 and 1960. Today, the term bacero refers mainly to Mexican laborers employed in agriculture in the southwestern United States, usually on an undocumented basis.

Legal status

Class of Immigrant

Cyclical

Permanent

Bracero
type"

Permanent

Permanent

Permanent

Permanent

Permanent

Illegal

Illegal
male migrants"

Illegal
cyclical

Permanent

Permanent

Illegal
permanent

Figure 3.—Profile of Mexican immigration.

Source: McCarthy and Valdez, Current and Future Effects.

Table 11. -- Studies of employment distribution of apprehended Mexican illegal aliens, by economic sectors

(In percent)					
	Southwest Border	Cornelius	North and	INS District	
Economic sector 1/	Regional study 2/	Study 3/	Houstoun 4/	Data 5/	
Agriculture	50.6	45.0	26.2	32.0	
Manufacturing		20.8	28.2	33.0	
Commerce		14.0	13.9	•	
Construction	3.3	10.6	20.8	8.0	
Services	13.3	8.6	10.4	26.5	
Other.,	. 2	1.0	. 4	-	
Total		100.0	99.9	100.0	

1/ Agricultural occupations include farmers and farm workers such as farmhands and laborers, and employment in forestry and fisheries. Manufacturing occupations include operatives, such as sewers and stichers, laborers, craft workers, and managers and administrators; commerce include occupations in transportation, such as truck drivers and retail sales clerks. construction occupations include craftsmen, operatives, and labor; service occupations include private household, food service, health service, and protective service workers.

- 2/ Southwest Border Regional Commission, table 14. Sample size equals 691.
- 3/ Cornelius, 1978: 54. Sample size = 994. 4/ North and Houstoun, p. 113. Sample size = 481.
- 5/ Immigration and Naturalization Service, Estimated Total Number of Illegal Aliens and Employed Illegal Aliens by INS District, Nov. 1976. Sample size equals 3,817,350.

Source: Illegal Aliens: Estimating Their Impact on the United States, Report to the Congress of the United States by the Comptroller General.

A Mexican immigrant's legal status is determined by two types of permits, a green card, or a border-crossing card. Possession of a green card permits a Mexican citizen to reside permanently in the United States, or to reside in Mexico and commute to work on the U.S. side of the border. It is estimated that 50,000 green-card commuters work in U.S. border communities. 1/

<sup>1/</sup> John M. Cresdon, "Border Region is Almost a Country Unto Itself Neither Mexican nor American," The New York Times, Feb. 14, 1979.

A border-crossing card entitles the holder to an infinite number of visits up to 72 hours, but does not permit employment. Although more than a million border crossing cards have been issued, there are numerous new applicants waiting to receive cards. Estimates of Mexicans who possess crossing cards and who are employed in the United States are difficult to calculate since it is illegal for the cardholder to work. Therefore, information about employment is generally concealed. In addition, official estimates of the number of cardholders may be underestimated. Some Mexican immigrants use their border-crossing card to enter the United States to settle permanently. Afterwards, the cardholder sends the card back to Mexico for safekeeping. 1/

Information is scarce on the number and types of jobs in which legal Mexican immigrants (green-card holders) are employed. Information from the 1970's indicates that the majority of green-card holders commuted daily to jobs in Texas. This phenomena was due to the Texas right-to-work statute and the absence of a minimum wage law. During this period, it was estimated that one-third of all green-card commuters lived in Juarez and commuted to jobs in El Paso. This number represented 9 percent of El Paso's labor force and accounted for 20 percent of Juarez's employed work force. 2/ In Brownsville, TX, Mexican commuters represented 20 percent of the city's labor force. 3/

A large concentration of Mexican immigrants, approximately 1.2 million, also work in California. Eighty percent of the immigrants are in southern California. 4/

Legal immigrants are employed in a variety of occupations. In one study of the Brownsville, TX, labor market, 52 percent of green-card holders were employed in industry; 19 percent in construction, 18 percent in trade, and less than 10 percent in agriculture. 5/ In El Paso, one-third of El Paso's alien population is employed in industry, one-fourth in sales and service jobs, and one tenth in agriculture. 6/ In California, Mexican immigrants are occupied primarily in low-skilled jobs. California's agriculture is heavily dependent on Mexican laborers. However, contrary to popular belief, McCarthy and Valdez found that less than 20 percent of Mexican immigrants in California worked in agriculture. In addition, 80 percent worked in low-skilled jobs,

<sup>1/</sup> Hansen, The Border Economy.

<sup>2/</sup> Oscar Martinez, Border Boom Town: Ciudad Juarez since 1848, University of Texas, 1973.

<sup>3/</sup> Michael V. Miller, Economic Growth and Change Along the U.S.-Mexican Border, Bureau of Business Research, 1982. Commuters may also include U.S. citizens that reside in Matamoros, Mexico.

<sup>4/</sup> McCarthy and Valdez, Current and Future Effects.

<sup>5/</sup> Miller, Economic Growth and Change.

<sup>6/</sup> Martinez, Border Boom Town.

20 percent held skilled craft jobs or low-level white collar jobs. In Los Angeles, Mexicans hold a substantial portion of the manufacturing jobs, employed especially in the construction and personal service industries.

Reliable data on jobs held by Mexicans employed illegally in the United States are not available because employers are reluctant to provide information about a worker's immigration status. However, most undocumented workers are believed to be employed in unskilled jobs. Table 11 summarizes the results of four different studies that examined the sectoral employment of apprehended illegal aliens in the late 1970's. The studies indicate that a majority of the undocumented workers are employed in the agricultural and manufacturing sectors.

Economic impact of intraregional labor flows.--The economic impact of undocumented workers for the United States is unclear. Cost, as well as benefits, are associated with their presence. For instance, it is argued that in California, Mexican immigrants may have increased employment and, therefore, regional income, by slowing manufacturing wage growth. 1/ In addition, it is also argued that Mexican labor increases the competitiveness of U.S. industries by allowing U.S. production costs to remain low. The resulting lower prices benefit U.S. consumers as well as U.S. producers. In other cases, it is argued that they create unemployment among U.S. nationals by lowering wages and are a drain on social services.

Impact on national income and net Government revenues.--The economic impact of Mexican-immigrant labor on national income depends on whether increased Mexican immigration amplifies any existing distortions in the labor market created by income taxes, public asistance programs, and inflexible wages. 2/ In the absence of labor market distortions, an increase in immigrant labor unequivocally increases U.S. national income and the total level of employment. However, with the existence of market distortions, the effect of immigration on national income is less clear.

Although total national income would rise in the absence of labor market distortions, immigration would still have consequences for the distribution of income. An increase in the immigrant labor force would benefit the owners of those resources that are complements with low-skilled labor, whereas, the owners of resources that are substitutes to low-skilled labor would experience a reduction in income. The wages of domestic low-skilled labor would fall. Since illegal alien labor and domestic high-skilled labor are on average complements, the real wages of domestic high-skilled workers would increase. Owners of farms, especially those who grow labor-intensive crops would also experience an increase in income. Finally, in the short run, owners of capital specialized for use with immigrant labor would also experience an increase in income. Note, however, that in the absence of labor market

<sup>1/</sup> McCarthy and Valdez, <u>Current and Future Effects</u>, argue that slower wage growth was one of the stimulants of an above average increase in California's manufacturing sector.

<sup>2/</sup> The different aspects of this argument have been summarized succinctly in John K. Hill, "The Economic Impact of Tighter U.S. Border Security," Economic Review, The Federal Reserve Bank of Dallas, July 1985. Hill suggested that a reduction of 1 million illegal aliens would reduce GNP by \$0.6 billion.

distortions, the total increase in incomes would more than offset the decrease in low-skilled labor's income. 1/

With market distortions, national income may not increase as a result of an inflow of undocumented workers. For instance, it is argued that undocumented workers also place a heavy burden on public services. According to this argument, not only do they indirectly use social services by inducing U.S. citizens to use unemployment compensation, but they also directly use social services such as public health care services. Therefore, with a sufficiently large direct and indirect use of public services, any net increases in regional income attributed to Mexican immigrant labor would become net decreases in the transfer of income through public services. However, a number of studies have found that, with the exception of public education, the use of public services by undocumented workers appears to be small.

In a study of undocumented workers in San Diego, Villalpando found that the use of public services was relatively small compared with the amount of taxes paid. It was found that undocumented workers contributed \$50 million to social services in the form of State and local taxes, and they used only \$2 million in social services. 2/

Using research data from California, McCarthy and Valdez concluded that it would be impossible to estimate accurately the tax contributions of all Mexican immigrants (legal and undocumented) or to estimate the cost of providing public services to Mexican immigrants. 3/ However, using census data and data taken from surveys conducted by service providers, they were able to infer the following: (1) With the exception of public education, Mexican immigrants' tax contributions (i.e. federal, state, and local) exceed the cost of public services they use, (2) given the low income levels of most Mexican immigrants and that the percentage of permanent immigrants is increasing, the costs of providing public services might be increasing at a faster rate than the tax revenues paid by the immigrants, and (3) areas with large concentrations of Mexican immigrants may bear a disproportionate share of the costs of providing public services to immigrants.

McCarthy and Valdez noted that the problem of disproportionate cost bearing is compounded by the fact the two services most widely used by Mexican immigrants, education and health care, are financed by local and State governments, whereas the major recipient of Mexican immigrant tax revenue is the Federal Government. Therefore, these costs paid by the local governments are, in fact, subsidies from the local governments to the Federal Government.

<sup>1/</sup> Hill, "The Economic Impact."

<sup>2/</sup> Manuel Vic Villalpando, et al., A study of the socioeconomic impact of illegal aliens on the County of San Diego, San Diego: County of San Diego Human Resources Agency, Jan. 1977.

<sup>3/</sup> McCarthy and Valdez, <u>Current and Future Effects</u>. In addition, the inclusion of the costs of providing public services to U.S. workers displaced by Mexican immigrants would compound the difficulty of accurately measuring the impact of immigration on net Government revenues.

Finally, Hill summarized the findings of three studies that surveyed the extent to which illegal aliens make use of social services. (The results of the studies are presented in table 12.) The findings support those of McCarthy and Valdez and Villalpando--illegal aliens pay more in taxes than they use in public services. The results indicated that 67 to 88 percent of the illegal aliens had Social Security taxes withheld, and 70 to 74 percent had Federal income taxes withheld. In addition, whereas one-fourth of the respondents in one study reported that they had some kind of medical treatment in the United States, 83 percent said that either they or their health insurance had paid for the care. 1/

Impact on Wages.--The lack of data makes it difficult to assess the exact magnitude by which Mexican immigrant labor decreases low-skilled domestic wages in the border region. Different conclusions result from the existing research.

Table 12. Participation of illegal aliens in U.S. fiscal system. The percentage of illegal aliens who had taxes withheld and the percentage who used public services

(In percent	:)		
Item	North and Houstoun Study 1/	Orange County Study 2/	Bustamente Study 3/
Share with taxes withheld			
Social security taxes	77.0	88	67
Federal income taxes	73.0	70	74
Share who used services			
Medical care <u>4</u> /	27.4	8.0-10.0	7.8
Unemployment compensation	3.9	-	•
Public schools	3.7	-	. 9
Food Stamps	1.3	1.6	•
Welfare	.5	2.8	3.2

 $<sup>\</sup>underline{1}$ / David S. North and Marion T. Houstoun,  $\underline{\text{The Characteristis and Role of }}$   $\underline{\text{Illegal Aliens in the U.S. Labor Market:}}$  An Exploratory Study.

Source: John K. Hill, "The Economic Impact of Tighter U.S. Border Security", Economic Review, The Federal Reserve Bank of Dallas, July 1985.

<sup>2/</sup> Task Force on Medical Care for Illegal Aliens, The Economic Impact of Undocumented Immigrants on Public Health Services in Orange County, Orange County, California, March 1978.

<sup>3/</sup> Jorge Bustamente, "Undocumented Immigration from Mexico: Research Report," International Migration Review, 1977, pp. 149-177.

 $<sup>\</sup>frac{4}{}$  Figures in the second and third columns represent the percentage of respondents who had used free medical care while living in the United States. In the North and Houstoun survey, individuals were asked simply whether they had used any medical services.

<sup>1/</sup> Hill, "The Economic Impact."

In 1974, Wise examined the effect of terminating the bracero program on wages. The bracero program was established unofficially in 1942 to permit the seasonal entry of agricultural workers from Mexico into the United States. 1/ It was intended to benefit U.S. agricultural producers by alleviating the labor shortages created by World War II. In addition to opening up employment opportunities, Mexican workers were to receive safeguards. The program was terminated officially in 1968. Wise estimated that the termination of the program would have increase wages between 12 and 67 percent if the Bracero workers were not replaced by illegal immigrants.

Conversely, Grossman suggested that immigrants have a relatively small impact on the U.S. wage level. In her analysis, Grossman assumed that the characteristics of illegal immigrants resemble those of U.S. legal immigrants. Given this assumption and the assumption of fully flexible wages, Grossman predicted that a 10-percent increase in the flow of immigrants reduces domestic wages by roughly 1 percent. In addition, Grossman contended that immigrants do not displace U.S. labor in the long run. In the short run, labor displacement might occur if wages are inflexible downward. 2/

Smith and Newman found that Mexican migrants had a relatively small impact on border region income. 3/ They compared the earnings of workers living in nonborder regions to those of workers living along the Texas-Mexico border. Houston, TX, was chosen to represent a nonborder region since it has a smaller Mexican-American population and since it has relatively fewer immigrants than the Texas-Mexico border. It was found that there was an 8 percent differential between border region (total average) income and (total average) income in Houston. However, this differential might represent a premium that workers (especially Mexican-Americans) living on the border were willing to give up in order to stay in a familiar environment. (This explanation is similar to that used to explain why individuals are willing to accept relatively lower wages in small communities rather than find higher paying employment in larger cities.)

In addition, Smith and Newman's study found that high-skilled and low-skilled workers are impacted differently by immigrants. Since most Mexican immigrants are low-skilled workers, the income of U.S. low-skilled workers was more greatly affected than the income of high-skilled workers: border region low-skilled income was 13 percent lower than nonborder low-skilled income, whereas border region high-skilled income was 7 percent lower than nonborder high-skilled income. In addition, Mexican-Americans living in the border region had an income that was 11 percent lower than their counterparts living outside the border region. Smith and Newman concluded that low-skilled workers are not affected as much as is commonly believed.

<sup>1/</sup> Donald E. Wise, "The Effect of the Bracero on Agricultural Production in California," Economic Inquiry, 12, pp. 547-558.

<sup>2/</sup> Jean B. Grossman, "The Substitutability of Natives and Immigrants in Production," Review of Economics and Statistics, November 1982.

<sup>3/</sup> Barton Smith and Robert Newman, "Depressed Wages Along the U.S.-Mexico Border: An Empirical Analysis," Economic Inquiry, January 1977.

McCarthy and Valdez also examined the displacement effect of Mexican immigrants on U.S. labor. They concluded that the displacement effects, if any, appeared to be concentrated in the Mexican-American population.  $\underline{1}$ /

Finally, special note should be made of the argument that undocumented workers have the largest displacement effect on Mexican-Americans living on the border since they compete for the same type of employment. As supported by the evidence, undocumented workers depress wages and contribute to higher rates of unemployment among Mexican-Americans. Yet, as indicated by Professor Hansen, Mexican-American organizations have been reluctant to support legislation that would impose fines on employers of undocumented workers. lack of support might be based on a number of factors: (1) the perception by Mexican-Americans that such legislation would result in the harassment of all Hispanics, (2) the desire by some Mexican-Americans for reunification with family members still in Mexico, and (3) nonpecuniary benefits that arise from living among a larger Hispanic population. A less plausible, and according to one observer, even ridiculous argument is that Mexican-Americans who do not support a restrictive immigration policy are not acting in their own self-interest, perhaps because they do not recognize the economic tradeoffs involved. 2/

Revision of U.S. immigration laws.--On October 17, 1986, the 99th Congress passed an immigration bill that some observers indicate is a sweeping revision of the immigration laws. 3/ The following are the bill's major provisions: 4/

- 1. The legislation ... provides a legalization program for illegal aliens who moved to the United States before 1982.
- 2. The bill makes it illegal for an employer knowingly to hire an alien not authorized to work in the United States. ... Employers would be required to verify new hires by examining either a U.S. passport or a combination of a birth certificate or a Social Security card with one of the following: a driver's license, state-issued identification card or an alien indentification document known as a green card. ... An employer convicted of a hiring violation would face a fine of \$250 to \$2,000 per illegal alien for the first offense; \$2,000 to \$5,000 for the second offense; and \$3,000 to \$10,000 for the third offense. Persons convicted of "pattern or practice" violations would face a \$3,000 fine and six months in prison for each illegal alien.
- 3. The Immigration and Naturalization Service would receive \$422 million in additional funding in 1987 and \$419 million extra in 1988 to increase border enforcement efforts.
- 4. The bill provides \$1 billion annually for four years to state and local governments to offset costs of the legalization program. Federally funded public assistance--including welfare benefits--would not be available to the newly legalized aliens for five years.

<sup>1/</sup> McCarthy and Valdez, Current and Future Effect.

<sup>2/</sup> Hansen, The Border Economy.

<sup>3/</sup> The bill was signed into law by President Reagan on November 6, 1986.

<sup>4/</sup> This summary of the bill's provisions draws heavily from Mary Thornton, "Hill Revises Immigration Law," The Washington Post, October 18, 1986.

- 5. A special office would be created in the Justice Department to investigate and prosecute cases of job-related discrimination against aliens with legal status in the United States.
- 6. Aliens who worked at least 90 days in U.S. agriculture between May 1, 1985, and May 1, 1986 would be given temporary resident status. After two years, those aliens would become permanent residents. ... Aliens who can prove they worked 90 days a year in U.S. agriculture for the last three years would qualify for permanent resident status after one year. ... If the program does not attract enough labor to satisfy U.S. agricultural needs, the government could approve the entry of "replenishment" workers, who would become eligible for temporary residence if they work in agriculture fo three years. Farm workers would qualify for permanent legal status after the three years.

# TRADE AND DEVELOPMENT POLICIES AFFECTING ECONOMY OF BORDER AREAS

#### Mexican Trade Programs With the United States

Generally, importations into Mexico face heavy regulation. In November 1982, the Mexican Government decreed that all commercial importations valued over 5,000 pesos would require an import license (also known as a prior import permit). Permits are rarely granted to bring in products for which a Mexican article can be substituted. Exemptions are subject to the discretion of the Mexican Secretariat of Commerce, which can deny permits for "nonessential" goods. However, a limited number of exemptions were created by this decree. These included items specifically exempted by the Secretariat and other Government agencies, spare parts up to a certain quantity per importer, shipments intended for the maquiladora industry, and goods destined for the "articulos gancho" program.

# The "articulos gancho" program 1/

Origin.--FTZ's have been a controversial political issue in Mexico since the establishment of the border with the United States in 1848. Cheaper, better quality goods have historically attracted Mexican consumers across the border. Losses of population and commerce to the U.S. side prompted the States of Tamaulipas and Chihuahua to establish a "free zone" (zona libre) on the frontier in 1858. For the last 125 years, some form of free zone has existed along the U.S. border. The extent of the zone has varied because of changing economic, social, and political circumstances.

The peninsula of Baja California (Baja), part of the State of Sonora, and the State of Quintana Roo on the Yucatan Peninsula are virtually free zones, having import limits on approximately 50 items, including agricultural products, automobiles, and raw materials. The program for these areas dates back to the 1930's and the Depression, when the majority of the border was treated as a free zone. Baja was able to retain its free zone status because of its distance from Mexico City and the resulting transportation problems.

In 1971, Mexico introduced a "modified" free zone, the articulos gancho program, which was primarily intended to cover the border cities east of Sonora. In general, only a limited number of personal articles manufactured in the United States could be brought into Mexico by a single individual without payment of duty. For example, as of September 1984, Mexican residents who purchased more than US \$25.00 of unrestricted goods were required to declare and pay duty on their purchases when returning to Mexico. El Paso reportedly served as a "giant shopping center for Juarez citizens" who shopped in U.S. retail outlets at competitive prices. 2/ Runners would also be sent from retail shops in Juarez (perhaps making several trips daily) to buy small amounts of U.S. products from U.S. outlets for resale in Juarez at slightly

 $<sup>\</sup>underline{1}/$  See generally, U.S. Department of Commerce, telegram No. 145, Mar. 2, 1982.

<sup>2/</sup> D. Michie and P. McDevitt, An Evaluation of Transportation Barriers to International Trade Along the U.S.-Mexican Border: A Case Study of the El Paso-Cd. Juarez Port of Entry, December 1984, pp. 15-17.

higher prices to residents of Juarez who could not obtain border crossing visas, or who did not wish to make the trip into El Paso. Some of the consumer goods were preferred by Mexican border residents because of quality differences; in other cases, advertising is reported to have generated demand for certain "brand name" articles. Certain U.S.-branded apparel items and toys have been mentioned as particularly in demand by Mexican border residents. 1/

Description. -- The articulos gancho are certain commodities approved by the Secretariat of Commerce in Mexico City which are permitted to be imported duty free on a wholesale basis for domestic resale and consumption in the area of the border (free) zone. The Secretariat establishes restrictions as to the total annual value and types of goods that may be imported under this program. Because of these restrictions, the border area in which this program is permitted is referred to as the "frontier fringe" (franja fronteriza) rather than as a free zone. The articulos gancho program was designed to "hook" (gancho) residents of the frontier into border area stores, such as Mexican department stores, 2/ by offering foreign (mainly U.S.) goods at prices that are competitive with those prevailing at U.S. stores across the border, thereby obviating the need to shop in the United States. Theoretically, once "hooked" into the Mexican commercial establishment, the consumer would then purchase Mexican products as well as the duty-free goods.

The Mexican Government has long been concerned about this program and numerous suggestions to phase it out have been put forward. However, the Government also recognizes that residents of the border areas have greater purchasing power than do residents of the interior and that they have become accustomed to a higher standard of living and the quality (or brand name appeal) of certain foreign goods. As a result of these concerns, during the 1960's the Government introduced the Border Industrialization Program (Programa Fronterizo de Industria or PFI) to produce consumer goods for the border areas, and the Programa Nacional Fronterizo (PRONAF) to attract U.S. purchasing power to the region. The desired outcome is a gradual phasing out of the articulos gancho program as domestic industry develops sufficient capability to meet the demands of frontier consumers.

Articles imported under the articulos gancho have been categorized as nondurable consumable goods, durable consumable goods, or raw materials. The Mexican Embassy has advised the Commission that this program was terminated in 1982.  $\underline{3}$ / Since then, a global import quota policy for "basic, partly basic, durable and production goods" has been in effect. The following tabulation

<sup>1/</sup> Conversations with staff, International Trade Administration, U.S. Department of Commerce, Mar. 17 and 18, 1986.

<sup>2/</sup> R. Turner, <u>Practical Advice on Exporting to Mexico</u>, BUS. AM., Nov. 15, 1982, p. 18.

<sup>3/</sup> Letter from Embassy of Mexico to Commission staff, May 11, 1986.

indicates that the amounts of products (in thousands of dollars) that were authorized for admission into the northern border area by the Mexican Government during 1983 through 1986--

Global Quota	<u>1983</u>	<u>1984</u>	<u>1985</u>	1986 3/
		1,000 d	ollars	• • • • • •
Basic products Partly basic 1/ Production goods Durable goods Total	13.1 7.0 .2 12.0 32.3	43.5 15.9 .9 26.0 86.2	86.1 19.6 1.0 61.2	2/ 25.4 1.0 103.1 129.5

<sup>1/</sup> Includes automotive parts.

Source: SECOFI--Direccion General de Asuntos Fronterizos.

#### Border zone production programs

Mexico's free zones were established in order to encourage development in these once remote and underpopulated regions. A perimeter zone (formerly known as a "free perimeter") 20 kilometers wide parallels the U.S. border and includes the border cities. Certain items may be shipped to these zones at reduced duties or free of duty. Duty-free goods brought into the free zones may not be transferred to the rest of the country without payment of duties. This is enforced by checkpoints at the boundaries of the zones.

In 1965, Mexico began encouraging the establishment of in-bond production facilities in the border region, commonly known as maquiladoras. Mexico waived a number of its restrictions on foreign investment and allowed duty-free importation of components and materials used in the maquiladoras, provided the output of the maquiladoras is exported from Mexico. Later Mexico permitted the establishment of maquiladoras in most of the interior of Mexico and allowed some of their output to be sold in Mexico. The maquiladora program has been very successful, now employing hundreds of thousands of workers and earning over a billion dollars annually in foreign exchange. The maquiladoras are described in detail in a separate section in this report.

## Investment promotion and restriction programs

Although recognizing its importance, Mexico closely regulates foreign investment. As a result, it is difficult for a foreigner to gain majority control of a Mexican entity (except maquiladoras, as previously noted). In addition, there are restrictions that are designed to encourage Mexican majority ownership of existing foreign enterprises. The rules governing foreign investment stem from three major laws enacted during the 1970's, i.e.,

 $<sup>\</sup>overline{2}$ / Open quota depending on the need of the border State.

<sup>3/</sup> Authorized.

the 1973 Law to Promote Mexican Investment and Regulate Foreign Investment, the 1973 Technology Transfer Law, and the 1976 Law on Inventions and Trademarks. 1/

The 1973 Foreign Investment law.--Under the Foreign Investment law of 1973, the economy is divided into three sectors. All activities with respect to petroleum and basic petrochemicals, nuclear power and other public utilities, and most areas of mining, railroads, and telegraphic and wireless communications are reserved for the government. Radio, television, automotive transport, airways, maritime transportation, forestry, gas distribution and similar activities are reserved for Mexican companies that prohibit foreign equity participation. The remainder of the economy is open to foreign investment, but generally foreign equity is limited to 49 percent of the enterprise. The Foreign Investment Commission publishes lists of economic sectors in which the Government desires to encourage foreign participation together with the permissible percentage of foreign equity. 2/ The Commission must approve any foreign investment in Mexican companies beyond 25 percent of capital or 49 percent of assets.

The Commission screens applications for investment based upon 17 criteria set out in article 13 of the Law. These criteria try to ensure that the proposed investment will have a beneficial effect on Mexico in the following areas--

- a) balance of payments;
- b) employment;
- c) wage and price scales;
- d) technology transfer;
- e) regional development;
- f) total national investment; and
- g) national economic policy.

Permission to make an investment is often granted subject to meeting performance requirements that are negotiated on a case-by-case basis.

There are several provisions of special interest in the 1973 law. The Law contains a "Calvo Clause" (based in article 27 of the 1917 constitution), which requires that foreigners who acquire properties of any kind agree "to consider themselves as Mexican nationals with regard to these properties and not to invoke the protection of their government, with respect to such properties, under penalty ... of forfeiting [to Mexico] the properties thus acquired." This is not an uncommon provision in foreign investment laws in Latin America. 3/

<sup>1/</sup> See generally, U.S. Department of Commerce, Investing in Mexico, December 1985, pp. 4-9.

 $<sup>\</sup>underline{2}/$  See, for example, Foreign Investment National Commission of Mexico, <u>Guidelines for Foreign Investment and Objectives for Its Promotion</u>, Mexico, 1984, pp. 5 and 6.

<sup>3/</sup> See generally, Comment, <u>Legal Issues Arising From the Mexican Economic Crisis</u>, 17 VAND. J. TRANSNAT. L. 367 at p. 371, 1984.

Performance requirements may include establishing minimum export and local content levels. Specific requirements are established for the enterprise in order to ensure attainment of the objectives set forth in the 1973 law. These are not usually made public and are negotiable. If the criteria cannot be met, the investor may later be permitted to renegotiate with the Commission.

The 1973 technology transfer law.--In an attempt to promote indigenous technology, Mexico enacted the Law on the Registration of the Transfer of Technology and the Use and Exploitation of Patents and Trademarks in 1973. It required the registration of all contracts involving the transfer of technology. The law specified the conditions to be met in order to receive registration and enumerated 14 reasons for automatic denial.

In 1982, this law was replaced by the Law on the Control and Registration of the Transfer of Technology and the Use and Exploitation of Patents and Trademarks. The revised law gives the Government increased powers in this area and expands the number of agreements that require registration. Failure to register an agreement renders it unenforceable in court and ineligible for governmental development support. Also, failure to register a technology agreement is subject to a fine up to the amount of the transaction or 10,000 times the minimum daily wage in Mexico City.

The National Registry for the Transfer of Technology scrutinizes contracts based on a number of criteria, including costs and the local availability of the technology in question. It will try to negotiate contracts under this law so as to maximize local management of the companies. The underlying purpose is to reduce Mexico's dependence upon foreign technology and provide State support to Mexican purchasers of foreign technology during their negotiations with the foreign companies. The law, in effect, reinforces the requirements of the Foreign Investment Commission that limits foreign control of Mexican enterprises.

The following are the agreements, contracts, or other acts that must be registered with the Government--

- a) concession of use or authorization to exploit works, patents of inventions or of improvements, and certificates of inventions;
- b) assignment of trademarks and patents:
- c) authorization to use commercial names;
- d) transmission of technical knowledge through plans, diagrams, models, instruction manuals, formulae, specifications, education and training of personnel, and other means;
- e) technical assistance in any form rendered;
- f) provision of basic or detailed engineering services;
- g) provision of operating or administrative services for enterprises;
- h) counseling, consulting, or supervisory services;

- i) concessions with respect to copyrights that imply industrial exploitation; and
- j) computer programs (i.e., the transactions for transfer of the software rather than the details of the specific program).

Previously, the maquila industry had been exempt from the registration requirements of the 1973 Technology Transfer Law. However, the 1982 Law now subjects maquiladoras to the registration requirements.

The following categories of technology transfers are exempt from the registration requirements--

- a) employment of foreign technicians to come to Mexico to install factories or machinery or to make repairs;
- b) the provision of designs, catalogs, or counseling in general, which are purchased with the machinery or equipment and are necessary for its installation, to the extent that this does not imply a separate obligation to make subsequent payments (e.g., training and manuals which are "bundled" into the purchase price of the equipment do not appear to require registration under this provision);
- c) assistance in repairs or emergencies if and when they derive from some act, agreement, or contract that has been previously registered;
- d) instruction or technical training furnished by educational institutions, personnel training centers, or by companies to their workers:
- e) industrial exploitation of copyrights relating to the publishing, motion picture, recording, or radio and television industries; and
- f) international agreements for technical cooperation executed between Governments.

There are several grounds for denial of registration.  $\underline{1}$ / These may be enumerated as follows-

- a) restrictions on improvements in the transferred technology;
- b) interference in the management practices of the recipient;
- c) requirements to accept supplies from an exclusive source;
- d) limitations on the export of the finished product;
- e) prohibitions on the use of complementary technologies;
- f) requirements to sell to one exclusive buyer;

<sup>1/</sup> B. Kryzda, Joint Ventures and Technology Transfers, 12 CASE WEST. RES. J. INT'L. L. 549 at pp. 558 and 559, 1980.

- g) restrictions on the use of personnel;
- h) limitations on volume of production or imposition of sale or resale prices;
- i) most requirements to enter into exclusive sales or representation contracts with the supplier;
- j) obligations to maintain the secrecy of the technical information beyond the duration of the agreement;
- k) failure of the supplier to accept responsibility for third party liability in the event of infringement of their industrial property rights; or
- 1) absence of quality guarantees by the supplier.

In addition, ordinarily acceptable agreements are denied registration when the technology is already available in Mexico; the fee or the duration of the agreement is considered excessive (agreements are limited, in any case, to no more than 10 years); or foreign arbitration is enlisted for dispute resolution purposes related to the agreement (i.e., the Calvo Clause supra is invoked). In the first 15 months of operation, the Mexican National Registry for the Transfer of Technology is reported to have rejected some 35 percent of the technology agreements submitted to it. 1/ However, in many of these areas, negotiation with the Government is possible on a case-by-case basis. Exceptions are granted when it is deemed in the "best interests of the country."

The 1976 Law on Inventions and Trademarks. -- In 1976, Mexico replaced its 1942 Industrial Property Code with the Law on Inventions and Trademarks. The 1976 law created new categories of nonpatentable items and increased the restrictions on granting and using patents and trademarks. 2/ The National Registry for the Transfer of Technology, which oversees the transfer of technology law, is also responsible for administration of the Law on Inventions and Trademarks.

Under the 1976 law, the following items are not patentable--

- a) plant varieties and animal breeds as well as biological processes for obtaining the same;
- b) alloys;
- c) chemical products, except new industrial processes for obtaining the same and their new uses of an industrial nature;
- d) chemical-pharmaceutical products and their mixtures, medicines, beverages and foods for human or animal consumption, fertilizers, pesticides, herbicides, and fungicides;

<sup>1/</sup> E. Epstein, <u>Business-Government Relations in Mexico: The Echeverria Challenge to the Existing Development Model</u>, 12 CASE WEST. RES. J. INT'L. L. 525 at 536, 1980.

<sup>2/</sup> See generally, A. Hyde and G. Ramirez de la Corte, Mexico's 1976 Law of Inventions and Trademarks, 12 CASE WEST. RES. J. INT'L. L. 469, 1980.

- e) processes for obtaining mixtures of chemical products, industrial processes for obtaining alloys, and industrial processes for obtaining, modifying, or applying the products and mixtures described above in paragraph (d);
- f) inventions pertaining to nuclear energy and security;
- g) antipollution apparatus and equipment for the manufacture, modification, or application thereof;
- h) juxtaposition of known inventions, their variation of form, of dimensions, or of materials, except when there is a combination or fusion of these inventions in such a manner that they cannot function separately, or that the characteristic properties or functions of the same are modified so as to obtain a novel industrial result;
- i) application or use in an industry of an invention already known or utilized in another industry, and processes which consist simply of the application or use of a device, machine, or apparatus which operates in accordance with previously known principles, even though such application is new; and
- j) inventions the publication or exploitation of which is contrary to the law, public order, health, public security, or to moral or good customs.

The inventions described above in paragraphs (e), (f), or (g) may be protected through registration and the issuance of a certificate of invention. 1/ The certificate of invention does not provide the right of exclusive use to the inventor. Instead, the certificate guarantees the right to collect royalties from any party that wishes to exploit the invention. A certificate of invention is available as an alternative to a patent for any patentable invention, as well as for certain types of nonpatentable inventions. The certificates have a duration of 10 years.

Patents also have a duration of 10 years and may not be extended. The law provides that patents must be used within 3 years from the date of issue. Otherwise, during the 4 years, the Government may authorize an obligatory nonexclusive license to use the patent. The Mexican authorities must approve the amount of royalties to be paid and other terms for such a license. If a valid request for a compulsory license is not made during the 4 years, the patent expires.

The length of trademark protection was reduced from 10 to 5 years by the 1976 law. This law allows registration renewal for successive 5-year periods, but only if the trademark's effective and uninterrupted use during the preceding 5-year period is proven. The law requires all products produced in Mexico to carry a distinctive Mexican trademark. This Mexican trademark must be equally "linked" to the foreign or international mark and owned by the

<sup>1/</sup> Ibid. pp. 471 and 472.

Mexican entity. 1/ This latter provision has attracted much comment. 2/ It has been suspended annually and has yet to be implemented. It may, however, be invoked at any time either in its entirety or on a selective basis.

## Mexican agricultural policies

Like the case in many other sectors of the Mexican economy, the Mexican Government actively participates in the management of its agricultural economy though a variety of governmental policies such as price ceilings, tax incentives, import and export licensing, State trading, and credit to name but a few. 3/ According to a July 1985 study, Mexican agricultural trade policies until recently,"... have reflected a national goal of self-sufficiency in basic foods; current actions [of the Mexican Government] seem to reflect a national goal of self-reliance with a somewhat greater attention to international comparative advantage. " 4/ Mexican agricultural policy derives, according to the authors of this study, from the political necessity of providing cheap food to rural and urban poor, while maintaining income for poor farmers. Intervention of the Government in Mexican agriculture ranges from guaranteed producer prices and consumer subsidies for food to Government ownership of food stores, wholesale distributors, milk processing plants, and feedmills. The Mexican Government has required import and export permits for a wide variety of agricultural and nonagricultural products for a number of years, although there has been some loosening of permit requirements for certain agricultural products in the past several years, according to some sources. 5/ A Mexican parastatal organization, Compania Nacional de Subsistencias Populares (CONASUPO), has permit control over imports and exports of most agricultural products, issuing export permits only when domestic needs have been met. Mexican exports of sugar and beef have been sharply reduced in recent years as domestic demand has risen and these products have become more scarce domestically.

<sup>1</sup>/ In-bond (maquila) assembly industries, and those operating in similar form in the free zones are exempt from the linking requirement, at least in so far as they produce goods that are intended for export. A. Hyde and G. Ramirez de la Corte, supra at p. 480.

<sup>2/</sup> Ibid. at pp. 477-482.

<sup>3/</sup> This section draws upon: Maury Bredahl, Jimmye Hillman, Rober Rothenberg, and Nicolas Gutierrez, Technical Change, Protectionism, and Market Structure: The Case of International Trade in Fresh Winter Vegetables, University of Arizona, August 1983; U.S. Department of Agriculture, "Mexico's Move to Liberalize Trade," Agriculture Outlook, December 1985, pp. 13-17; Stephen Duprick and Clive Harston, U.S.-Mexican Trade: An Examination of Agricultural and Nonagricultural Trade Policies and Their Implications, Department Information Report No. 82-2, Dept. Of Agriculture Economics, Texas A&M University, August 1982; and Jimmye Hillman, Philip Abbott, Maury Bredahl, and Myles Mielke, Understanding U.S. Mexican Agricultural Trade, University of Missouri-Columbia, July 1985.

<sup>4/</sup> Hillman, Abbott, Bredahl, and Mielke, Ibid., p. 2.

<sup>5</sup>/ Dupnick and Harston, op cit., pp. 40-41; the U.S. Department of Agriculture, op cit., December 1985, pp. 15-16.

Mexican imports of agricultural products.--Mexico imports principally basic agricultural commodities, notably grain and oilseeds. The Mexican \*Government carefully controls these imports to minimize interference with its programs for farmers and agricultural producers. There are few imports into Mexico of the so-called high valued products (HVP), such as beef, wine, horticultural products, or other processed foods that the United States supplies to other countries such as Canada or Japan.

Trade barriers within Mexico to U.S. agricultural exports. -- As indicated earlier in the section entitled "Mexican agricultural policies," Mexico tightly regulates its international and domestic trade in agricultural products through a wide variety of government programs and policies. authors of a USDA study conclude, for example, "Traditionally, Mexico has taken a strong protectionist stance in international trade in order to promote national development." 1/ The Government of Mexico has used chiefly nontariff measures, notably direct import licensing, to reduce or control imports of agricultural products. And, although it has recently reduced the number of products requiring licenses, most of the leading imports such as grain, oilseeds, vegetable oils, oilseed meals, dry milk, and tallow still require them. Moreover, even where import licenses are no longer required, to some degree, higher and restrictive tariffs have taken their place. For example, imports of the various animal fats (except tallow) into Mexico required an import license prior to 1985, and required a duty of up to 10 percent ad valorem; in 1986, such imports require no permit, but are dutiable at 25 percent ad valorem. 2/

Factors other than trade barriers affecting Mexican imports of agricultural products.--In addition to Mexico's tariff and nontariff trade barriers to agricultural imports, there are several other factors that limit Mexican demand for U.S. agricultural products. Heavy foreign indebtedness has already curtailed purchases of U.S. agricultural products, according to several USDA studies. 3/ Moreover, in Mexico, over the past 5 or 6 years, the lack of vigorous economic growth has dampened prospects for U.S. agricultural sales to Mexico. In most years, the United States supplies 80 percent or more of Mexico's total imports of agricultural products. Therefore there is little prospect of increasing total U.S. exports to Mexico by replacing other foreign suppliers. 4/

<sup>1/</sup> Nicole Ballenger and Myles Mielke, "Mexico's Move to Liberalize Trade," Agricultural Outlook, U.S. Department of Agriculture, December 1, 1985, pp. 14 and 15.

<sup>2/ &</sup>lt;u>Ibid.</u>, pp. 15 and 16.

<sup>3/</sup>See John Dunmore and James Longmire, Sources of Changes in U.S. Agricultural Exports, January 1984, U.S. Department of Agriculture, for example.

<sup>4/</sup> USDA (Foreign Agriculture Service), Mexico--Agriculture Situation Report (U.S. Attache Report), Mar. 4, 1986, p. 13.

In response to Mexico's foreign debt problem, the USDA has provided the Government of Mexico with various credit guarantees and intermediate credit at various times over the past several years. In fiscal year 1983, for example, USDA provided over \$1 billion in credit guarantees for private loans to Mexico from U.S. banks to finance the purchase of mostly feedgrains, oilseeds, and oilseed meal from the United States. In 1985, USDA provided about \$175 million in credit guarantees that were used to purchase mostly feedgrains and oilseeds, according to information supplied by the USDA. 1/

# GATT accession

Mexico formally applied to accede to the General Agreement on Tariffs and Trade (GATT) in November 1985. By August 24, 1986, Mexico was a full member, or contracting party, to the GATT. Mexico had applied to join the GATT once before, during the 1970's. With its application pending, Mexico participated in the Tokyo Round of multilateral trade negotiations (MTN's). However, at the close of the Tokyo Round in 1980, Mexico withdrew its application because of internal dissent from a coalition of opposition politicians, labor unions, and producers benefiting from Mexico's protection against foreign imports.

This time, Mexico's application to the GATT followed several months of floating the idea on the domestic front. 2/ The climate now seemed more favorable. For the Mexican administration, joining the GATT complemented efforts already under way to liberalize the country's import regime and open its economy to international competition. GATT accession would also support discussions with the International Monetary Fund (IMF) and ensure Mexico a role in the upcoming new round of MTN's.

The U.S. interests.--Mexican measures identified by the United States Trade Representative (USTR) and in hearings before the Commission as affecting U.S. exporters include, among others, high tariffs, an extensive import licensing system, minimum import pricing, extensive Government purchasing under a "buy national" policy, and export subsidy programs. 3/ Many of these practices were addressed in accession negotiations. In the entry negotiations conducted with Mexico by GATT members, the U.S. Government requested concessions relevant to U.S. trading interests. Priority requests were determined through extensive consultations by the USTR and other agencies with private sector advisors. Some of the sectors providing advice included producers of farm equipment, paper and paper products, leather products, agricultural products, computers and software, steel and steel products, chemicals, and cosmetics.

<sup>1/</sup> Ibid.

<sup>2/</sup> In August 1985, then Minister of Commerce and Industry, Hector Hernandez, discussed interest in joining the GATT before hearings of the Mexican legislature. <u>Journal of Commerce</u>, Aug. 12, 1985.

<sup>3/</sup> Office of the United States Trade Representative, Annual Report on National Trade Estimates, 1985, pp. 150-155, and proceedings before the U.S. International Trade Commission, The Impact of Increased U.S.-Mexican Trade on Southwest-border Development, Investigation No. 332-223, Apr. 10, 1986.

The accession package.--To join the GATT, Mexico agreed to bind or lower many tariffs, continue to phase out many quotas and import license requirements, administer nontariff measures (NTM's) and development programs in a GATT-consistent manner, and sign on to a number of codes adopted at the Tokyo Round of multilateral trade negotiations. Many of the tariff and other changes required to comply with the terms of accession (those that have not already been implemented under Mexico's current liberalization program) will be phased in according to a specific timetable.

On tariffs, Mexico agreed to a ceiling binding of 50 percent ad valorem on all 8,143 of its tariff lines.  $\underline{1}/$  Mexico is also granting bound duty rates of lower than 50 percent on 373 tariff lines, representing 16 percent (or \$1.9 billion) of total Mexican imports in 1985. In concessions of interest to the United States, Mexico bound 210 items at rates lower than 50 percent. These items, represented \$1.2 billion in imports and accounted for 15.7 percent of total Mexican imports from the U.S. in 1985. The United States also obtained the bound elimination of licenses of 175 of the 210 priority U.S. items.  $\underline{2}/$ 

Several other Mexican commitments involved nontariff barriers. Mexico agreed to adhere to five of the Tokyo Round nontariff barriers codes within 6 months of accession. These codes include those on licensing, customs valuation, antidumping, subsidies, and standards. Mexican accession to the import licensing code is key to alleviating many trade restraints. The USTR characterized Mexico's import licensing system as one of the "greatest deterrents to U.S. exports." 3/ Accession to the Customs Valuation Code should remedy trade problems associated with Mexico's minimum import pricing system. Under the code, import duties would have to be based on customs value rather than on the Government's calculated "official value" that has been used in the past. 4/ Membership in the Subsidies Code, under which export subsidies are illegal, reinforces Mexico's bilateral commitments to the United States to phase out export subsidies. 5/

Mexico agreed to conduct the purchasing by its State-owned enterprises and administration of its laws on antidumping, countervailing duties, and safeguards in a GATT-consistent manner and to work toward eliminating GATT-inconsistent border charges. Mexico also agreed to adhere to GATT

<sup>1/</sup> GATT Press Release, No. GATT/1389, 25 July 1986. Tariffs of 100 percent had been applied, for example, to canned fruit cocktail, electric shavers, and beer. Office of the United States Trade Representative, Annual Report on National Trade Estimates, 1985, pp. 150-151.

<sup>2/</sup> Details contained in the memorandum to private sector advisors from the USTR Office of Private Sector Liaison, July 11, 1986.

<sup>3/</sup> Office of the United States Trade Representative, Annual Report on National Trade Estimates, 1985, p. 152.

<sup>4/</sup> Ibid. USTR reported that U.S. paper and paper product producers claim to be particularly affected by these pricing practices.

<sup>5/</sup> In testimony before the Commission, Ann Burton of the California Farm Bureau Federation noted past problems with Mexican agricultural subsidies on eggs, honey, and asparagus. Official Transcript of Proceedings before the U.S. International Trade Commission, The Impact of Increased U.S.-Mexican Trade on Southwest-Border Development, Investigation No. 332-223, Apr. 10, 1986.

principles in the application of its National Development Program, with the exception of current practices embodied in mandatory legislation covered by a standard GATT "grandfather clause."

Although both Mexico and the United States are expected to benefit broadly from market-opening opportunities created by Mexico's accession to the GATT, several challenges are also inherent in the new relationship. Two main factors are relevant to U.S. interests. First, Mexico's accession is part of an overall Government strategy of shifting from a protected, import-substitution economy to one that is open and export-oriented. Second, as a major trader and a rapidly growing developing country, Mexico may speak effectively for developing country concerns in the GATT, but has also indicated interest in serving as a bridge between the developed and developing countries' positions. On Mexico's part, it will be faced with "overcoming domestic problems from the competition of foreign imports, and learning to cope with more extensive commercial relations with the 90 GATT countries." 1/Although a positive impact of expanded trade flows between the United States and Mexico can be expected to result from Mexico's adherence to the GATT rules and its entry concessions, the potential impact on southwest-border development is unclear at this time.

# Tax programs

The major taxes in Mexico are income taxes, value-added taxes, import and export duties, as well as Social Security and property taxes. Other special Federal taxes are those applied to the mining industry and excise taxes levied on items such as gasoline and telephone service. In general, Mexico's income taxes are based on the Income Tax Law of December 1964. The tax law is promulgated annually but the new version generally retains the essential principles of the original. The law establishes four groups of taxpayers, each governed by separate rules. These are (1) resident business entities; (2) resident individuals; (3) nonresident business entities and individuals; and (4) nonprofit organizations.

Resident business entities are subject to taxation on all of their income from all sources with very few exceptions. 2/ Resident individuals are taxed on personal income, regardless of source, with special treatment for capital gains. Marginal rates range up to 55 percent. In 1983, Mexico introduced accelerated depreciation provisions into its tax law, allowing writeoffs of 75, 50, and 25 percent on the cost of investment in 1984, 1985, and 1986, respectively.

Business entities and individuals who are not Mexican residents are taxed solely on their Mexican earnings, whereas nonprofit organizations are considered not to be taxpayers, except with respect to dividends received.

<sup>1/</sup> Francisco J. Agraz, "Mexico-United States Trade Negotiations: Seeking the Most Effective Forum," unpublished paper, Mar. 1, 1986, submitted to the Commission by the office of Senator Lloyd Bentsen.

<sup>2/</sup> It is reported that Mexico "guarantees" investors in the border zone that there will be no customs duties or indirect taxes, other than the 1.8 percent gross receipts tax. Three Tax Free Trade Zones of the World, Mexico, 1983, p. 14.

Annual tax returns must be filed by all business entities, nonprofit organizations, and by most individuals.

Several forms of tax incentives are (or have been) employed to encourage manufactured exports and import substitution to improve Mexico's balance of payments position. Two major programs, in effect since the 1970's, are CEDI's and CEPROFI's (Certificados de Promocion Fiscal). 1/ Issuance of CEDI's has been suspended temporarily, but CEPROFI's remain in effect. These two programs, together with the FOMEX program to provide pre-export financing which is sponsored by the Mexican Treasury Department, have constituted the basis for U. S. Department of Commerce investigations of subsidy practices with respect to Mexican trade. 2/

<u>CEDI's</u>.--CEDI's were introduced in 1971 as nontransferable tax rebate certificates specially designed to promote exports of manufactured products. They were suspended temporarily in August 1982. As applied prior to that time, CEDI's were granted for exports of selected products, based on the local content and the export performance of the product. Articles subject to export taxes were not eligible. The tax rebate was 10 percent of the sales value when the domestic content exceeded 60 percent. When domestic content was between 50 and 60 percent, the rebate was 5 percent. If the domestic content was less than 50 percent, the product was not eligible for a CEDI. CEDI's could be applied against a wide range of Federal tax liabilities, including payroll taxes, value-added taxes, income taxes, and import duties.

<u>CEPROFI's</u>.--CEPROFI's are designed to foster a variety of industrial development objectives including setting goals relating to exports. CEPROFI's are tax credit certificates awarded to companies satisfying criteria for promoting development in priority regions, engaging in priority economic activities, and meeting more general industrial goals.

These certificates are issued for the first 5 years of a new investment and can be used to pay any type of Federal tax. The amount of the credit varies from 10 to 20 percent of investment costs, depending on whether the project is a new plant or an expansion. CEPROFI's are also issued for the creation of new jobs. These credits amount to 20 percent of the incremental labor cost and cover a period of 2 years.

Mexican companies must satisfy a variety of obligations to receive the credit. A company must have investment tax credits approved by the Government agency concerned. It must be registered under an approved development program for the sector in question. As part of the registration process, the company must commit to performance requirements related to increasing production, domestic content levels, production shares to be exported, as well as price commitments.

<sup>1/</sup> U.S. International Trade Commission, Foreign Industrial Targeting and Its Effects on U.S. Industries, Phase III--Mexico (Investigation No. 332-162), USITC Publication 1632, pp. 193-198 January 1985.

<sup>2/</sup> C. Ludolph, <u>Subsidies and Countervailing Duties in U.S.-Mexican Trade</u>, September 1982, pp. 107 and 111.

During 1980-85, there were 28 countervailing duty cases involving Mexican products such as steel, cement, ceramic tiles, bricks, toy balloons, textiles, lime, and fresh flowers.

A major restriction on these credits is that they cannot be used in conjunction with any other tax benefit with respect to the same investment. These include Federal tax benefits, local tax incentives, and reductions in import duties. The company could, however, receive import duty reductions in cases such as severe shortages of raw materials and parts.

Value-added taxes.--Value-added taxes (VAT's) were instituted in January 1980 to replace several gross receipts and excise taxes. 1/ The VAT is applied to domestic sales and imports of goods and services. In the case of imports, the VAT is levied in addition to import duties. The general VAT rate is 15 percent, but rates vary with the product. 2/ A rate of 20 percent applies to goods considered "luxury" items. A rate of 6 percent is applied to "essential" items including many food items and all medicines. A number of food items are subject to a zero VAT rate.

Transactions in certain industrial sectors are taxed at a zero rate. The majority of transactions at the zero rate are sales of food, agricultural equipment, inputs, and farming services. The zero VAT rate is also applied to the export of services such as technical assistance, in-bond (maquila) assembly operations, publicity, insurance and bonding, and financial operations, as well as to international freight and air passenger services.

Some transactions, such as sales of certain products and services and sales by certain entities, are exempt from VAT. These include sales of governmental and other public services, professional medical services, public entertainment, and educational services. The VAT does not apply to sales of land and residences, construction materials, publications, credit instruments, and sales made by labor unions' nonprofit stores, farmers' groups, and governmental agencies.

### Special programs

Measures taken in the automotive sector.--From the mid-1920's until 1962, the automotive industry in Mexico consisted of assembly operations using completely knocked down vehicle kits imported from the United States and Europe. 3/ After the Automotive Decree of 1962, however, the industry experienced a dramatic change characterized by accelerated development. In addition to successfully deterring importation of fully assembled vehicles, the decree placed a ban on imports of assembled engines in 1964. Although automotive sectoral policy was changed somewhat under the decrees of 1972 and 1977, the major objectives have remained the same. These include (1) promotion of a national automotive industry, (2) reduction in the balance of payments deficit resulting from high import levels, and (3) the establishment of employment opportunities.

<sup>1/</sup> U.S. International Trade Commission, supra at pp. 200 and 201.

<sup>2/</sup> A 10 percent VAT generally is levied on sales of consumer items throughout Mexico, except on sales to residents in the northern border zones and southern Baja California where the VAT rate is 6 percent. Three Tax Free Trade Zones of the World, Mexico, 1983, p. 14.

<sup>3/</sup> A. Violante Morlock, <u>A Critical Juncture in the U.S.-Mexican Trade</u> Relationship: The Automotive Sector, 1981, p. 4.

The most recent automotive decree was published in September 1983. Its stated objectives were to improve the efficiency of the industry, promote research and development, generate employment, standardize components, and help strengthen the balance of payments situation.

The four key provisions are as follows--

- There are restrictions on the number of car lines and models which each assembler can produce, although assemblers can earn additional car lines through the export of components and vehicles.
- 2) The medium and heavy truck market is reserved for Mexican majority owned companies.
- 3) Vehicle assemblers are required to balance foreign exchange transactions on a model year basis. No more than 20 percent of the foreign exchange earnings may be generated from in-bond (maquila) assembly operations.
- 4) Domestic content minimums are increased from 50 to 60 percent for cars, from 65 to 70 percent for light trucks, and to even higher levels for other classes of motor vehicles.

As of 1981, cities in the border zone were reported to be the only areas in Mexico where U.S.-manufactured automobiles could be sold under very limited conditions. Among other requirements, only very small quantities of specified models of these automobiles could be sold to local residents of the border zone. This was further limited to automobiles that were 4 years old and that were "identical to those made in Mexico." 1/

In 1984, the U.S. Customs Service began to refuse entry to commercial vehicles of Mexican registry weighing 10,000 pounds or more that had not complied with U.S. Federal and local insurance requirements. In addition, a regulation concerning the declaration and payment of U.S. duty on automobiles purchased in Mexico began to be more vigorously enforced. American citizens and resident aliens who had purchased such vehicles were required to pay duty on the purchase price and to modify the vehicle to conform with the Environmental Protection Agency (EPA) antipollution requirements and Department of Transportation safety standards in order to obtain release of the vehicle. Imported vehicles not in compliance with these regulatory requirements were seized as contraband.

In apparent "retaliation" for these actions by the U.S. Customs Service, Mexican authorities commenced seizures of U.S.-manufactured automobiles owned by Mexican citizens (for noncompliance with certain customs regulations). In addition, U.S. citizens employed in Mexico, who had not paid the 10 percent Mexican duty on their cars or otherwise failed to comply with Mexican registration requirements, had their vehicles seized.  $\underline{2}/$ 

<sup>1/</sup>U.S. Department of Commerce, Marketing in Mexico, May 1981, pp. 5 and 16. 2/D. Michie and P. McDevitt, supra at pp. 16 and 17.

The pharmaceutical decree.--The decree was first announced in February 1984, but it did not take effect until the issuance of amended regulations in April 1985. 1/ The decree, and the implementing regulations, seek to increase the participation of Mexican-owned firms in this sector and to reduce Mexico's dependence on imports so as to conserve foreign exchange. The regulations introduce requirements for local content, export performance, and domestic research and development. In addition, the regulations require retail generic sales, uniform labeling and packaging, import substitution of active ingredients, and price equalization of equivalent drugs. The decree also calls for the Government to expand its role in licensing, production planning, procurement, pricing, and marketing of retail drugs. The decree requires all drug companies to purchase at lease 20 percent of their raw materials from domestic sources and to increase this level to 50 percent within 3 to 5 years. 2/

Measures for the electronics (including computers) and food-processing sectors.--Mexico is understood to be considering new measures for the electronics and food-processing sectors that would parallel the measures put into place in connection with the current computer plan. These measures include (1) the substitution of imports and the promotion of exports; (2) a gradual increase in local content for the industry as a whole; (3) greater market penetration for Mexican-owned companies; (4) increased employment and research and development activities; and (5) greater national competitiveness. The computer plan also requires majority local ownership in order to qualify for Mexican development incentives. To date, this requirement has been enforced only for microcomputers and the low end of computer technology. The food-processing plan is believed likely to have similar objectives, particularly with regard to the participation of Mexican capital in that sector of the economy.

Other measures in the transportation sector.--3/ U.S. railroads are not permitted to operate in Mexico. Mexican railroad engines pick up boxcars in El Paso railyards for transport to Cd. Juarez. Similarly, U.S. truck tractors are not allowed to operate on Mexican Federal highways. In the past, a Presidential Decree of 1956 has permitted U.S. trucks to have access to the border zones. It has been reported that Mexican truck tractors pick up trailers in El Paso for distribution into Mexico. However, there are few U.S. truckers operating in Cd. Juarez "due to resistance by Mexican labor unions and other entities." 3/

Insurance, bonding, and other permits often represent barriers to U.S. transportation interests in Mexico. The Mexican authorities do not accept U.S. insurance certificates, bonds, or permits. Performance bonds are required by U.S. carriers before any commercial shipment is allowed to move by rail into Mexico. Mexican entry permits designate the specific point of entry that U.S. boxcars must use to enter and exit Mexico. Deviations from the planned route are not allowed.

<sup>1/</sup> U.S. Department of Commerce, <u>Investing in Mexico</u>, December 1985, pp. 7 and 8.

<sup>2/</sup> U.S. International Trade Commission, Operation of the Trade Agreements Program, Publication 1725, July 1985, pp. 160 and 161.

<sup>3/</sup> D. Michie and P. McDevitt, supra at p. 32.

# U.S. Trade Programs With Mexico 1/

#### Most-favored-nation tariff treatment

Most-favored-nation (MFN) treatment is the grant of privileges to a given country which are no less favorable than those accorded to the grantor's best or "most favored" allies or trading partners. Thus, the intention of the grantor is to establish equality in its international dealings with or among the grantees. Insofar as international trade is concerned, the main effect of according MFN treatment is the lowering of the grantor's import duties on the grantee's products.

Since World War II, MFN treatment for a large share of world trade has been accorded among the approximately 90 member countries of the GATT (61 Stat. (pts. 5 and 6)). Among GATT members, this 1948 multilateral agreement largely replaced the traditional, bilateral "friendship, commerce, and navigation" (FCN) agreements, that had been the principal means of establishing MFN treatment. Under article I:1 of the GATT, contracting parties agree that--

With respect to customs duties and charges of any kind imposed on or in connection with importation or exportation or imposed on the international transfer of payments for imports or exports, and with respect to the method of levying such duties and charges, and with respect to all rules and formalities in connection with importation and exportation, . . . any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.

Although Mexico has only recently become a contracting party to the GATT, Mexican exports to the United States have received MFN treatment. Even though a FCN agreement has not been in force with Mexico since a 1943 reciprocal trade agreement was terminated in 1950  $\underline{2}$ / and replaced with various more

<sup>1/</sup> It is important to note that the figures given in this section on U.S. imports from the border region of Mexico were determined by extrapolating based on data supplied by Direccion General Estadistica, Instituto Nacional de Estadistica, Geografia e Informatica. Such data included production statistics for broad categories of products for border and nonborder Mexican regions. The extrapolation involved contacting appropriate analysts, other government agencies, e.g., the U.S. Department of Agriculture, as well as Mexican officials and knowledgeable industry persons. Nevertheless, the reader is cautioned that even though every effort was made to calculate such imports, the results remain estimates.

<sup>2/ 57</sup> Stat. 833; E.A.S. No. 311.

specific agreements, Mexico's status as an MFN continued and was confirmed in the enactment of the TSUS--specifically, by general headnote 3(f) and later by section 126 of the Trade Act of 1974 (19 U.S.C. 2136). General headnote 3 sets forth the U.S. tariff treatment (although not all pertinent executive actions 1/2) applicable to all countries. It currently enumerates countries eligible for preferential treatment, including Mexico, for some products under the GSP, 2/2 and countries subject to column 2 duty rates, 3/2 and then in paragraph (f) states that products of all other countries are dutiable at column 1 general rates. 4/2

Thus, unless particular tariff items provide for duty-free entry under the GSP of eligible articles which are the product of Mexico, Mexican exports to the United States are assessed column 1 general rates of duty. These duty rates are also imposed on products of all GATT member countries, where no preferential tariff treatment is set forth in individual tariff items under the special rates of duty column. Column 1 general duty treatment is also granted to other non-GATT members not designated as Communist countries or areas in general headnote 3(d). The MFN duty rates therefore apply to a very large share of U.S. imports, making MFN status in effect the broadest "preferential" tariff program. The rates of duty under column 2 are generally referred to as statutory rates, since they are for the most part the high rates of duty included in the Smoot-Hawley Tariff Act of 1930.

## Generalized System of Preferences

Authorized under the GATT, it is a one-way duty elimination granted by developed countries to designated products of developing countries. As noted above, GSP was established in title V of the Trade Act of 1974 (19 U.S.C. 2461 et seq.) and renewed with some changes in the Trade and Tariff Act of 1984.

<sup>1</sup>/ The headnote does not reflect trade embargoes other than that applicable to Cuba pursuant to Proclamation No. 3447 of Feb. 3, 1962.

<sup>2/</sup> The GSP affords nonreciprocal tariff preferences to developing countries to aid their economic development and to diversify and expand their production and exports. The U.S. GSP, enacted in title V of the Trade Act of 1974 and renewed in the Trade and Tariff Act of 1984, applies to merchandise imported on or after Jan. 1, 1976, and before July 4, 1993. It provides duty-free entry to eligible articles imported directly from designated beneficiary developing countries.

 $<sup>\</sup>underline{3}$ / The rates of duty in col. 2 apply to imported products from those Communist countries and areas enumerated in general headnote 3(d) of the TSUS.

<sup>4/</sup> The rates of duty in col. 1 are MFN rates and are applicable to imported products from all countries except those Communist countries and areas enumerated in general headnote 3(d) of the TSUS. The People's Republic of China, Hungary, Romania, and Yugoslavia are the only Communist countries eligible for MFN treatment. However, MFN rates would not apply if preferential tariff treatment was sought and granted to products of developing countries under the GSP or the Caribbean Basin Economic Recovery Act (CBERA), or to products of Israel or of least developed developing countries (LDDC's), as provided under the special rates of duty column.

The U.S. GSP program has been administered by a subcommittee of the Trade Policy Staff Committee and, prior to the 1984 act, followed a regular timetable and course of procedures each year.

Under this system, Mexico was designated as a beneficiary developing country (BDC) in 1975, the first year of the program, and has continued as a designated BDC since then. 1/ TSUS general headnote 3(e)(v)(A) sets forth the list of independent countries, non independent countries and territories, and associations of countries (each of the latter treated as one country) designated as BDC's; subparagraph (B) enumerates those currently treated as least developed BDC's. In all, over 140 countries and territories and three associations are now designated as BDC's.

Each year, following the receipt of petitions from foreign governments, producers, importers, or other interested parties, the GSP subcommittee has designated articles or classes of articles as eligible for duty-free entry when imported directly from a BDC and when certain other requirements are met. Specifically, 35 percent of the imported article's value (when it is not wholly the product of a BDC) must be added in a BDC (or in the case of associations of countries, more than one BDC), and documents required to verify origin and the added value must be submitted to the U.S. Customs Service along with the entry papers bearing a request--in the form of a code--for GSP treatment.

Since 1980, the GSP subcommittee has also entertained and granted petitions to remove or "graduate" individual products from GSP benefits, either entirely or when imported from particular BDC's, when injury to domestic interests has been shown. Furthermore, duty-free GSP imports of eligible articles are restricted annually by country, with the exception of the enumerated least developed BDC's, based on statutory limitations--the so-called competitive-need criteria. That is, when imports under a designated TSUS item from one BDC have either reached an announced absolute dollar limit or exceeded a fixed percentage of total U.S. imports, the BDC's eligibility under that TSUS item is suspended for at least a year. Thus far, no BDC has been completely graduated from the GSP based on its improved competitiveness; rather, any removals have been based on statutory restrictions, such as the exclusion from GSP of countries joining the European Economic Community.

Under the 1984 act, however, some of the larger BDC's, perhaps including Mexico, may be graduated entirely or lose eligibility under many TSUS items because of the act's more stringent competitive-need controls. Section 504 of the Trade Act of 1974 (19 U.S.C. 2464) was amended to create a three-tiered competitive-need standard. In other words, the least developed BDC's are no longer subject to competitive-need limits, more developed BDC's will be subject to the prior standard (absolute dollar figure, or 50 percent of U.S. imports), and the most developed BDC's will be graduated from eligibility under a tariff item when import levels reach the absolute dollar figure, or 25 percent of total U.S. imports. The last two groupings of countries (not yet announced) must be made based on each BDC's degree of competitiveness as to

<sup>1</sup>/ See Executive Order No. 11888 of Nov. 24, 1975 (40 F.R. 55276), and subsequent orders; see also Proclamation No. 5365 of Aug. 30, 1985 (50 F.R. 36220).

each eligible article, relative to other BDC's. The 1984 act also limits the President's authority to grant waivers of the competitive-need limits and requires the graduation of a BDC from the entire program when its per capita gross national product exceeds a specified level. These changes would appear most likely to have an impact on BDC's such as the Republic of Korea, Taiwan, Hong Kong, Brazil, and Mexico, among the principal recipients of GSP benefits and presently ineligible under many GSP-designated tariff items. As with the granting of GSP benefits, the impact of graduation (either from more tariff items or from the GSP program) is not restricted to the U.S.-Mexican border area.

Since the creation of the program, various products have been excluded from designation as GSP-eligible articles, either by statute or by action of the GSP subcommittee. Statutory exclusions include textiles and apparel subject to textile agreements; watches; import-sensitive electronic and steel articles; import-sensitive semimanufactured and manufactured glass products; and most footwear, handbags, luggage, flat goods, work gloves, and leather wearing apparel; as well as any other articles determined by the President to be import sensitive. The latter has included many labor-intensive products and various agricultural articles, among others. The degree of sensitivity attributed to such products has been linked to U.S. production, employment, and import patterns; to potential alternative products for a firm, industry, or area; and to changes in foreign production levels and capacity. Thus, a product may be excluded from GSP designation, or one or more BDC's excluded from GSP benefits therefor, despite the fact that it may be a significant or potential export of the BDC's.

Unlike the extension of MFN benefits, which is an across-the-board privilege for all the grantee's exports, it would be possible to alter the present level of GSP benefits to assist Mexico. This could be accomplished by granting eligibility to additional articles produced in Mexico or extending waivers of the competitive-need limits for additional products. In practice, such changes seem likely only if they could be accomplished without great harm to U.S. interests, with consideration of possible imports from both Mexico and other BDC's. From a U.S. standpoint, GSP eligibility for a country, or for any product, has a potentially nationwide impact, so the effects of increasing Mexico's level of benefits would not be limited to the border region.

Economic overview.--The GSP program does provide some benefits to Mexico. By providing duty-free treatment for many products exported to the United States, the total duties forgone as a result of GSP imports from Mexico are estimated to have amounted to \$300.2 million for the period 1976-85. 1/Nevertheless, GSP benefits to Mexico have been limited, in part, because of the inherent criteria of the GSP. Some products are excluded from GSP designation despite the fact that they may be a significant or potentially

<sup>1</sup>/ Generally total duties foregone closely approximates the benefits exporters receive from a reduction in import duties.

significant export. 1/ For instance, although the dollar value of Mexican exports to the United States (\$1.2 billion in 1985) would indicate that Mexico is a major beneficiary of the GSP program, merchandise valued at \$1.2 billion entered duty free in 1985, these imports constituted only 6.6 percent of total Mexican exports to the United States. U.S. imports from Mexico are the smallest among all beneficiaries of the U.S. GSP program because petroleum, which dominates Mexico's exports, is not GSP eligible.

Nonetheless, GSP imports from Mexico have increased significantly. Total GSP imports increased from an estimated \$346.5 million in 1976 to \$1.2 billion in 1985 and are expected to continue to increase to \$1.6 billion in 1990. Total imports have increased from an estimated \$5.6 billion in 1976 to \$18.4 billion in 1985 and are expected to reach \$29.5 billion in 1990. Principal sectors in Mexico that use GSP are chemical and related products; machinery and equipment; agriculture, fisheries and forest products; and textiles and apparel. In 1985, GSP imports from all these sectors combined amounted to 56 percent of total GSP imports from Mexico.

For some sectors, factors that have encouraged border development have succeeded in causing many companies to open plants there. These principally are machinery and equipment and textile and apparel operations. For the other sectors, U.S. imports from the Mexican border region were not significant.

Imports from Mexico under the Generalized System of Preferences.--Total U.S. imports from Mexico increased from an estimated \$5.6 billion in 1976 to \$18.4 billion in 1985 for an average annual rate of increase of 2 percent (table 13). U.S. imports from Mexico under the GSP increased at an average annual rate of 15 percent per year, or from an estimated \$346.5 million in 1976 to \$1.2 billion in 1985. 2/ As a percent of the total, imports under the GSP averaged 6 percent over the period. Imports from the border region represented 30 percent of total imports and 37 percent of imports under the GSP during the time period.

The single largest sectoral group of products imported from Mexico was chemicals and related products, mostly petroleum products. In Mexico, the largest petroleum exporting areas are in the interior. Other chemical processing facilities also tend to be located in the interior.

Total U.S. imports of products in the chemicals sector increased from an estimated \$1.1 billion in 1976 to \$8.3 billion in 1985 at an average annual rate of 25 percent (table 14). Imports under the GSP increased from an estimated \$31.3 million in 1976 to \$294.0 million in 1985 for an average annual rate of 28 percent. Such imports under the GSP accounted for an

<sup>1/</sup> For another extensive discussion of GSP and Mexican benefits, see Sidney Weintraub, Free Trade Between Mexico and the United States, Brookings Institution, 1984, pp. 95-128.

<sup>2/</sup> Caution must be used in interpreting these trends. GSP-eligible exports even without GSP treatment may inherently grow at a faster rate than the average for all imports. A statistical analysis is necessary to determine if and to what extent that growth rate was higher because of GSP treatment. A similar analysis is required for noneligible exports, i.e., to what extent was their growth rate lower because they did not receive benefits?

Table 13.--All Products: U.S. imports for consumption from Mexico, under the Generalized System of Preferences, from border and nonborder regions in Mexico, all other countries, and total, 1976-90

				J	(In thousands of dollars)	of dollars)				
	Imports	Imports from Mexico					Imports fro	[mports from countries		
	Border region 1	egion 1/	Other regions 1/	ons 1/	Total		other than Mexico	Mexico	Total imports	
Year	GSP	Total	GSP	Total	GSP	Total	GSP	Total	GSP	Total
1976 2/	•	1,555,364	204,917	4,037,148	346,506	5.592,512	3,651,881	135,555,387	3,998,387	141 147 751
1977 2/	159,332	1,809,484	239,150	3,894,878	398,482	5.704.362	4.163.143	149,110,763	4 561 625	154 915 125
1978	138,959	2,156,722	310 205	102 133 5	450 254	010 010 9		000 100 101	1,00,100,0	(27'CTO'LCT
9505		111111111111111111111111111111111111111	0031010	771170010	#C7 0C#	J. 016, 449	4,740,984	164,021,839	5,204,237	169,840,288
19/9	196,462	2,853,536	325,069	2,648,696	551,531	8,502,232	5,764,502	193,921,450	6.316.033	202.423.681
1980	192,048	3,153,438	317,817	9,005,238	509,865	12,158,676	6,840,879	223,434,540	7.350.745	235, 593, 216
1981	267,959	3,634,504	366,036	9,626,213	633,995	13,260,717	7,794,530	240,700,911	8,428,525	253,961,628
1982	240,082	3,838,171	362,026	11,199,357	602,108	15,037,528	7,871,272	221,526,701	8.473.380	236.564.229
1983	263,041	4,095,087	464,470	12,110,744	727,511	16,205,831	10,056,512	234,656,606	10.784,023	250.862.437
1984	361,880	5,771,289	734,007	11,526,296	1,095,887	17,297,585	11,925,004	298,839,537	13.020.891	316,137,122
1985	406,465	6,654,534	833,530	11,739,200	1,239,995	18,393,734	12,122,172	316,860,487	13,362,167	335,254,221
1986 2/	407,050	7,117,594	795,860	14,384,633	1,202,910	21,502,227	13,344,090	324.743.846	14.547.000	346.246.073
1987 2/	439,541	7,996,018	869,659	15,545,201	1,309,200	23,541,219	14.446.668	344.041.027	15,755,868	367 852 246
1988 2/	472,106	8,873,793	943,381	16,706,415	1,415,487	25,580,208	15,549,349	364,099,649	16.964.836	389 679 857
1989 2/	504,521	9,753,822	1,017,259	17,868,219	1,521,780	27,622,041	16,651,924	384,129,111	18,173,704	411 751 152
1990 27	537,107	10,635,626	1,090,963	19,030,650	1,628,070	29,666,276	17,753,602	404,424,112	19,381,672	434,090,388
									•	

1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direccion General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.
2/ Projected using ordinary least square on 1978-85 data to calculate a regression line with the year as the independent variable and the level of imports as the dependent variable (see methodology section).

Table 14.--Chemicals and related products under the Generalized System of Preferences: U.S. imports for consumption from Hexico, from border and nonborder regions in Mexico, all other countries, and total, 1976-90

	tries	al imports	tal GSP Total GSP Total	965	123,093 46,156,542 163,756	155,097	186.879	222,865 81,444,299 285,611	324,120	765,913 333,961 66,584,431 414,700	882,647 494,257	538,373 66,676,660 813,560	776,236 60,033,662 1,070,221	750,195 67,197,956 1,038,019	832,689 67,381,645 1,155,442	915,183	997,677 67,749,023 1,390,288	1,080,171
(In thousands of dollars)		Total	GSP Total	31,272 1,090				62,746 6.86			ó			287.824 10.919		357,682 12,803	i i es	
(1		Other regions 1/	Total	29.843 1.068.598				59.609 6.519.443				· ~		1			,	406,163 13,952,029
	Imports from Mexico			22.261	43.556	85 225	037 77	343,129	146 045	420 206	464 132	418.986	415.691	545.986	593.068	640.151	687.234	734,317
	Import	Border	Year GSP	1976 2/ 1.429	1077 2/ 1 905			19/9 3,134			1992 1991			2/	1087 2/ 148		1080 2/ 10.631	1990 2/ 21,377

Instituto Nacional de Estadistica, Geografia e Informatica. 2/ Projected using ordinary least square on 1978-85 data to calculate a regression line with the year as the independent variable and the level of imports as the dependent variable (see methodology section). 1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direction General de Estadistica

average of 2 percent of total imports during the period. Imports from the border region of Mexico accounted for about 5 percent of both total imports and imports under the GSP.

The next largest sectoral group of products imported from Mexico during 1976-85 was machinery and equipment. 1/ Total imports of this group of products increased by an average annual rate of 21 percent, from an estimated \$974.5 million in 1976 to \$5.4 billion in 1985 (table 15). Such imports entered under the GSP, on average, accounted for 5 percent of total imports and increased by an average annual rate of 12 percent, from an estimated \$69.7 million in 1976 to \$192.8 million in 1985. On average, U.S. imports of these products from the border region of Mexico accounted for 90 percent of total imports and GSP imports of these products during 1976-85.

Another important group of products with respect to GSP imports from Mexico is agricultural, fisheries, and forest products. Total U.S. imports from Mexico increased from an estimated \$1.4 billion in 1976 to \$2.1 billion in 1985, or by an average annual rate of 5 percent (table 16). U.S. imports from Mexico entered under the GSP at an average annual rate of 7 percent, from \$103.3 million in 1976 to \$200.9 million in 1985. Such imports, on average, accounted for 9 percent of total imports during the period. Most of the agriculturally productive land, prime fishing centers and forest product development areas that would be a source of imports are not located along the border. However, there are some products produced along the border that are trade sensitive such as winter fresh vegetables. About 17 percent of the total U.S. imports of this sector originate in the border area; for GSP imports, the percentage is also around 17 percent.

The final group of products is textiles and apparel. Total imports of these products increased from an estimated \$225.7 million in 1976 to \$412.7 million in 1985, or by an average annual rate of 9 percent (table 17). Imports under GSP increased from an estimated \$20.7 million in 1976 to \$24.1 million in 1978 before dropping significantly to \$6.4 million in 1979. During 1980-85, such imports increased irregularly at an overall average annual rate of 2 percent to \$7.2 million in 1985. On average during 1976-85, imports under GSP accounted for 4 percent of total imports.

The border region in Mexico is a very important location for many producers of textiles and apparel that export to the United States. During 1976-85, an average of 71 percent of total imports and 80 percent of GSP imports of these products originated in maquiladoras along the border. Such imports play an important part in developments along the U.S.-Mexican border.

Total U.S. imports from Mexico of all other products increased from an estimated \$711.0 million in 1976 to \$2.2 billion in 1985 (table 18). Such imports under the GSP increased from \$128.6 million in 1976 to \$542.1 million in 1985.

<sup>1/</sup> Most of the products included in this sector are made in maquiladoras located along the U.S. Mexican border. For a discussion of the importance of maquiladoras border development, see chapter on maquiladoras.

Table 15.--Machinery and equipment: U.S. imports for consumption from Mexico, from border and nonborder regions in Mexico, all other countries, and total, under the Generalized System of Preferences, and total, 1976-85 and projected 1/ 1976-90

orts			.			(In thousar	(In thousands of dollars)	~			
Border region 1/ GSP         Other regions 1/ Total         Total GSP         Other than Mexico Total         Total imports           62.765         877,016         6,974         97,446         69,739         974,462         929,942         34,720,325         1,012,335           70,297         1,061,189         7,810         117,910         78,107         1,179,099         1,078,733         40,275,576         1,164,183           70,297         1,061,189         7,810         117,910         78,107         1,179,099         1,078,733         40,275,576         1,164,183           70,297         1,061,189         7,810         117,910         78,107         1,179,099         1,078,733         40,275,576         1,164,183           70,297         1,061,189         7,810         117,910         78,107         1,179,099         1,078,733         46,713,669         1,649,430           92,522         1,760,946         10,280         195,661         102,802         2,064,311         1,646,482         58,013,792         1,747,729           163,177         2,217,792         18,131         246,422         181,130         2,664,371         2,664,371         2,666,974         2,080,561         6,077,818         2,261,869           155,679		Imports	Irom Mexico					Imports fro	om countries		
GSP         Total         GSP		Border r	egion 1/	Other reg	ions 1/	Total		other than	Mexico	Total import	w
62,765         877,016         6,974         97,446         69,739         974,462         929,942         34,720,325         1,012,335           70,297         1,061,189         7,810         117,910         78,107         1,179,099         1,078,733         40,275,576         1,164,183           78,733         1,284,039         8,748         142,671         87,481         1,426,710         1,251,330         46,719,669         1,138,810           92,522         1,760,946         10,280         195,661         102,802         1,956,607         1,546,682         51,758,640         1,649,430           91,124         1,857,790         10,125         206,541         101,249         2,064,314         2,080,561         66,077,818         2,261,869           135,460         2,397,577         15,051         2,464,214         2,080,561         66,077,818         2,261,869           135,460         2,997,577         15,051         2,464,214         2,080,085         69,696,096         2,600,597           135,460         2,997,577         14,187         345,712         3,457,128         3,343,312         81,555,210         3,485,174           137,516         4,872,537         184,088         4,553,300         184,088         4,553		GSP	Total	GSP	Total	GSP	Total	GSP	Total	GSP	Total
70.297         1,061,189         7,810         117,910         78,107         1,179,099         1,078,733         40,275,576         1,164,183           78,733         1,284,039         8,748         142,671         87,481         1,426,710         1,251,330         46,719,669         1,338,810           92,522         1,760,946         10,280         195,661         102,802         1,956,607         1,546,628         51,758,640         1,649,430           11,24         1,857,790         10,125         206,541         101,249         2,064,311         1,646,482         58,013,792         1,747,729           135,460         2,397,577         15,051         26,397         1,561,18         2,663,97         2,464,214         2,080,561         66,077,818         2,261,869           135,460         2,397,577         15,051         26,397         150,511         2,644,214         2,080,561         66,077,818         2,261,869           127,677         3,111,415         14,187         345,713         141,864         3,457,128         3,433,312         81,555,210         3,485,174           165,679         4,097,976         5,414,174         3,427,329         122,990,557         3,51,809           173,516         4,827,328         <	6 2/		877,016	6,974	97,446	69,739	974.462	929,942	34,720,325	1,012,335	35 780 601
78.733         1,284,039         8,748         142,671         87,481         1,426,710         1,251,330         46,719,669         1,338,810           92.522         1,760,946         10,280         195,661         102,802         1,956,607         1,546,628         51,758,640         1,649,430           11,24         1,857,790         10,125         206,541         101,249         2,064,331         1,646,482         58,013,792         1,747,729           135,460         2,397,577         15,051         246,422         181,308         2,464,214         2,080,561         66,077,818         2,261,869           135,460         2,397,577         15,051         26,397         150,511         2,464,214         2,080,561         66,077,818         2,600,597           127,677         3,111,415         14,187         345,713         141,864         3,457,128         3,433,312         81,555,210         3,485,174           165,679         4,097,970         18,409         455,330         184,088         4,553,300         184,084         4,555,310         3,477,20         112,597,465         3,541,417           188,015         5,137,056         20,891         570,781         20,805         5,707,849         128,509,570         3,942,309	7 2/	2	1,061,189	7,810	117,910	78,107	1,179,099	1,078,733	40.275,576	1,164,183	41,505,497
92,522 1,760,946 10,280 195,661 102,802 1,956,607 1,546,628 51,758,640 1,649,430 1,646,482 206,541 101,249 2,064,331 1,646,482 58,013,792 1,747,729 16,131 246,422 181,308 2,464,214 2,080,561 66,077,818 2,261,869 1,247,729 18,131 246,422 181,308 2,464,214 2,080,561 66,077,818 2,261,869 1,247,729 18,131 246,422 181,308 2,464,214 2,080,561 66,077,818 2,261,869 1,247,729 1,244,134 1,244 1,874 1,875,134 1,415 14,187 14,184 1,845,134 1,247,120 112,597,465 3,531,809 1,555,70 18,409 455,330 184,088 4,553,300 3,347,720 112,597,465 3,531,809 1,505,570 18,409 455,330 184,088 4,555,300 3,347,720 112,597,465 3,531,809 1,288,015 5,137,056 20,891 5,70,781 208,906 5,707,840 3,977,649 128,508,322 4,186,555 20,801 735,059 238,304 7,350,590 4,684,743 151,383,132 4,953,047 227,703 7,354,768 25,300 817,197 253,003 8,171,965 5,938,290 162,820,537 5,591,293 2240,931 8,094,006 26,771 899,334 267,702 8,993,340 5,391,837 174,257,942 5,659,539		78,733	1,284,039	8,748	142,671	87,481	1,426,710	1,251,330	46.719.669	1,338,810	48.146.377
91,124 1,857,790 10,125 206,541 101,249 2,064,331 1,646,482 58,013,792 1,747,729 18,131 246,422 181,308 2,464,214 2,080,561 66,077,818 2,261,869 2,600,597 15,051 266,397 150,511 2,663,974 2,450,085 69,696,096 2,600,597 127,677 3,111,415 14,187 345,713 141,864 3,457,128 3,343,312 81,555,210 3,485,174 165,679 4,097,970 18,409 455,330 184,088 4,553,300 3,347,720 112,597,465 3,531,809 173,516 4,812,757 69,890 541,417 192,796 5,707,840 3,977,649 128,508,322 4,186,555 20,891 735,059 23,607,840 3,977,649 128,508,322 4,186,555 20,124 5,876,293 22,361 652,922 223,605 6,529,215 4,331,196 139,945,727 4,554,801 227,703 7,354,768 25,300 817,197 253,003 8,171,965 5,038,290 162,820,537 5,591,293 2240,931 8,094,006 26,771 899,334 267,702 8,993,340 5,391,837 174,257,942 5,659,539	9	92,522	1,760,946	10,280	195,661	102,802	1,956,607	1.546,628	51,758,640	1,649,430	53.629.970
163.177         2.217,792         18,131         246,422         181,308         2,464,214         2,080,561         66,077,818         2,561,869           135,460         2,397,577         15,051         266,397         150,511         2,663,974         2,450,085         69,696,096         2,600,597           127,677         3,111,415         14,187         345,713         141,864         3,457,128         3,343,312         81,555,210         3,485,174           165,679         4,097,970         18,409         455,330         184,088         4,555,300         3,347,720         112,597,465         3,531,809           173,516         4,872,757         19,280         541,417         192,796         5,714,174         3,427,393         129,905,570         3,620,190           188,015         5,137,065         0,891         570,781         208,906         5,707,849         128,508,322         4,186,555           201,244         5,876,293         22,361         652,922         223,605         6,529,215         4,331,196         139,945,727         4,554,801           214,474         6,615,531         238,304         7,356,590         4,684,743         151,383,132         4,923,047           227,703         7,354,768         25,300		91,124	1,857,790	10,125	206,541	101,249	2,064,331	1,646,482	58.013.792	1.747.729	60.078.120
135,460         2,397,577         15,051         266,397         150,511         2,663,974         2,450,085         69,696,996         2,600,597           127,677         3,111,415         14,187         345,713         141,864         3,457,128         3,343,312         81,555,210         3,485,174           165,679         4,097,970         18,409         455,330         184,088         4,553,300         3,347,720         112,597,465         3,531,809           173,516         4,872,757         19,280         541,417         192,796         5,414,174         3,427,393         129,905,570         3,620,190           188,015         5,137,056         20,891         570,781         208,906         5,707,840         3,977,649         128,508,322         4,186,555           201,244         5,876,293         23,361         652,922         223,605         6,529,215         4,331,196         139,945,727         4,554,801           214,474         6,615,531         238,304         7,350,596         4,684,743         151,383,132         4,923,047           227,703         7,354,768         25,300         817,197         253,003         8,171,965         5,391,837         174,257,942         5,591,293           240,931         8,094,006	1	163,177	2,217,792	18,131	246,422	181,308	2,464,214	2,080,561	66.077.818	2.261.869	68.542.029
127.677 3,111,415 14,187 345,713 141,864 3,457,128 3,343,312 81,555,210 3,485,174 165,679 4,097,970 18,409 455,330 184,088 4,553,300 3,347,720 112,597,465 3,531,809 173,516 4,872,757 19,280 541,417 192,796 5,414,174 3,427,393 129,905,570 3,620,190 188,015 5,137,056 20,891 570,781 208,906 5,707,840 3,977,649 128,508,322 4,186,555 201,244 5,876,293 22,361 652,922 223,605 6,529,215 4,331,196 139,945,727 4,554,801 214,474 6,615,531 23,830 735,059 238,304 7,350,590 4,684,743 151,383,132 4,923,047 227,703 7,354,768 25,300 817,197 253,003 8,171,965 5,038,290 162,820,537 5,291,293 240,931 8,094,006 26,771 899,334 267,702 8,993,340 5,391,837 174,257,942 5,659,539	2	135,460	2,397,577	15,051	266,397	150,511	2,663,974	2,450,085	960,969,69	2,600,597	72,360,072
165.679 4,097,970 18,409 455,330 184,088 4,553,300 3,347,720 112,597,465 3,531,809 173,516 4,872,757 19,280 541,417 192,796 5,414,174 3,427,393 129,905,570 3,620,190 188,015 5,137,056 20,891 570,781 208,906 5,707,840 3,977,649 128,508,322 4,186,555 20,120,244 5,876,293 22,361 652,922 223,605 6,529,215 4,331,196 139,945,727 4,554,801 214,474 6,615,531 23,830 735,059 238,304 7,350,590 4,684,743 151,383,132 4,923,047 227,703 7,354,768 25,300 817,197 253,003 8,171,965 5,038,290 162,820,537 5,291,293 240,931 8,094,006 26,771 899,334 267,702 8,993,340 5,391,837 174,257,942 5,659,539	3	127,677	3,111,415	14,187	345,713	141,864	3,457,128	3,343,312	81,555,210	3,485,174	85,009,193
173.516 4.872,757 19,280 541,417 192,796 5,414,174 3,427,393 129,905,570 3,620,190 188.015 5,137,056 20,891 570,781 208,906 5,707,840 3,977,649 128,508,322 4,186,555 201,244 5,876,293 22,361 652,922 223,605 6,529,215 4,331,196 139,945,727 4,554,801 214,474 6,615,531 23,830 735,059 238,304 7,350,590 4,684,743 151,383,132 4,923,047 227,703 7,354,768 25,300 817,197 253,003 8,171,965 5,038,290 162,820,537 5,291,293 240,931 8,094,006 26,771 899,334 267,702 8,993,340 5,391,837 174,257,942 5,659,539	4	165,679	4,097,970	18,409	455,330	184,088	4,553,300	3,347,720	112,597,465	3,531,809	117,150,767
188,015 5,137,056 20,891 570,781 208,906 5,707,840 3,977,649 128,508,322 4,186,555 201,244 5,86,293 22,361 652,922 223,605 6,529,215 4,331,196 139,945,727 4,554,801 214,474 6,615,531 23,830 735,059 238,304 7,350,590 4,684,743 151,383,132 4,923,047 227,703 7,354,768 25,300 817,197 253,003 8,171,965 5,038,290 162,820,537 5,291,293 240,931 8,094,006 26,771 899,334 267,702 8,993,340 5,391,837 174,257,942 5,659,539	5	173,516	4,872,757	19,280	541,417	192,796	5,414,174	3,427,393	129,905,570	3,620,190	135,319,744
$2/ \cdots 201,244$ 5,876,293 22,361 652,922 223,605 6,529,215 4,331,196 139,945,727 4,554,801	6 2/		5,137,056	20,891	570,781	208,906	5,707,840	3,977,649	128,508,322	4.186.555	134.216.162
$2/\dots$ 214,474 6,615,531 23,830 735,059 238,304 7,350,590 4,684,743 151,383,132 4,923,047 $2/\dots$ 227,703 7,354,768 25,300 817,197 253,003 8,171,965 5,038,290 162,820,537 5,291,293 $2/\dots$ 240,931 8,094,006 26,771 899,334 267,702 8,993,340 5,391,837 174,257,942 5,659,539	7 2/		5,876,293	22,361	652,922	223,605	6,529,215	4.331.196	139,945,727	4.554.801	146.474.942
$\frac{2}{4}$ $\frac{227,703}{2}$ 7,354,768 25,300 817,197 253,003 8,171,965 5,038,290 162,820,537 5,291,293 $\frac{2}{4}$	8 2/	214,474	6,615,531	23,830	735,059	238,304	7,350,590	4.684.743	151,383,132	4.923.047	158.733.722
<u>2</u> / 240,931 8,094,006 26,771 899,334 267,702 8,993,340 5,391,837 174,257,942 5,659,539	9 2/	227,703	7,354,768	25,300	817,197	253,003	8,171,965	5.038.290	162,820,537	5.291.293	170,992,502
	0 2/	240,931	8,094,006	26,71	899,334	267,702	8,993,340	5,391,837	174,257,942	5,659,539	183,251,282

1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direction General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.
2/ Projected using ordinary least square on 1978-85 data to calculate a regression line with the year as the independent variable and the level of imports as the dependent variable (see methodology section).

Table 16.--Agriculture, fisheries, and forest products under the Generalized System of Preferences: U.S. imports for consumption from Mexico, from border and nonborder regions in Mexico, all other countries, and total, 1976-90

					(In thousan	(In thousands of dollars)				
	Imports	Imports from Mexico					Imports fro	Imports from countries		
	Border	Border region 1/	Other regions 1	ions 1/	Total		other than Mexico	Mexico	Total imports	8
Year	GSP	Total	GSP	Total	GSP	Total	GSP	Total	GSP	Total
1976 2/	17,400	230,800	68,526	1,126,524	103,326	1,357,324	631,686	21,463,962	730,367	22,795,797
1977 27	18,800	242,300	91,758	1,182,890	110,558	1,425,190	694,854	22,751,800	803,404	24,163,544
1978	20,300	254,400	99,103	1,242,050	119,403	1,496,450	764,340	24,116,908	883,744	25,613,357
1979	29,900	301,000	146,136	1,469,498	176,036	1,770,498	964,239	27,327,299	1,140,276	29,097,798
1980	22,800	274,300	111,106	1,339,247	134,406	1,613,547	1,527,614	27,660,927	1,662,020	29,274,474
1981	25,600	284,200	125,080	1,387,574	150,680	1,671,774	1,553,180	28,236,152	1,703,860	29,907,926
1982	24,500	308,300	119,835	1,505,251	144,335	1,813,551	1,074,390	26,245,018	1,218,725	28,058,569
1983	25,800	335,800	125,897	1,639,325	151,697	1,975,125	1,501,575	29,377,811	1,653,271	31,352,935
1984	32,400	337,700	158,011	1,648,878	190,411	1,986,578	1,782,218	34,606,834	1,972,629	36,593,413
1985	34,200	354,200	166,695	1,729,176	200,895	2,083,376	1,486,658	36,071,997	1,687,553	38,155,372
1986 2/	33,200	364,500	162,132	1,779,900	195,332	2,144,400	1,792,300	35,807,200	1,987,632	37,951,600
1987 2/	34,600	377,500	168,921	1,843,200	203,521	2,220,700	1,894,500	37,274,400	2,098,021	39,495,100
1988 2/	36,000	390,500	175,710	1,906,600	211,710	2,297,100	1,996,800	38,741,500	2,208,510	41,038,600
1989 2/	37,400	403,500	182,499	1,970,000	219,899	2,373,500	2,099,000	40,208,700	2,318,899	42,582,200
1990 2/	38,800	416,500	189,288	2,033,400	228,088	2,449,900	2,201,300.	41,675,900	2,429,388	44,125,800
	-									

Instituto Nacional de Estadistica, Geografia e Informatica. 2/ Projected using ordinary least square on 1978-85 data to calculate a regression line with the year as the independent variable and the 1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direction General de Estadistica level of imports as the dependent variable (see methodology section).

Table 17.--Textiles and apparel under the Generalized System of Preferences: U.S. imports for consumption from Mexico, from border and nonborder regions in Mexico, all other countries, and total, 1976-90

					(In thousands of dollars)	of dollars)				
	Imports	Imports from Mexico					Imports f	Imports from countries		
	Border	Border region 1/	Other regions 1/	gions 1/	Total		other than Mexico	n Mexico	Total imports	ts
Year	GSP	Total	GSP	Total	GSP	Total	GSP	Total	GSP	Total
1976 2/	17.553	190.653	1114	35 005	20 667	937 366	361 301	040 343	216 042	000 776 3
	3 1	20000	11110	0000	100107	909,022	C/T'C6T	2,040,042	240'CT2	000,002,0
1977 2/	18,673	197,303	3,621	35,565	22,294	232,868	210,789	5,680,132	233,083	5,913,000
1978	19,865	233,454	4,210	49,475	24,075	282,929	228,211	7,625,113	252,286	7,908,042
1979	5,410	246,416	1,031	46,970	6,441	293,386	181,918	7,672,887	188,359	7,966,273
1980	3,786	247,667	1,007	65,857	4,793	313,524	244,132	8,580,051	248,925	8,893,575
1981	4,384	250,415	1,395	79,619	5,779	330,034	315,819	10,361,448	321,598	10,691,482
1982	3,746	182,338	1,260	61,329	5,006	243,667	267,140	10,894,047	272,146	11,137,714
1983	5,358	203,740	2,009	76,384	7,367	280,124	343,599	12,799,714	350,966	13,079,838
1984	5,296	252,417	2,283	108,788	7,579	361,205	427,566	17,831,972	435,145	18,193,177
1985	5,161	294,565	2,070	118,109	7,231	412,674	397,666	19,718,134	404,897	20,130,808
1986 3/	5,396	315,308	2,280	125,840	7,676	441,149	459,961	21,702,740	467,637	22,143,889
1987 37	5,629	337,500	2,388	134,088	8,017	471,588	497,171	23,886,690	505,188	24,358,278
1988 3/	5,934	361,241	2,424	142,887	8,358	504,127	534,381	26,289,978	542,739	26,794,105
1989 3/	060.9	386,638	2,609	152,274	8,699	538,912	571,591	28,934,604	580,290	29,473,516
1990 3/	6,418	413,808	2,622	162,290	9,040	576,097	608,801	25,272,314	616,841	32,420,868

1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direccion General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.
2/ Estimated by the staff of the U.S. International Trade Commission.
3/ Imports under GSP projected by a straight line on the basis of 1979-85 data. The projected level of total imports was calculated on the basis of a 6-percent annual growth rate in quantity, plus an estimated 4-percent annual inflation rate, which yield a 10-percent annual growth rate.

Table 18. --All other products imported under the Generalized System of Preferences: U.S. imports for consumption from Mexico, from from Mexico, all other countries, and total, 1976-90

				(1)	(In thousands of dollars)	or dollars)				
	Imports	Imports from Mexico					Imports fro	Imports from countries		
	Border region 1/	egion 1/	Other regi	regions 1/	Total		other than Mexico	Mexico	Total imports	10
Year	GSP	Total	GSP	Total	GSP	Total	GSP	Total	GSP	Total
1976 2/	42,442	234,634	86,171	476,379	128,613	711,013	1,805,944	31,999,757	1,934,557	32,710,770
1977 2/	49,657	265,136	100,821	538,308	150,478	803,444	2,058,776	34,879,735	2,209,254	35,683,179
1978	58,099	299,604	117,960	608,288	176,059	907,892	2,347,005	38,018,911	2,523,065	38,926,806
1979	65,196	378,424	132,368	768,317	197,564	1,146,741	2,884,838	42,386,797	3,082,401	43,618,813
1980	68,201	430,552	138,464	874,150	206,671	1,304,702	3,199,786	47,735,477	3,406,458	49,040,176
1981	70,699	521,356	143,541	1,058,510	214,240	1,579,866	3,520,850	52,146,216	3,735,090	53,726,084
1982	73,101	511,660	148,416	1,038,763	221,517	1,550,423	3,745,696	48,107,109	3,967,213	49,657,529
1983	97,676	531,566	393,664	1,079,241	295,988	1,610,807	4,373,770	50,888,398	4,669,765	52,502,350
1984	144,746	664,216	293,877	1,348,559	438,623	2,012,775	5,829,127	67,126,606	6,267,748	69,143,375
1985	178,889	717,321	363,199	1,456,379	542,088	2,173,700	6,034,219	71,131,124	6,579,305	73,304,823
1986 2/	166,047	754,744	337,125	1,534,388	503,172	2,290,132	6,363,985	71,526,624	6,867,157	73,816,756
1987 2/	181,930	811,657	369,374	1,646,690	551,304	2,457,747	6,891,112	75,823,165	7,442,416	78,280,912
1988 2/	197,814	866,370	401,622	1,758,992	599,436	2,625,362	7,418,239	80,119,706	8,017,675	82,745,068
1989 2/		921,682	433,871	1,871,295	647,568	2,792,977	7,945,366	84,416,247	8,592,934	87,209,224
1990 2/	•••	976,995	466,119	1,983,597	695,700	2,960,592	8,472,493	88,712,788	9,168,193	91,673,380

Instituto Nacional de Estadistica, Geografia e Informatica. 2/ Projected using ordinary least square on 1978-85 data to calculate a regression line with the year as the independent variable and the level of imports as the dependent variable (see methodology section). 1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direccion General de Estadistica

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Mexican benefits derived from the Generalized System of Preferences.--The GSP program may have encouraged the industrial development of certain sectors in Mexico. Other factors, however, may have lessened the benefits to Mexico.

Many of the products for which Mexico has a comparative advantage are not eligible for GSP treatment. The most significant examples are certain textiles and apparel and petroleum products. Although labor-intensive garment production would suggest a Mexican comparative advantage in textiles and apparel, these articles are not GSP eligible because of their regulation by the Multifiber Arrangement. 1/ Petroleum products are not designated GSP eligible articles.

In addition to nondesignated items and articles that are regulated by a specific agreement and many items are suspended from eligibility for duty-free treatment under the GSP because Mexico has exceeded the competitive-need limits. Important examples include certain fresh vegetables, ceramics, glass products, and electronic products. The ineligibility of these products for duty-free treatment under the GSP exemplifies an inherent characteristic of the GSP program that limits its longrun use. That is, when an industry in Mexico begins to develop, it can use the GSP provisions (assuming the product is not otherwise restricted); but if that industry becomes successful and is able to export to the United States in quantities such that the competitive-need limits are exceeded, Mexico (like other developing countries) is removed from eligibility for those products.

Another provision of the GSP program that has a limiting effect requires that the value added in Mexico be at least 35 percent in order to receive GSP treatment. In many cases, the value added is less than 35 percent when Mexican facilities are used by multinational corporations for final assembly operations, accounting for a relatively small percent of the value of a product.

The total duties foregone under the GSP program closely approximate the benefits that exporters receive from a reduction in import duties. The total duties foregone as a result of GSP imports are estimated to have increased irregularly from \$23.3 million in 1976 to \$47.4 million in 1985, at an average annual rate of 8 percent.

Border industry developments associated with the Generalized System of Preferences. -- Generally, the GSP cannot be associated with any particular region of Mexico. Because the GSP program is not sector specific, the benefits of the program can be derived by producers or exporters throughout Mexico.

However, some products produced on the border do receive GSP treatment. The group of products with the largest volume of imports under the GSP that is concentrated along the United States-Mexico border is machinery and equipment. These products, produced mostly in maquiladoras, use GSP provisions, if possible, when exporting their products to the United

<sup>1/</sup> See section on Multifiber Arrangement.

States.  $\underline{1}/$  Other than machinery and equipment, there is no significant manufacturing sector of the Mexican economy that is located along the border and that extensively uses GSP provisions.

Projection of U.S. imports from Mexico under the Generalized System of Preferences.--If imports from Mexico continue to grow at post rates, total imports from Mexico under the GSP are projected to increase at an average annual rate of 8 percent from \$1.2 billion in 1986 to \$1.6 billion in 1990. 2/ Total imports are projected to increase from \$21.5 billion in 1986 to \$29.7 billion in 1990. Thus, imports under GSP would continue to account for 6 percent of the total. Imports from the border would average 34 percent for GSP imports and 35 percent for total imports.

Chemicals and related products will continue to be the largest category of GSP imports. Such imports under the GSP would increase from \$287.8 million in 1986 to \$427.5 million in 1990, at an average annual rate of 10 percent. Total imports would increase at a slightly slower rate of 8 percent. As a share of total imports, GSP imports will account for 3 percent. Imports from the border region will continue to account for 5 percent of GSP and total imports.

- U.S. imports of machinery and equipment from Mexico under the GSP surpass GSP imports of agricultural products during 1986-90. These imports of machinery and equipment will increase at an average annual rate of 6 percent from \$208.9 million in 1986 to \$267.7 million in 1990. Total imports of machinery and equipment will increase by an average of 12 percent per year from \$5.7 billion in 1986 to \$9.0 billion in 1990. On average, GSP imports of these products will account for 3 percent of total imports. Imports from the border zone will continue to account for 90 percent of GSP and the total imports of these products from Mexico during the period.
- U.S. imports from Mexico under the GSP of agriculture, fisheries, and forest products will increase at an average annual rate of 4 percent during 1986-90 from \$195.3 million in 1986 to \$228.1 million in 1990. Total imports from Mexico of these products will increase at a slightly slower rate of 3 percent per year from \$2.1 billion in 1986 to \$2.5 billion in 1990. On average, GSP imports will account for 9 percent of total imports during 1986-90. Imports from the border region will account for 17 percent of GSP and total imports of these products.
- U.S. imports of textiles and apparel under the GSP will increase from \$7.7 million in 1986 to \$9.0 million in 1990, or by an average of 10 percent per year. Total imports of these products will increase by 4 percent per year from \$441.1 million in 1986 to \$576.1 million in 1990. On average, imports

<sup>1/</sup> Laura R. Randall, "Mexican Development and Its Effects upon United States Trade," in Mexico and the United States, Robert H. McBride, ed. 1981, pp. 50-76.

<sup>1/</sup> Projected using ordinary least square on 1978-85 data to calculate a regression line with the year as the independent variable and the level of GSP imports as the dependent variable. This technique simply projects past growth rates into the future. The following discussion is only relevant if there are no large changes in relative product prices.

under GSP will account for 2 percent of total imports during the period. Imports from the border zone will account for 70 percent of GSP imports and 71 percent of total imports of these products during the period.

#### Foreign trade zones

FTZ's, 1/ or free-trade zones as they are often described, have been permitted in the United States since the enactment of the Foreign-Trade Zones Act of 1934 (19 U.S.C. 81a et seq.). U.S. FTZ is a relatively small, enclosed, isolated area located in or near a customs port of entry, often comprising only a few buildings or even part of a single structure. The FTZ's are considered to be outside the customs territory of the United States; and goods may be brought into the FTZ, returned to the country of origin, or exported to third countries without payment of U.S. customs duties or taxes. Once within the zone, foreign articles may be stored, manufactured, processed, combined with U.S. components, shown, or otherwise manipulated in accordance with the operating grant given by the Foreign-Trade Zones Board. They may be brought into the U.S. customs territory with the option of being declared "privileged" or "nonprivileged" merchandise, to obtain lower U.S. customs duty treatment, depending on their condition as imported, any changes while in the FTZ, and the pertinent tariff provisions. 2/

Since the FTZ's must be situated in or adjacent to a customs port of entry, and since they are strictly regulated by the Board and the U.S. Customs Service in accordance with current statutes, a proposed FTZ would not be permitted to cover a very large area. Further, no ordinary commercial activity or residences are allowed to be in the zone, and all merchandise or components therein must be carefully documented. Whereas general purpose zones may encompass several structures with different users, FTZ's for manufacturing or most assembly--called special-purpose subzones--are limited to a single operation and user. The FTZ's must be provided with certain utilities and other facilities, and at all times are subject to customs inspection and audit.

<sup>1/</sup> The FTZ's are frequently confused with free-trade areas, such as that between the United States and Israel, but they differ significantly. For purposes of U.S. law, a free-trade area with this country must include the entire customs territory of the United States (as well as the entire area of the other country, for practical reasons of reciprocity). This requirement derives from two provisions of the U.S. Constitution. The first is the so-called port preference clause of the Constitution, which reads as follows: "No Preference shall be given by any Regulation of Commerce or Revenue to the Ports of one State over those of another: nor shall Vessels bound to, or from, one State, be obliged to enter, clear, or pay Duties in another."
(Art. I, sec, 9, par. 6). The second is the uniformity clause of article I, section 8, paragraph 1, which provides that "all Duties, Imposts and Excises shall be uniform throughout the United States."

<sup>2/</sup> See the Commission's Report to the Committee on Ways and Means in Investigation No. 332-165, The Implication of Foreign-Trade Zones for U.S. Industries and for Competitive Conditions Between U.S. and Foreign Firms, (Investigation No. 332-165), USITC Publication 1496, February 1984, pp. 15-19.

As a result, no city or section of a city can be an FTZ. Similarly, under present law no FTZ could be permitted that comprised a strip extending the length of the border, since such a zone could not be administered in accordance with the terms of the Foreign-Trade Zones Act. A "border FTZ" might also be challenged by the 46 nonborder States as violating the port preference clause, as noted above. In addition, when an application for an FTZ is made, domestic interests that might be adversely affected by the zone or its proposed activities can oppose the grant, perhaps causing a denial of the zone request or restriction of its activities (such as prohibiting manufacturing or requiring its production be exported to third countries). Finally, the FTZ Board has often been criticized for having an arguably "pro-zone" bias, at the expense of U.S. industries; the FTZ program may therefore be subject to greater scrutiny in the future.

However, on the positive side, several FTZ's are already located at the U.S.-Mexican border customs ports of entry, including at McAllen, El Paso, Brownsville, Laredo, Del Rio, and Eagle Pass, all in Texas. These zones have the advantage of proximity to the border, with a reduction in shipping costs for any user importing from Mexico, though Mexican products are shipped to FTZ's across the United States. Because of the potential for duty reduction through the manipulation of merchandise and for delay in the payment of duties, the FTZ's offer great flexibility for their users. For example, when assembly of components occurs in an FTZ, the zone user can decide (depending on the duty rates potentially applicable) to enter articles into the U.S. customs territory either as such components or as the finished product, to obtain the lower duty rate. Thus far, however, the FTZ's have generally not been viewed as playing a significant role in U.S. trade, and zone operations appear to have focused on storage and distribution rather than manufacturing. Their chief impact has more frequently been confined to the user industries and local areas.

Economic overview .-- The FTZ program differs from other programs discussed in this report because it involves a variety of mechanisms for facilitating international trade and is not just a tariff or quota program. FTZ's are either general-purpose zones or special-purpose zones (subzones). The former serve many firms and are often located in or near industrial parks, frequently near international airports. The latter serve a single firm and encompass that firm's plant or part of its plant which has been designated as a subzone. The subzone, as its name implies, is sponsored by a general-purpose Subzones are established at manufacturing facilities primarily to take advantage of inverted tariff situations that will be explained below. Both types of zones are areas physically located within the United States, but for customs purposes are considered to be outside the customs territory of the United States. All of the border FTZ's are general-purpose zones, and none has sponsored a subzone. Although some light assembly occurs, virtually none of the manufacturing in border FTZ's is done to take advantage of inverted tariff situations. In an earlier report on FTZ's, the Commission noted the benefits of FTZ's as follows: 1/

<sup>1/</sup> The Implications of Foreign-Trade Zones for U.S. Industries and for Competitive Conditions Between U.S. and Foreign Firms (Investigation No. 332-165), USITC Publication 1496, February 1984, pp. 21 and 22.

In an effort to compete, firms have looked increasingly at the benefits resulting from operating in an FTZ. There are many advantages associated with zone usage, and firms may opt for zone operation for one or more reasons, depending on their individual needs. In addition to the benefits associated with traditional operations such as warehousing, labeling, packaging, inspection, and sorting, other important benefits derived from FTZ usage are listed below.

- (1) The ability to take maximum advantage of inverted tariffs: Perhaps the most important benefit for those firms involved in manufacturing in FTZ's is that they may take maximum advantage of so-called inverted, or upside down, tariff rates. As a consequence, manufacturing has become the single most important aspect of zone activity, accounting for more than 60 percent of the total annual value of merchandise shipped from FTZ's in recent years. Inverted tariffs (as applied to nonprivileged foreign merchandise) allow the importer to reduce tariff liability by manufacturing or assembling components or raw materials subject to higher rates of duty into a finished product with a lower rate of duty. Although manufacturing occurs in both general-purpose zones and subzones, it is conducted largely in subzones utilized by a single firm, frequently a large multinational company.
- (2) <u>Duty deferral</u>: Since duty is not collected on merchandise when admitted into a zone, but only at the time of importation into the U.S. customs territory, the deferral of duty payment can provide cash flow advantages to a company that ultimately sells its product in the U.S. market. Duty deferral is utilized by firms active in both general-purpose zones and subzones, but principally those in the former.
- (3) Quota avoidance: An FTZ user can avoid quota restrictions in several ways; e.g., quota-restricted merchandise may be admitted into an FTZ, manufactured into another product not so restricted, and then enter into the U.S. customs territory.
- (4) <u>Duty avoidance</u>: Since duty is collected only on goods that enter the U.S. customs territory, foreign merchandise, which would be dutiable if imported into the United States, such as fuel, can be consumed in an FTZ and never be placed in dutiable status. Similarly, merchandise admitted into an FTZ that does not meet importer specifications can be destroyed within the zone without payment of duty.

- (5) Establishment of country of origin: Products manufactured in FTZ's entirely of foreign components can be exported bearing a "Made in USA" label. In addition, components from Communist countries which would otherwise be assessed column 2 rates of duty on entry into the U.S. can be manufactured into articles in an FTZ and entered under lower column 1 duty rates.
- (6) Elimination of costs related to use of a bonded warehouse: The warehousing of merchandise in a bonded warehouse requires the posting of a bond by the importer, and such merchandise can be stored for only 5 years. By contrast, an FTZ user may enter merchandise into a żone without posting a bond and may store it there for an unlimited amount of time.
- (7) Avoidance of drawback procedures: Under drawback procedures applicable to non-FTZ related exportation of a domestic product, a manufacturer may receive a refund of 99 percent of the duty paid on any imported component incorporated into that product. Use of the drawback mechanism may entail large initial expenditures in duties, substantial paper work, and significant delay between the initial expenditure and the refund. The use of an FTZ avoids these expenditures and delays.

Given the many potential benefits FTZ's offer, communities throughout the United States that are eligible under the law have sought to establish a zone in order to improve the economic development package that they offer to firms looking for a place to locate or relocate a facility. The presence of twin plant or maquiladora operations along the Mexican border has enhanced the possibilities of taking advantage of many of the zone benefits, and El Paso has pointed out in its annual report the location of such twin plants as an incentive for drawing future tenants to occupy its FTZ. Most of the current border FTZ's and the known potential FTZ's are located near large concentrations of twin plants, suggesting considerable potential for increased utilization of zone benefits. 1/

There are nine FTZ's located in the border region. McAllen, TX, is by far the most active of these zones. El Paso and Brownsville, TX, are also active. Laredo, TX, and Nogales, AZ, are reportedly becoming active. Pima County, AZ, is not active. Three other Texas border zones are not active: Starr County, Eagle Pass, and Del Rio.  $\underline{2}$ /

Merchandise handled (the total received and forwarded) by U.S.-Mexican border FTZ's increased from \$10 million in 1976 to \$1.3 billion in 1984. 3/ McAllen, TX, accounted for the great bulk of this activity, although El Paso

<sup>1/</sup> For a more extensive discussion, see the chapter on maquiladoras.

 $<sup>\</sup>overline{2}$ / Generally, the official name of the FTZ refers to the sponsoring public entity.

<sup>3</sup>/ The most recent year for which data are available from the Foreign-Trade Zones Board is 1984. Some of these data have not been published.

and, to a lesser extent, Brownsville experienced rapid rates of increase in activity in 1983 and 1984. Much of the merchandise received at McAllen was subsequently forwarded to Mexico, generally Reynosa, for processing in twin plant facilities before returning to the zone for export or entry into the United States. The benefits of TSUS item 806.30 and 807.00 were often utilized in conjunction with these movements of merchandise. By far the leading commodity of foreign origin entering the zones was television components, followed by electric motors and various electronic devices and parts. In recent years, Mexico has been the leading source country.

The rapid growth of merchandise handled following activation of the El Paso zone, the potential for sustained growth at other zones (especially those near large concentrations of twin plants), and two proposed zones in California with substained growth potential make projections of future growth in the amount of merchandise handled by border zones problematic. It is believed, however, that growth will be significant.

The number of firms utilizing border zone facilities on a full-time basis increased from 12 in 1980 to at least 51 in 1984. The total number of firms served increased from 60 to 158 during the period. The number of workers employed at least part of the time in border FTZ's increased from 700 in 1980 to 941 in 1984. 1/2 In addition, the operators of each zone believe that each job in the zone leads to the creation of more jobs and economic activity in the local community. 2/2

Imports from Mexico under foreign-trade zones.--Official public data on U.S. imports from Mexico that entered the customs territory of the United States through U.S. FTZ's are available only for 1980-81 and January-June 1982. In order to avoid public disclosure of business confidential information from individual firms and because of difficulties in gathering data, the Bureau of the Census no longer gathers such data. 3/ In addition, the data cover all entries from Mexico and not just those entering from zones in the border region. It is believed however, that most of these imports entered through the zones along the border, chiefly through McAllen, TX. The other border zones either did not exist or were not very active at the time.

These official data understate U.S. imports from Mexico entering the United States through zones because entries under the provisions of TSUS items 806.30 and 807.00 as well as those entering under the GSP are excluded by the census in order to avoid double counting. However, a field interview revealed that much of the zone activity conducted through McAllen revolved around twin-plant activities located mainly in Reynosa, Mexico, whereby goods returned to the zone in McAllen entered under TSUS items 806.30 or 807.00 so that duty would be paid only on the value added in Mexico. It appears that the El Paso zone is also developing twin plant ties and other zones, as well

 $<sup>\</sup>underline{1}$ / Brownsville did not report any employment data.

 $<sup>\</sup>underline{2}$ / From field interviews and public hearings conducted in connection with  $\underline{\text{The Implications of Foreign Trade Zones}}$ , USITC Publication 1496, (Investigation No. 332-165).

 $<sup>\</sup>underline{3}/$  A census official noted that some merchandise was shipped between zones resulting in double counting, and that some merchandise entering the country consisted solely of materials originating in the United States rather than foreign materials.

as some future zones, have strong potential to foster twin plant relationships. Thus, a more accurate sense of the value of FTZ's emerges when they are viewed as an adjunct to other economic development programs conducted by the governments and local communities in the United States and Mexico.

The border FTZ facilitates and supports trade and economic growth through a variety of programs. It is often located within or near an industrial park and near an international airport. It often serves as a staging area for collecting goods, establishing inventory control, sorting, inspecting, and warehousing both prior to shipment to Mexico and upon return to the United States prior to export or entry into U.S. customs territory.

Table 19 shows the available official data regarding U.S. imports for consumption through FTZ's from both Mexico and all sources during 1980-81 and January-June 1982. During the three periods, Mexico accounted for less than one percent of U.S. imports from FTZ's. Total imports amounted to \$1.0 billion in 1980, \$852.4 million in 1982, and \$369.9 million during January-June 1982. For the corresponding periods, Mexico accounted for imports of only \$4.7 million, \$2.9 million, and \$2.2 million.

The dominant share of total U.S. imports from FTZ's consisted of crude petroleum (shale oil), fuel oils, jet fuels, and parts or components for automobiles, trucks, and motorcycles. The principal sources were Indonesia, Brunei, Malaysia, Japan, and West Germany. The principal products imported from Mexico through FTZ's were certain parts for televisions, electronic signaling devices, electronic tubes, motor-vehicle bodies, certain parts of motor vehicles, gold, and nonalcoholic beverages, not specially provided for.

In addition to the limited amount of official import data noted above, the Foreign-Trade Zones Board collects data on movements of merchandise into and out of FTZ's. Despite the limitations of these data, they are the most complete statistics available on economic activity in FTZ's along the United States-Mexico border. 1/ Until 1981, the FTZ at McAllen, TX, was the only active zone in the border region. In that year, the Brownsville, TX, zone became active, and, in 1982, El Paso, TX, became active.

Despite the above limitations, these data are presented because these zones are located in the border region. Merchandise passing through them may under certain circumstances generate jobs and stimulate commercial and industrial economic activity in the border area. This would be true even when the flow of merchandise into and out of a zone does not cross the border into Mexico because of the jobs and economic activity created on the U.S. side of the border.

<sup>1/</sup> The data reported to the Foreign-Trade Zones Board have the following problems. Double counting occurs because of the way zones are used along the border. For example, parts may arrive from a foreign source or from the United States and be counted as received at the zone. Then the parts are forwarded to Mexico for assembly. The assembled product may be brought back to the zone and be counted as received again before being counted as forwarded again when sent to the United States or exported. This phenomenon may result in the same merchandise being reported as entering a zone from more than one country. In addition, it is known that merchandise from some zones are shipped between zones, resulting in that merchandise being recorded in each zone. Because of the way data is reported to the Board, it is difficult to ascertain the country of origin of specific products.

Table 19.--Privileged and nonprivileged foreign merchandise: U.S. imports for consumption from foreign-trade zones, total and from Mexico, by product groups, 1980-81 and January-June 1982  $\frac{1}{2}$ 

Item	1980	1981	January-June 1982
Animal and vegetable products:	·		
	\$471	\$103,067	<b>\$1,084,</b> 359
Mexico	•	• •	• • •
Total	13,162,667	16,515,310	12,994,446
Wood and paper; printed material	•		
Mexico	•	3,871	•
Total	620,210	845,988	<b>889,</b> 492
Textile fibers and textile			
products:			
Mexico	67,843	59,830	-
Total	11,716,364	9,756,175	7,132,984
Chemicals and related products:		• •	
Mexico	-	30,468	33,800
Total	420,485,971	323,586,808	156,690,189
Nonmetallic minerals and		•	•
products:			
Mexico	49,625	51,551	
Total	5,274,937	5,371,631	1,492,373
Metals and metal products:	3,2,4,707	5,5,2,002	
Mexico	4,442,550	2,565,311	1,076,924
Total	554,739,675	464,234,303	176,662,874
Specified, miscellaneous, and	334,739,073	404,234,303	170,002,074
<del>-</del>			
nonenumerated products:	170 /02	00 400	49 771
Mexico	172,483	82,408	43,771
Total	17,555,155	27,294,624	13,105,546
Special classification provision			
(duty-free products):		·	
Mexico	-	-	-
Total	2,827,802	4,779,993	887,018
Total of all schedules:			
Mexico	4,732,972	2,896,506	2,238,854
Total		852,384,842	369,854,922

<sup>1/</sup> Data are on a calendar-year basis. Data for 1980, 1981, and January-June 1982 are understated in that they do not include imports under TSUS items 806.30 and 807.00 or imports entered under the Generalized System of Preferences. These data were not reported by the U.S. Bureau of the Census.

Note. -- Because of rounding, figures may not add to the totals shown.

<sup>2/</sup> Official public data on U.S. imports from Mexico that entered the customs territory of the United States through U.S. FTZ's are available only for 1980-81 and January-June 1982. In order to avoid public disclosure of business confidential information from individual firms and because of difficulties in gathering data, the Bureau of the Census no longer gathers such data.

The total value of merchandise received in FTZ's from foreign and domestic sources and subsequently forwarded from FTZ's to foreign or domestic markets equals the value of merchandise handled in FTZ's. Table 20 shows these data for 1976-84 for FTZ's in the border region. 1/ Data for 1976-80 represent only McAllen, TX, because it was the one active border zone. Merchandise handled increased from \$10 million in 1976 to \$1,135 million in 1982. Such merchandise then decreased to \$1,090 million in 1983 before increasing to \$1,320 million in 1984. The board data show that by far the most important merchandise of foreign origin entering zones was television parts, followed by various electronic motors, devices, and parts. In 1983 and 1984, Mexico was the leading country of origin of commodities. Prior to that it was Japan, usually followed by Taiwan and then Mexico.

Mexican benefits derived from foreign-trade zones. -- As noted earlier, the benefits derived from the FTZ program in the border region with Mexico usually are derived in conjunction with other programs, particularly the twin plant program and the use of TSUS items 806.30 and 807.00. Thus, no data exist on the value of production and income generated, employment created, or tariff payments foregone solely because of FTZ programs. A single example may illustrate this point. It is publically known that one of the most active zone users of the McAllen FTZ is Zenith Electronics Corp. This company permanently occupies a building in the zone and has facilities in Reynosa, Mexico, adjacent to McAllen, where it assembles television set components and employs about 10,000 workers. Obviously, this facility would continue to assemble without the McAllen zone, but the zone's existence greatly facilitates customs procedures and offers all the other zone benefits. benefits, however, are not central to the decision to locate television · assembly component operations in the border area. They merely provide an additional benefit. Thus, only a small fraction of the production, income, and employment generated at the Zenith facilities in Reynosa can be attributed to the FTZ program.

Border industry developments associated with foreign-trade zones..-Three zones located in McAllen, Brownsville, and El Paso, TX, are currently active. Zones in Nogales, AZ, and Laredo, TX, are reportedly becoming active. Four zones in the border area located in Pima County, AZ, and Starr County, Eagle Pass, and Del Rio, TX, are not now active. Information on FTZ's located in the border area is shown in table 21. In addition, an official at the Foreign-Trade Zones Board indicated that San Diego is considering an application for Otay Mesa across the border from Tijuana, and there may be an application within a year or two for the El Centro-Imperial Valley area across the border from Mexicali.

Tables 22-24 show the merchandise-handled data by each of the three active zones in the border area. McAllen, TX, accounted for most of the merchandise handled during 1976-84. Although much smaller in absolute amounts, both Brownsville and especially El Paso experienced very rapid rates of growth in 1984.

In recent years, most of the merchandise entering the McAllen zone from foreign sources has been television parts. Electric motors and various electronic devices were the other notable articles of foreign origin, although

<sup>1/ 1984</sup> is the most recent year for which data from the Board are available.

Table 20--Merchandise handled in foreign-trade zones in the border region between the United States and Mexico:

		Ü	thousand	(In thousands of dollars)	rs)				
Item	1976	1977	1978	1979	1980	1981	1982	1983	1984
Received:									
From U.S. Customs territory 2/	3,377	5,067	73,423	94,238	205,230	257,954	229,108	275,500	252,115
From foreign countries	2,535	5,393	11,160	52,723	70,832	90,613	218.707	277,285	416.187
TotalForwarded:	5,912	10,459	84,586	146,960	276,063	348,567	447,815	552,785	668,301
To U.S. Customs territory	1,388	4,901	54,403	89.590	157.209	102.207	197,182	751, 157	361 105
To foreign countries	2,820	491	32,705	45,826	113,799	206,145	490,457	304,381	350,617
Total	4.208	5,393	87,108	135,415	271,008	308,352	687,639	537,518	651,985
crand total	10,120	15,852	171,694	282,376	547,071	616,959	1,135,454	1,090,303	1,320,286

1/1977-84 data are on the basis of a fiscal year ended on Sept. 30. The fiscal year ends June 30 for 1976. 2/184 hay include merchandise from foreign countries that did not directly enter the FIZ.

Note.---Because of rounding, figures may not add to the totals shown.

Source: Foreign-Trade Zones Board.

Table 21.--Foreign-Trade Zones existing in the border area between the United States and Mexico, as of March 1986

FTZ No.	FTZ	Adjacent city(les) or Municipality in Mexico	Date zone granted	Date became active	ecame	Customs port of entry
7,0	HcAllen, TX	Reynosa	Oct. 23, 1970	1970 June 5, 1973	, 1973	Hidalgo, T.K.
<b>x</b> o .	Pima County, AZ	i	Mar. 28,			Tucson, AZ Customs Station.
09	Nogales, AZ	Nogales	oct. 15, 1980	1980 2/2	•	Nogales, AZ.
<b>7</b>	Brownsville, TX	Matamoros	Oct. 20, 1980		Mid-September	Brownsville-Cameron County,
	:			1981		TX.
89	El Paso, TX	Ciudad Juarez	Apr. 14, 1981	1981 July 1982	982	El Paso, TX.
<b>4</b> (	Laredo, TX	Nuevo Laredo	Nov. 22,	983		Laredo, TX.
ō.	Starr County, TX	Camargo and Ciudad Mier	Nov. 22, 1	1983 1/		Rio Grande City, IX., and
96	Eagle Pass, TX	Piedras Negras	Nov. 22, 1983	1983		Koma, TX. Earle Pass, TX.
97	Del Rio, TX	Ciudad Acuna	Nov. 22, 1983	1983		Del Rio, IX.

1/ Not active.
2/ Becoming active.

Source: Compiled from information supplied by the Foreign-Trade Zones Board.

Table 22.--Merchandise handled in foreign-trade zone No. 12, McAllen, TX: Merchandise received and shipped, 1976-84  $\underline{1}$ /

		Ţ	thousand	(In thousands of dollars)	rs)				
Item	1976	1977	1978	1979	1980	1981	1982	1983	1984
Received:									
From U.S. Customs territory 2/	3,377	5,067	73,423	94,238	205,230	257,954	229,104	272,980	. 244,482
From foreign countries	2,535	5,393	11,160	52,723	70,832	89,436	216,678	263,021	373,580
TotalForwarded:	5,912	10,459	84,586	146,960	276,063	347,391	445,781	536,001	618,062
To U.S. Customs territory	1,388	4,091	54,403	89,590	157,209	102,207	197,136	230,759	290,579
To foreign countries	2,820	491	32,705	45,826	113,799	206,145	488,584	293,933	309,765
Total	4,208	5,393	87,108	135,415	271,008	308,352	685,720	524,691	600,344
Grand total	10,120	15,852	171,694	282,376	547,071	655,743	1,131,501	1,060,693	1,218,406

1/1977-84 data are on the basis of a fiscal year ended on Sept. 30. The fiscal year ends June 30th for 1976. 1/1976 Hay include merchandise from foreign countries that did not directly enter the FIZ.

Note.--Because of rounding, figures may not add to the totals shown.

Source: Foreign-Trade Zones Board.

Table 23.--Merchandise handled in FTZ No. 62, Brownsville, TX: Merchandise received and shipped, 1981-84 1/

(In thousands	of dollar	s)		
Item	1981 2/	1982	1983	1984
Received:	,			
From U.S. Customs territory 3/		4	858	-
From foreign countries	1,176	685	3,374	3,016
Total	1,176		4,232	3,016
Forwarded:			•	
To U.S. Custom territory	-	37	847	1,974
To foreign countries	•	1,362	617	4,055
Total	-	1,399	1,464	6,029
Grand total	1,176	2,089	5,696	9,045

<sup>1</sup>/ Data are on the basis of fiscal year ended Sept. 30.

Note. -- Because of rounding, figures may not add to the totals shown.

Source: Foreign-Trade Zones Board.

Table 24.--Merchandise handled in FTZ No. 68, El Paso, TX: Merchandise received and forwarded, 1982-84 1/

(In thousands	of dollars)		
Item	1982 2/	1983	1984
	7.	•	
Received:	• .	. ' '	
From U.S. Customs territory 3/		1,662	7,633
From foreign countries		10,890	39,590
Total		12,552	47,223
Forwarded:	•	. ,	•
To U.S. Custom territory	9	1,531	8,815
To foreign countries		9,831	36,797
Total		11,363	45,612
Grand total		23,914	92,835

<sup>1/</sup> Data are on the basis of a fiscal year ended Sept. 30.

Note. -- Because of rounding, figures may not add to the totals shown.

Source: Foreign-Trade Zones Board.

<sup>2/</sup> Grant received Oct. 20, 1980. Zone activated mid-September 1981.

 $<sup>\</sup>frac{3}{}$ / May include merchandise from foreign countries that did not directly enter the FTZ.

 $<sup>\</sup>overline{2}$ / Grant received Apr. 14, 1981. Operations began in temporary facilities in July 1982.

 $<sup>\</sup>underline{3}/$  May include merchandise from foreign countries which did not directly enter the FTZ.

much smaller in volume. In recent years, Japan had been the principal source of merchandise entering the McAllen zone until it was replaced by Mexico in 1983 and 1984. In the earlier years, Taiwan generally was the second leading source followed by Mexico. In the later years, Japan dropped to second and Taiwan third. Unfortunately, the Foreign-Trade Zones Board data do not show the country of origin by commodity.

Brownsville did not have any clear pattern of principal commodities of foreign origin. In 1983, Mexico supplied a large share of the merchandise received in the zone, much of which is believed to have been bauxite. In its annual report, officials at Brownsville state they are expecting electronics and aviation-related firms to utilize their zone in the future.

The El Paso zone was also clearly a major handler of television parts of foreign origin in 1983 and 1984. Electronic parts were also important during those years. The major countries of origin for the El Paso zone were fairly evenly divided among Mexico, Singapore, and Japan, followed by the United States and Taiwan. In 1982, electronic equipment and toys accounted for most of the commodities of foreign origin. Mexico was the major country of origin, followed by Hong Kong and Singapore. Of the four firms served by the zone on a full-time basis in 1983 and 1984, two were twin-plant users and two were customs brokers offering warehousing and freight forwarding.

Table 25 gives the available data on the number of firms using each of the active zones and the number of workers employed. McAllen accounted for the great bulk in both categories.

Projection of U.S. imports from Mexico associated with foreign-trade zones.--As noted earlier, the FTZ program serves a supporting role to other economic development programs promoted by the area in which the zone is located. The volume of merchandise passing through zones is dependent, in part, on the success of other programs such as 806.30 and 807.00. In addition, FTZ's are intended to be flexible vehicles able to respond to the varying needs of commerce at the moment. Rapid growth experienced by El Paso and Brownsville in 1983 and 1984 in conjunction with the rapid growth of McAllen in earlier years underline the dynamic nature of the program. Finally, with so many other zones recently added to the program not yet active and with several possible new zones being established within a few years in California, many of which are located across from municipalities with active twin-plant operations, it is not possible to project U.S. import values or volumes associated with the FTZ programs for the 1986-90 period.

## Tariff treatment of U.S. components (TSUS items 806.30 and 807.00)

TSUS items 806.30 and 807.00 are of importance in United States-Mexico trade because they exclude from U.S. customs duties the portion of the imported article's value that is of U.S. origin. Under item 806.30, articles of metal (except precious metal) that were manufactured or subjected to a manufacturing process in the United States, were exported for processing, and then were imported into the United States for further processing are dutied only on the value of the foreign processing. Under item 807.00, articles assembled abroad, using fabricated components manufactured in the United

Table 25.--Active border foreign-trade zones: Number of firms served and number of employees, 1980-84

Item	1980	1981	1982 ·	1983	1984
McAllen:					
Number of firms served:	,				
Part-time	60	105	105	138	140
Full-time	12	17	17	51	47
Number of employees:			•		
Up to	700	700	700	900	910
Full-time	650	<u>1</u> /	1/	<u>1</u> /	1/
Brownsville: .				_	
Number of firms served:					
Part-time	0	1	1	2	4
Full-time	0	1/	1/	1/	1/
Number of employees:					
Up to	0	1/	1/	1/	1/
Full-time	0	<u>1</u> / 1/	$\frac{1}{1}$	$\frac{1}{1}$	$\overline{1}/$
El Paso:					<i>,_</i>
Number of firms served:					
Part-time	0	0	7	12	14
Full-time	0	. 0	1/	4	4
Number of employees:					
Up to	0	0	6	23	31
Full-time	. 0	0	1/	23	31

<sup>1/</sup> Not available.

Source: Foreign-Trade Zones Board.

States, are dutied upon importation based on the full value of the imported article minus the cost or value of any products of the United States. Articles entered under TSUS item 807.00 need not be processed further in this country. The two tariff items and their MFN rates of duty are as shown below.

Item Articles MFN duty rate

Articles returned to the United States after having been exported to be advanced in value or improved in condition by any process of manufacture or other means:

Any article of metal (except precious metal)
manufactured in the United States or subjected
to a process of manufacture in the United
States, if exported for further processing,
and if the exported article as processed outside the United States, or the article which
results from the processing outside the United

States, is returned to the United States for further processing...... A duty upon the value of

duty upon the value of such processing outside the United States (see headnote 2 to subpart 1B of schedule 8)

duty upon the full value of the imported article, less the cost or value of such products of the United States (see headnote 3 to subpart 1B of schedule 8)

An imported article may be afforded a partial duty exemption under only one of these provisions, and is ineligible if it had previously been exported with any remission, abatement, or refund of duties or with benefit of drawback, or after bonded manufacture pursuant to TSUS item 864.05.  $\underline{1}/$ 

To obtain the benefit of these provisions, considerable documentation is required in order to permit customs to identify the U.S. components and ascertain costs and value at various stages of production. Careful review of export declarations and the use of constructive segregation of the U.S. and foreign elements of the imported articles are among the means utilized by customs to determine U.S. content.  $\underline{2}/$ 

It should be noted that the two tariff items and their impact on the U.S. economy, labor force, and trade have regularly been reviewed by the Congress, with amendments or repeals proposed in many recent sessions. Thus, users of these provisions must be aware not only of the difficulties in starting and

<sup>1/</sup> See the Commission's series of reports, Imports Under Items 806.30 and 807.00 of the Tariff Schedules of the United States, the latest being USITC Publication 1688, April 1985, covering 1980-1983.

<sup>2/</sup> U.S. International Trade Commission, <u>Tariff Classification Study:</u>
<u>Schedule 8 and Appendix</u>, November 1960, pp. 12-16. Item 807.00 was first codified in 1963 on enactment of the TSUS. Item 806.30 was created in 1956. The wording of the article descriptions of these tariff items has been the subject of many customs and judicial decisions, with some earlier rulings serving as the basis for the items' language.

running such operations (including problems of compliance with foreign law, as in the case of Mexico discussed earlier in this report) but also of the potential for legal and administrative changes in the provisions.

In addition, there are other limitations in the two tariff items, dictated by the types of products involved, the level of skill needed of the workers, and the difficulties and costs involved in shipping the articles. Operations not involving metal processing or component assembly do not qualify under these provisions. These facts may limit operations in Mexico that would be designed to take advantage of them.

These tariff items apply to articles processed or assembled in any foreign country and entered at any customs port of entry. Though Mexico is a significant beneficiary, especially in regard to TSUS item 807.00, many other countries are involved in these operations; and the United States-Mexico border area is not the only portion of this country where firms utilizing these tariff provisions are located.

Economic overview.--The 806.30/807.00 provisions, in addition to a number of changes by the Mexican Government affecting the operation and ownership of foreign investments engaged primarily in assembly, have stimulated investment in the United States-Mexico border area, particularly by U.S. firms. These provisions allow manufacturers to reduce labor costs related to assembly operations, and at the same time encourage the use of U.S. components. The Mexican population also receives jobs and technical skills developed through training and experience, and the Mexican Government obtains hard currency from the U.S. investments. Because of the relationship of the 806.30/807.00 provisions to the maquiladoras, see the chapter on maquiladoras for a more extensive discussion of their impact.

Imports from Mexico under TSUS items 806.30 and 807.00.--The value of Item 806.30/807.00 imports rose annually from \$5.7 billion in 1976 to \$27.8 billion in 1985 (table 26). Throughout the period Mexico was a leading source, accounting for 89 percent of all forest products imported under item 807.00 and 42 percent of all miscellaneous manufactured item 806.30/807.00 products in 1985 (table 27). Imports under TSUS items 806.30 and 807.00 of textiles and apparel from Mexico nearly doubled from \$131.0 million in 1976 to \$226 million in 1985 (table 28). However, the bulk of Mexican imports (\$3.8 billion) was in machinery and equipment products (table 29). U.S. imports of other products increased from \$221.0 million in 1976 to \$474.0 million in 1985 (table 30).

Television apparatus, electronic and electrical articles, transportation machinery, and office machines were the major imports under items 806.30 and 807.00 from Mexico in 1985. In contrast, during 1966-72, the major imports from Mexico under items 806.30/807.00 were textile and apparel goods.

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6.30 and 807.00: U.S. imports for consumption from Mexico, from border and nonborder regions in Mexico, all other countries, and total, 1976-90Table 26.--All products under TSUS item 806.30 and 807.00:

iollars)	Imports from countries	other than Mexico Total imports	00 806.30/807.00 2/	able Total Total Dutiable Total Total Dutiable Total	5,593 4,586 3,640 135,555 5,722 4,175	5,704 6,033 4,688 149,111 7,189 5,212	5,818 8,195 6,430 164,022 9,735 7,144	8,502 9,902 7,625 193,921 1,967 8,641	12,159 11,675 9,107 223,435 14,016 10,262	13,261 13,471 10,462 240,701 16,181 11,734	15,038 15,438 12,189 221,527 18,275 13,572	16,206 17,859 14,381 234,657 21,576 16,189	17,298 23,764 19,109 298,840 28,572 21,362	11 18,394 23,878 18,843 316,860 27,792 20,724 335,254	21,502 26,207 20,672 324,744 30,389 22,684	23,541 28,536 22,502 344,041 32,987 24,644	25,580 30,865 24,331 364,100 35,585 26,605	27,622 33,194 26,161 384,129 38,182 28,565	29,666 35,523 27,990 404,424 40,780 30,526
(In millions of dollars)		Total 2/	806.30/807.00	Total Dutiable	1,135	1,156	1,540	2,065	2,341	2,710	2,838	3,717	4.808	3,914 1,881	5.041	5,466	5,893	6,320	6.748
(II		Other regions 1/	806.30/807.00	Total Dutiable Total	57		85	156	164	171	184	233	252	576 277 11,739	. 257	279	301	323	344
	xico		8	Total						3,635 36						7,996 68		9,754 78	
	Imports from Mexico	Border region 1/	806.30/807.00	Year Total Dutiable	1976 1,014 . 479	. 1,015	1978 1,357 629		1980 2,009 991	2,346	1982 2,460 1,199	1983 3,238 1,575	4,271	1985 3,338 1,604	3/ 4,412	3/ 4,787		3/ 5,532	3/ 5,912

1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direccion General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

2/ Estimated by the staff of the U.S. International Trade Commission.

3/ Projected using ordinary least square on 1978-85 data to calculate a regression line with the year as the independent variable and the level of imports as the dependent variable (see methodology section).

Table 27.--Agriculture, fisheries, and forest products: U.S. imports for consumption from Mexico, from border and nonborder regions in Mexico, all other countries, and total, under TSUS items 806.30 and 807.00, and total, 1976-90

				Total	701	06/177	24,164	25,613	29,098	29,274	29,908	28,059	31,353	36,593	38,155	37,952	39,495	41,039	42,582	44,126	
		mports	806.30/807.00 2/	Dutiable	•	æ	œ	o	17	18	27	29	26	34	37	40	44	47	51	54	
		Total imports	806.30/	Total		78	31	34	28	62	91	102	101	117	133	145	158	170	183	196	
	ies			Total	:	21,464	22,752	24,117	27,327	27,661	28,236	26,245	29,378	34,607	36,072	35,807	37,274	38,742	40,209	41,676	
	Imports from countries	other than Mexico	07.00 2/	Dutiable		m	7	-1	4	9	6	7	6	17	14	16	18	19	21	22	
	Imports	other tha	806.30/807.00 2/	Total		'n	-		S	7	11	6	. #	20	17	19	20	22	24	56	
(				Total		1,357	1,425	1,496	1,770	1,614	1,672	1,814	1,975	1,987	2,083	2,144	2,221	2,297	2,374	2,450	
(In millions of dollars)		Total 2/	806.30/807.00	fotal Dutiable		23 5	30 7	32 8	53 13 .	55 12	80 18	93 22		97 17	16 23	127 24	37 26		159 30		
(In mil		T	Total 8			1,127	1,183	1.242	1,469	1,339	1,388	1,505	1,639	1,649					•	•	
		Other regions 1/	806.30/807.00	Dutiable		-	-	1		-	7	7	8	7	2	7	e	m	· m	· F	
		Other	806.3	Total		7	4	4	œ	· œ	11	12	12	11	17	16	17	19	50	21	
	001		Total			231	242	254	301	274	284	308	336	338	354	365	378	391	404	417	
	mports from Mexico	·nulnu 1/	307.00	Dutiable		4	9	7	. 7	! =	9	2 0	15	15	21	22	24	. 52	27	. 63	
	Imports	Turden renten	806.30/807.00	Total		21	26	28	45	47	69							129			
				Year		1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 3/	1987 3/	1988 3/	1989 3/	1990 3/	

1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direccion General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

2/ Estimated by the staff of the U.S. International Trade Commission.
3/ Projected using ordinary least square on 1978-85 data to calculate a regression line with the year as the independent variable and the level of imports as the dependent variable (see methodology section).

Table 28.--Textiles and apparel: U.S. imports for consumption from Mexico under TSUS items 806.30 and 807.00, from border and nonborder regions in Mexico, all other countries, and total, 1976-90

				Total	5,266	5,913	7,908	7,966	8,894	10,691	11,137	13,080	18,193	20,131	22,144	24,358	26,794	29,474	32,420
		Total imports	806.30/807.00 2/	Dutiable	76	110	157	178	198	225	217	224	290	295	317	338	359	381	402
		Total i	806.30	Total	112	312	410	478	545	589	572	646	807	812	871	930	686	1,049	1,108
	les			Total	5,040	5,680	7,625	7,673	8,580	10,361	10,894	12,780	17,832	19,718	19,041	20,564	22,088	23,612	25,272
	Imports from countries	other than Mexico	806.30/807.00 2/	Dutiable	56	73	111	125	139	163	167	179	233	236	257	276	295	315	335
	Imports	other th	806,30/8	Total	146	181	253	308	345	391	402	464	572	586	634	683	732	781	830
(s,				Total	226	233	283	293	314	330	244	280	361	413	441	472	504	539	576
(In millions of dollars)		2/	806.30/807.00	Dutiable	41	37	46	53	59	62	20	45	57	. 65	09	62	64	99	67
millions		Total 2/	806.30	Total	131	131	157	170	200	198	170	182	235	226	237	247	257	268	278
(In		1/		le Total	35	36	49	47	99	80	61	9/	109	118	126	134	143	152	162
		Other regions	806.30/807.00	Dutiable	4	4	Ŋ	9	•	7	'n	S	9	9	7	7	7	7	7
		Other	806.3	Total	14	16	19	<b>5</b> 6	78	27	23	23	<b>5</b> 6	33	30	32	33	34	35
	00			Total	191	197	233	246	248	250	182	203	252	295	315	338	361	387	414
	Imports from Mexico	Border region 1/	806.30/807.00	Dutiable	37	33	41	47	53	55	45	, <b>4</b> 0	51	53	54	26	57	59	09
	Impor	Borde	806.3	Total	111	115	138	144	172	171	147	159	209	193	207	216	225	234	243
				Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 3/	1987 37	1988 3/	1989 3/	1990 3/

1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direccion General de Estadistica Instituto Nacional de Estadistica. Geografia e Informatica.

2/ Projected using ordinary least square on 1978-85 data to calculate a regression line with the year as the independent variable and the level of imports as the dependent variable (see methodology section).
3/ Estimated by the staff of the U.S. International Trade Commission.

Table 29 --Machinery and equipment: U.S. imports for consumption from Mexico, from border and nonborder regions in Mexico, all other countries, and total, 1976-90

		Total imports	806.30/807.00 2/	Total Dutiable Total		4,531 3,643 CC. 4	5,898 4,638 41,	8,325 6,486 48	10,575 7,985	12,553	14,492	16,380	19,561 15,242	7 26,364 20,420 117,151	25,549 19,673	28,021 21,575	30,494 23,476	32,966 25,378	35,439 27,279	37,911 29,181	
	ies			Total	ŕ	34,120	40,276	46,7	51,7	58,014	0,99	69,69	81,555	112,597	129,906	128,5	139,9	151,3	162,8	174,2	
	mports from countries	other than Mexico	806.30/807.00 2/	Dutiable	Ċ	3,236	4,232	5,921	7,131	8,617	698'6	11,554	13,646	17,493	17,750	19,465	21,179	22,894	24,608	26,323	
	Imports	other th	806.30/8	Total	•	3,770	5,094	7,189	8,952	10,796	12,437	14,274	16,489	22,300	21,752	23,851	25,951	28,050	30,150	32,248	
lars)				Total	į	9/4	1,179	1,427	1,957	2,064	2,464	2,664	3,457	4,553	5,414	5,708	6,529	7,351	8,172	8,993	
(In millions of dollars)		/	807.00	Dutiable		407	406	565	854	944	1,040	1,055	1,596	2,027	1,923	2,110	2,297	2,484	2,671	2,858	
In milli		Total 2/	806.30/807.00	Total	;	761	804	1,136	1,623	1,757	2,055	2,106	3,072	4,064	3,797	4,170	4,543	4,916	5,289	5,663	
)				Total	;	97	118	143	196	207	246	266	346	455	541	571	653	735	817	899	
		Other regions 1/	806.30/807.00	Dutiable		43	43	09	91	100	111	112	170	216	204	225	245	265	285	305	
		Other	806.3	Total	;	81	86	135	249	249	276	280	396	454	558	517	562	607	652	697	
	co			Total		887	1,061	1,284	1,761	1,858	2,218	2,398	3,111	4,098	4,873	5,137	5,876	6,616	7,355	8,094	
	Imports from Mexico	Border region 1/	806.30/807.00	Dutiable		364	363	505	763	844	929	943	1.426	1,811	1,719	1,885	2,052	2,219	2,386	2,553	
	Imports	Border	806.30/	Total		9	902	1.001	1,374	1.508	1.779	1,826	2.676	3,610	3,239	3,653	3,981	4.309	4.637	4,965	
				Year		1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 3/	1987 3/	1988 3/	1989 3/	1990 3/	

Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direccion General de Estadistica Instituto Nacional de tadistica, Geografia e Informatica. 1/ Estimated by the staff of the U.S. International Trade Commission on the basis of uses commission.

Estadistica, Geografia e Informatica.

2/ Estimated by the staff of the U.S. International Trade Commission.

3/ Projected using ordinary least square on 1978-85 data to calculate a regression line with the year as the independent variable and the level of imports as the dependent variable (see methodology section).

Table 30.--All other products: U.S. imports for consumption from Mexico, from border and nonborder regions in Mexico, all other countries, and total, 1976-90

				Total		32,711	35,683	38,927	43,619	49,040	53,726	49,658	52,502	69,143	73,305	73,817	78,281	82,745		87,209	91,673
	*	rts	7.00 2/	Dutiable		127	156	192	161	185	573	117	597	518	718	752	186	355	100	885	688
		Total imports	806.30/807.00 2/	Total D		886 4		996			2 600,1			1,284 6		1,352					
		· · ·				32,000	088	38,019	,387						71.131					84,416	
	ries			Total		32	34	38	42	47	52	48	50	6	7	7	œ	à	6	8	86
	Imports from countries	other than Mexico	806.30/807.00 2/	Dutiable		345	381	397	366	345	421	460	547	1.366	842	935	1.029	1 2 2 2	21,1	1,217	1,310
	Imports	other th	806.30/8	Total		665	757	751	636	527	632	753	895	873	1 524	1 703	1 882		7,000	2,239	2,419
lars)				Total		111	803	806	1.147	1.305	1.580	1.550	1.611	2,012	و <u>د</u> در د	2 200	0.7.	000	2,625	2,793	2,961
(In millions of dollars)		/	807.00	Dutiable		83	7.5	95	95	091	152	257	151	152	202	,,,,	777	220	251	566	281
millio		Total 2/	806.30/807.00	Total		221	190	215	210	320	377	849	367	, , ,	11,	1 7	200	600	5/2	604	637
(II				Total		476	5.38	804	896	974	י פאַט ר	1,039	1,039	6/0.1	1,349	9041	1,034	1,04/	1,759	1.871	1,984
		l suois	307.00	Dutiable		o	۰ ۵		2 2	2 4	2 4			9 9	9 9	77	2.2	C)	<b>5</b> 6	28	53
		Other regions	806 30/807 00	Total		7.4	3 2	; ;	3 7	, ,	7 2		• •			2 ;					
	6		-	Total		235	225	707	200	9/9	101	176	216	232	664	/1/	227	218	998	922	977
	Imports from Mexico	Bondon resion 1/	807 00	Dutiable		771	111		000	00	571	130	230	135	136	185	199	212	225	238	251
	Imports	Border	00 20/807 00	Total	l	701	151	/07	107	183	797	320	406	320	365	404	441	4/0	498	527	555
				Vear		7691	19/0	1977	19/8	19/9	1980	1981	1982	1983	1984	1985	1986 3/	1987 3/	1988 3/	1080 1/	1990 3/

\texts / Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direccion General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

2/ Estimated by the staff of the U.S. International Trade Commission.

3/ Projected using ordinary least square on 1978-85 data to calculate a regression line with the year as the independent variable and the level of imports as the dependent variable (see methodology section). Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direccion General de Estadistica Instituto Nacional

The following tabulation shows the value of total item 806.30/807.00 imports, such imports from Mexico, and the share of Mexican imports for the six commodity groupings used in the Commission's Trade Monitoring Reports for 1984:

Commodity group	From Mexico (1,000 dollars)	Total (1,000 dollars)	Mexican share (percent)
Agricultural, animal, and vegetable products	85	7,381	1
Forest products	97,271	109,392	89
Textiles, apparel, and footwear	295,235	926,441	32
Chemicals, coal, petroleum, natural gas, and related products.	10,341	36,424	28
Minerals and metals	154,497	435,558	35
Machinery and equipment	4,049,251	26,363,526	15
Miscellaneous manufactures	291,956	693,285	42

Machinery and equipment accounted for \$3.8 billion, or 85 percent of the total 807.00 imports from Mexico in 1985. This largely consisted of television apparatus and parts, other electronic and electrical articles, transportation machinery, and office machines. The duty-free value of all TSUS item 807.00 imports from Mexico was \$2.0 billion, which represented 52 percent of the total import value.

Mexican benefits derived from the use of TSUS items 806.30 and 807.00.--Although the items 806.30/807.00 do not contain specific regional or unilateral provisions, they have provided some benefits to Mexico and the border region. Since this program is affected by the maquiladora program, for a more extensive discussion of the benefits see the maquiladora chapter.

Border industry developments associated with the use of TSUS items 806.30 and 807.00.--Mexico is an important partner in assembly operations because of its geographical location. Its border stretches along 2,000 miles of the United States, a major world producer, and there is easy access to transportation routes leading to and from almost anywhere in the United States. The close proximity helps to ensure lower transportation costs compared with most other foreign sources of imports.

The twin plant concept is a result of the close proximity of Mexico to the United States and the Mexican Government's border development policy (maquilas). The idea is that a single U.S. company would establish one plant on the U.S. side of the border to provide components and oversee certain operations such as accounting, finance, and distribution. The same company would also establish a maquila operation on the Mexican side of the border, near the U.S. plant, to assemble the components (i.e., oversee the labor-intensive work). The single management team would be able to live in the United States, but would be close enough to maintain control over the operation on both sides of the border. However, most maquilas are supplied from plants in other regions of the United States, particularly in the Midwest. According to a report published by the Brookings Institution,

manufacturers apparently felt that the costs of establishing a U.S. border plant near the Mexican plant did not justify the expenditures, and that the Mexican plant could be supplied from existing plants located elsewhere in the United States.

Projection of U.S. imports from Mexico associated with the use of TSUS items 806.30 and 807.00.--Using a linear regression line through the data for years 1976-85, total 806.30/807.00 imports from Mexico are projected to increase at an average annual rate of 8 percent, rising from \$3.9 billion in 1986 to \$6.8 billion in 1990. Total imports are projected to increase from \$21.5 billion in 1986 to \$29.7 billion in 1990. Thus, imports under 806.30/807.00 provisions would account for approximately 23 percent of total imports in 1990; the dutiable value of such imports would account for 11 percent. Imports from the border would account for 88 percent of the value of 806.30/807.00 imports from Mexico in that year.

Machinery and equipment products would continue to dominate 806.30/807.00 imports from Mexico, rising from \$4.2 billion in 1986 to \$5.7 billion in 1990. Such imports would rise at a rate of 8 percent. As a share of total imports from Mexico, machinery and equipment 806.30/807.00 imports would account for 19 percent in 1990; imports from the border region would represent 88 percent of the such imports.

# Multifiber Arrangement

The United States and Mexico are both parties to the so-called Multifiber Arrangement (MFA) 1/ and maintain a bilateral agreement covering many Mexican exports to the United States of textiles and apparel. Specified categories of these Mexican articles are subject to absolute annual restraints, others to a consultation requirement in the event exports reach a predetermined level, and others to monitoring for statistical purposes in relation to future agreements. Remaining categories are not restricted, but may be restricted unilaterally in the future under article 3 of the MFA if found to be causing disruption of the U.S. market. The United States and other developed parties to the MFA have similar bilateral arrangements with many developing country exporters, and the pacts are renegotiated at periodic intervals.

Such arrangements may pose difficulties for some developing supplier nations, since their developed country market shares are limited--as an exception to the GATT's principle of nondiscrimination--and much therefore depends on their ability to conduct negotiations with larger governments. However, the bilaterals do afford some certainty of market access, contain room for annual growth, and diminish the risk of sudden and unforeseen quantitative restrictions as to covered products. The effectively guaranteed access, to agreement limits, for many products may serve as an incentive for U.S. firms to locate some operations in or purchase from Mexico, perhaps with the use of TSUS item 807.00.

<sup>1/</sup>Officially known as the Arrangement Regarding International Trade in Textiles, and sanctioned under the GATT, the MFA provides a framework for the regulation of international trade in most textile and apparel products through bilateral agreements or unilateral action in the absence of a bilateral agreement.

Economic overview.--The MFA, which entered into force in January 1974, was renewed in 1977 and again in 1981. It was scheduled to expire on July 31, 1986, but was extended for 5 more years effective August 1, 1986. Among the changes contained in the protocol extending the MFA was the provision extending the product coverage from cotton, wool, and manmade-fiber textiles and apparel also to include items of other vegetable fibers, such as linen, ramie and silk and silk blends. (For purposes of this report, however, any reference to MFA products is limited to those articles that are covered by cotton, wool, or manmade-fiber restraints.)

The United States currently has agreements with 38 countries that provide for quotas on imports of specified products and procedures for establishing additional quotas when imports of a particular product are causing or threatening market disruption. The agreement currently in effect with Mexico, signed in February 1979, initially covered the period from May 1978 through 1981 but was subsequently extended through 1985 and again through December 1987. This agreement currently provides for quotas only on apparel items, including trousers, coats, coveralls, shirts, and blouses of cotton and/or manmade fibers. These garments accounted for slightly more than 60 percent of the value of total imports of MFA-covered products from Mexico in 1985. remaining, nonquota MFA product imports from Mexico may be brought under quota when the United States finds that imports of a particular product are disrupting or threatening to disrupt the U.S. market. In addition to quotas, designated consultation levels, which can not be exceeded without prior consultation between the two countries, cover many other products from Mexico, including yarn and suits.

In a related matter, a countervailing duty petition was filed by a U.S. textile manufacturing association and two domestic labor unions under section 303 of the Tariff Act of 1930, charging that Mexico was subsidizing its exports of textile mill products. In March 1985, an affirmative determination was made by the United States and a countervailing duty of 3.7 percent was charged on textile mill product imports from Mexico. On April 23, 1985, the two countries signed an agreement whereby interested parties in the United States who allege unfair Mexican trade practices under the U.S. countervailing duty statutes will also have to demonstrate that the imports in question cause or threaten to cause material injury to an established U.S. domestic industry. In exchange, the Mexican Government agreed to adjust its general subsidy policies to those allowed under international practice and to eliminate the export subsidy elements in its programs, including those regarding production of textile mill products. Although the agreement is not retroactive, the outstanding positive determination by the U.S. Department of Commerce and the resulting 3.7 percent countervailing duty charge on textile imports from Mexico is subject to annual review at the request of either In March of 1986, the Government of Mexico requested a review of Government. the determination.

Imports from Mexico under the Multifiber Arrangement.--U.S. imports from Mexico of textile and apparel products of cotton, wool, and manmade fibers, subject to MFA control increased significantly during 1976-85, rising by 40 percent in quantity and by 69 percent in value to 224 million square yard

equivalents 1/ (SYE's) valued at \$275 million (table 31). During the first years of the period, 1976-80, MFA-controlled imports increased by 37 percent to \$222 million then declined by 32 percent during the recession of 1980-82 to \$151 million before recovering by 82 percent during the 1982-85 period to \$275 million. The imports from Mexico were dependent upon economic conditions in the United States market but trailed the U.S. market recovery.

The overall growth of MFA-controlled imports from Mexico was substantially lower than the growth in U.S. imports of MFA products from all countries. Imports from all countries rose by 117 percent in quantity and by 267 percent in value during 1976-85 to 10.8 billion SYE's, valued at \$16 billion, primarily because of the growth in imports from Hong Kong, Taiwan, Korea, China, Japan, and Italy, the six largest suppliers.

Until recently, wage rates for textile workers in Mexico, although considerably lower than those in the United States, were higher than those of the major textile suppliers in Asia. However, the sharp decline in the peso's value against the U.S. dollar resulted in a drop in labor costs for Mexican textile workers from \$2.62 per hour during the spring of 1984 to \$1.82 per hour during the winter of 1985-86, improving Mexico's competitive position. In comparison, hourly labor costs for textile workers in the United States, Hong Kong, Taiwan, Korea, and China were \$8.67, \$1.81, \$1.60, \$1.57, and \$0.20, respectively, during the winter of 1985-86. 2/

Approximately 67 percent of the U.S. textile and apparel imports from Mexico during 1985 were MFA-controlled products. Of these, an estimated 71 percent were manufactured in the border area, consisting almost entirely of labor-intensive apparel products. In addition, most of the apparel imports from Mexico entered the United States under TSUS item 807.00. Under this provision, garment parts must be cut in the United States before they are sent abroad for assembly (almost entirely in in-bond plants), to qualify for tariff exemption on the U.S.-made components.

Much of the production is based on the twin-plant 3/ concept with U.S. plants supplying components to Mexican plants just across the border to facilitate quality control and rapid style changes, and to reduce costs by minimizing transportation charges and costs associated with in-transit inventory. However, as a result of efforts of the Mexican Government to develop the maquiladoras, or in-bond production-for-export facilities in Mexico's interior, a growing share of U.S. imports is coming from nonborder plants. In 1980, border regions provided an estimated 79 percent of U.S. textile and apparel imports, but this figure declined to 71 percent in 1985. This shift is further reflected by the fact that border regions of Mexico accounted for an estimated 76 percent of in-bond apparel production employment

<sup>1</sup>/ SYE's is the standard unit of measurement for all textile products and is used in the administration of the U.S. textile trade agreements program. In this system, one dozen woven shirts equals 24 SYE's, 1 pound of cotton yarn converts to 4.6 SYE's, and so forth.

<sup>2/</sup> Werner Associates, Inc., "Spinning and Weaving Labour Cost Comparisons: Winter 1985/86," 1986, New York.

 $<sup>\</sup>underline{3}/$  For a more extensive discussion of the twin-plant concept, see the maquiladora chapter.

Table 31.--Textiles and apparel: U.S. imports for consumption from Mexico under the Multifiber Arrangement (MFA), from border and nonborder regions in Mexico, all other countries, and total, 1976-90

(In thousands of dollars)	Imports from countries	ons 1/ Total other than Mexico Total imports	Total MFA 2/ Total MFA 2/ Total MFA 2/ Total	35,005 162,968 225,658 4,183,360 5,040,342 4,346,328	35,565 158,014 232,868 4,733,240 5,680,132 4,891,254 6,121,720	49,475 204,708 282,929 6,116,992 7,625,113 6,321,700 7,908,042	200,879	222,482 313,524 6,977,064 8,580,051 7,199,546	216,446	61,329 150,921 243,667 9,002,379 10,894,047 9,153,300 11,137,714	280,124 10,438,675	108,788 255,865 361,205 14,031,335 17,831,972 14,287,200 18,193,177	275,048 412,674 15,689,852 19,718,134 15,964,900	17,269,839	134,088 309,044 471,588 19,008,485 23,886,690 19,317,529 24,358,278		152,274 347,242 538,912 23,026,968 28,934,604 23,374,210 29,473,516	368.076 576.097 25.343.555 25.272.314 25.711.631
	Imports fro	other than	MFA 2/	4,183,360	4,733,240	6,116,992	6,105,921	6,977,064	8,453,554	9,002,379	10,438,675	14,031,335	15,689,852	17,269,839	19,008,485	20,921,695	23,026,968	25,343,555
of dollars)			Total	225,658	232,868	282,929	293,386	313,524	330,034	243,667	280,124	361,205	412,674	441,149	471,588	504,127	538,912	576.097
In thousands		Total	MFA 2/	162,968	158,014	204,708	200,879	222,482	216,446	150,921	173,125	255,865	275,048	291,551	309,044	327,587	347,242	368.076
()		gions 1/	Total	35,005	35,565	49,475	46,970	65,857	79,619	61,329	76,384	108,788	118,109	125,840	134,088	142,887	152,274	162.290
		Other regi	MFA 2/	28,633	27,249	40,643	34,671	48,016	55,076	41,767	53,705	82,954	83,426	88,138	93,122	98,392	103,965	109.860
	Imports from Mexico	egion 1/	Total	190,653	197,303	233,454	246,416	247,667	250,415	182,338	203,740	252,417	294,565	315,308	337,500	361,241	386,638	413.808
	Imports	Border region l	MFA 2/	134,335	130,765	164,065	166,208	174,466	161,370	109,154	119,420	172,911	191,622	203,413	215,922	229,195	243,277	258.216

1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direction General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

2/ Data on MFA imports for 1976 and 1977 estimated by the staff of the U.S. International Trade Commission.
3/ The projected level of imports from Mexico for 1986-90 was calculated using the compound annual growth rate of such imports during 1976-85 and assumed that imports from the border regions as a share of the total imports from Mexico would remain at estimated 1985 levels during 1986-90. The projected level of total imports for 1986-90 was calculated on the basis of a 6-percent growth rate plus an estimated 4-percent annual inflation rate, which yielded a 10-percent annual growth rate.

in 1984, declining from 89 percent in 1978. Similarly, Mexico's border regions share of the value added by in-bond apparel production declined from 89 percent in 1978 to 77 percent in 1984.  $\underline{1}$ /

Major MFA products imported from Mexico include trousers, shirts, body-supporting garments, and yarn. U.S. imports of MFA trousers from Mexico rose by 127 percent during 1976-85 to \$102 million with large increases during 1984 and 1985 (table 32). U.S. import quotas on cotton trousers from Mexico were 91 percent filled during 1983 and 100 percent filled for 1984 by October 1984. Use of the flexibility provision in the U.S.-Mexican bilateral agreement under the MFA allowed Mexico to "borrow" quota from other categories, resulting in expansion of cotton trouser shipments. During 1985, the cotton trouser quota was 73 percent filled while that on manmade-fiber trousers was 64 percent filled. 2/

U.S. imports of MFA shirts and blouses from Mexico rose by 18 percent during 1976-85 to \$40 million (table 33). The U.S. import quota on manmade-fiber woven blouses was 73 percent filled during 1985, whereas the quota on cotton shirts was 25 percent filled, and that on knit manmade-fiber shirts was only 14 percent filled.

For imports of body-supporting garments from Mexico, the general stagnation of the U.S. market for these products and competition from the Caribbean Basin as a producing area resulted in a decline of 2 percent during 1976-85 to \$26 million (table 34). Quotas on these products were 53 percent filled during 1982 and only 34 percent filled in 1985.

U.S. imports of MFA yarn from Mexico, primarily manmade-fiber yarn, rose by 43 percent during 1976-85 to \$20 million (table 35). Although yarn was not subject to specific limits, the designated consultation level on acrylic spun yarn from Mexico was reached during 1985, which may result in future negotiations to set specific limits.

The imports of other, smaller product categories from Mexico also rose, together increasing by 99 percent during 1976-85 to \$88 million (table 36). Major products included coats and jackets that had specific import limits and suits that reached their designated consultation levels during 1985.

Mexican benefits derived from the Multifiber Arrangement.--Mexico receives benefits from the extremely tight quota restraints that are applied to the large Asian suppliers. 3/ As U.S. importers find it increasingly difficult to fill their needs from countries such as Hong Kong, Korea, and Taiwan, export opportunities increase for a large number of secondary

 $<sup>\</sup>underline{1}/$  Direccion General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

<sup>2</sup>/ Generally, quotas are nonbinding (i.e. not filled) if demand for the product is low, such as during recessionary periods. As conditions improve, quotas on more competitive suppliers are filled first, followed by less competitive suppliers.

<sup>3</sup>/ The extent of benefits from tight quotas on the large Asian suppliers has not been reviewed.

Table 32.--Trousers, slacks, and shorts: U.S. imports for consumption from Mexico under the Multifiber Arrangement (MFA), from border and nonborder regions in Mexico, all other countries, and total, 1976-90

Mexico         Imports Irom countries         Imports Irom countries <th< th=""><th></th><th></th><th></th><th>)</th><th>(In thousands of dollars)</th><th>of dollars)</th><th></th><th></th><th></th><th></th></th<>				)	(In thousands of dollars)	of dollars)				
Other regions         Total         Other than Mexico         Total imports           MFA 1/         Total         MFA 1/         Total         MFA 1/         Total         MFA 1/           4,471         4,471         44,705         518,908         519,564         563,613           4,731         4,705         44,705         518,908         519,564         563,613           6,896         6,896         53,048         51,048         757,736         701,662         810,784           12,316         12,316         65,163         910,170         918,356         975,333           12,316         12,316         66,394         66,394         1,111,502         1,125,049         1,177,896           8,887         8,887         42,932         1,222,024         1,231,512         1,264,956           10,533         51,382         51,382         1,472,836         1,482,188         1,524,218           10,533         10,533         51,382         1,472,836         1,482,188         1,524,218           20,291         20,295         85,255         85,274         1,847,110         1,867,872         2,164,98           27,802         27,828         111,231         2,277,69         2,317,09	rom Me	xico					Imports fro	m countries		
MFA 1/         Total         MFA 1/         Total         MFA 1/         Total         MFA 1/         Total         MFA 1/	Border region		Other reg	ions	Total		other than	Mexico	Total import	8
4,471         4,471         44,705         44,705         518,908         519,564         563,613           4,731         4,731         43,005         43,005         601,857         603,222         644,862           5,711         5,711         51,448         51,448         787,97         792,206         839,425           6,896         6,896         53,048         53,048         757,736         761,662         810,784           12,316         65,163         65,163         910,170         918,356         975,333           13,876         66,394         66,394         1,111,502         1,125,049         1,177,896           8,887         8,887         42,932         1,222,024         1,231,512         1,264,956           10,533         51,382         42,932         1,472,836         1,482,188         1,524,218           20,291         20,295         85,255         85,274         1,847,110         1,867,872         2,164,956           25,390         25,414         101,559         101,654         2,070,166         2,377,089         2,386,898           27,802         111,21         2,277,690         2,377,099         2,377,099         2,377,099         2,377,090	Total	,	MFA 1/	Total	HFA 1/	Total	MFA 1/	Total	MFA 1/	Total
4,731         4,731         43,005         43,005         601,857         603,222         644,862           5,711         5,711         51,448         51,448         787,977         792,206         839,425           6,896         6,896         53,048         53,048         757,736         761,662         810,784           12,316         12,316         65,163         65,163         910,170         918,356         975,333           13,876         13,876         66,394         1,111,502         1,125,049         1,177,896           8,887         42,932         42,932         1,222,024         1,231,812         1,264,956           10,533         10,533         51,382         51,382         1,472,836         1,482,188         1,564,956           20,291         20,295         85,274         1,847,110         1,867,872         1,932,365           25,340         20,291         20,101,654         2,070,166         2,160,528         2,163,806           27,828         111,207         111,311         2,277,690         2,377,089         2,880,566           30,441         121,772         121,886         2,757,226         2,877,499         2,890,566           36,502         36,536 <td>40.23</td> <td>ñ</td> <td>4.471</td> <td>4.471</td> <td>44,705</td> <td>44,705</td> <td>518,908</td> <td>519,564</td> <td>563,613</td> <td>564,269</td>	40.23	ñ	4.471	4.471	44,705	44,705	518,908	519,564	563,613	564,269
5,711         5,714         51,448         51,448         787,977         792,206         839,425           6,896         6,896         53,048         757,736         761,662         810,784           12,316         12,316         65,163         65,163         910,170         918,356         975,333           13,876         13,876         66,394         1,111,502         1,125,049         1,177,896           8,887         42,932         42,932         1,222,024         1,231,512         1,264,956           10,533         10,533         51,382         51,382         11,472,836         1,487,118         1,564,956           20,291         20,295         85,255         85,274         1,847,110         1,867,872         1,932,365           25,390         25,414         101,559         101,654         2,070,166         2,160,528         2,163,806           27,802         27,828         111,207         111,311         2,506,015         2,617,089         2,886,898           30,443         30,471         121,772         121,886         2,757,226         2,877,499         2,890,566           35,502         36,536         146,007         146,144         3,033,615         3,483,239 <td< td=""><td>38.2</td><td>74</td><td>4.731</td><td>4,731</td><td>43,005</td><td>43,005</td><td>601,857</td><td>603,222</td><td>644,862</td><td>646,227</td></td<>	38.2	74	4.731	4,731	43,005	43,005	601,857	603,222	644,862	646,227
6,896         6,896         53,048         757,736         761,662         810,784           12,316         12,316         65,163         65,163         910,170         918,356         975,333           13,876         13,876         66,394         1,111,502         1,125,049         1,177,896           8,887         8,887         42,932         42,932         1,222,024         1,231,512         1,264,956           10,533         10,533         51,382         51,382         1,472,836         1,482,188         1,524,218           20,291         20,295         85,255         85,274         1,847,110         1,867,872         1,932,365           25,390         25,414         101,559         101,654         2,070,166         2,160,528         2,163,806           27,802         27,828         111,207         111,311         2,277,690         2,377,089         2,386,898           30,443         30,471         121,772         121,886         2,757,226         2,877,499         2,890,566           35,502         36,536         146,007         146,144         3,033,615         3,165,917         3,497,585           39,970         40,007         159,878         160,28         3,337,707	45.7	37	5.711	5,711	51,448	51,448	787,977	792,206	839,425	843,654
12,316         12,316         65,163         910,170         918,356         975,333           13,876         13,876         66,394         1,111,502         1,125,049         1,177,896           8,887         8,887         42,932         42,932         1,222,024         1,231,512         1,264,956           10,533         10,533         51,382         51,382         1,472,836         1,482,188         1,524,218           20,291         20,295         85,255         85,274         1,847,110         1,867,872         1,932,365           25,390         25,414         101,559         101,654         2,070,166         2,160,528         2,163,806           27,802         27,828         111,207         111,311         2,277,690         2,377,089         2,386,898           30,443         30,471         121,772         121,886         2,506,015         2,615,355         2,627,787           31,335         36,536         146,007         146,144         3,033,615         3,165,917         3,497,585           39,970         40,007         159,878         160,028         3,337,707         3,483,239         3,497,585	46.1	52	968.9	968'9	53,048	53,048	757,736	761,662	810,784	814,710
13,876         13,876         66,394         66,394         1,111,502         1,125,049         1,177,896           8,887         8,887         42,932         42,932         1,222,024         1,231,512         1,264,956           10,533         10,533         51,382         51,382         1,472,836         1,482,188         1,524,218           20,291         20,295         85,255         85,274         1,847,110         1,867,872         1,932,365           25,390         25,414         101,559         101,654         2,070,166         2,160,528         2,163,806           27,802         27,828         111,207         111,311         2,277,690         2,377,089         2,386,898           30,443         30,471         121,772         121,886         2,506,015         2,615,355         2,627,787           31,335         33,56         133,465         2,757,226         2,877,499         2,890,566           36,502         146,007         146,144         3,033,615         3,165,917         3,497,585           39,970         40,007         159,878         160,028         3,337,707         3,483,239         3,497,585	52.8	47	12,316	12,316	65,163	65,163	910,170	918,356	975,333	983,519
8,887         8,887         42,932         42,932         1,222,024         1,231,512         1,264,956           10,533         10,533         51,382         51,382         1,472,836         1,482,188         1,524,218           20,291         20,295         85,255         85,274         1,847,110         1,867,872         1,932,365           25,390         25,414         101,559         101,654         2,070,166         2,160,528         2,183,806           27,802         27,828         111,207         111,311         2,277,690         2,377,089         2,388,898           30,443         30,471         121,772         121,886         2,506,015         2,615,355         2,627,787           31,335         33,56         146,007         146,144         3,033,615         3,165,917         3,179,623           39,970         40,007         159,878         160,028         3,337,707         3,483,239         3,497,585	52,5	18	13,876	13,876	66,394	66,394	1,111,502	1,125,049	1,177,896	1,191,443
10,533         10,533         51,382         51,382         1,472,836         1,482,188         1,524,218           20,291         20,295         85,255         85,274         1,847,110         1,867,872         1,932,365           25,390         25,414         101,559         101,654         2,070,166         2,160,528         2,163,806           27,802         27,828         111,207         111,311         2,277,690         2,377,089         2,388,898           30,443         30,471         121,772         121,886         2,506,015         2,615,355         2,627,787           31,335         33,366         133,465         2,577,226         2,877,499         2,890,566           36,502         36,502         146,007         146,144         3,033,615         3,165,917         3,179,623           39,970         40,007         159,878         160,028         3,337,707         3,483,239         3,497,585	34.0	145	8.887	8,887	42,932	42,932	1,222,024	1,231,512	1,264,956	1,274,444
20,291         20,295         85,255         85,274         1,847,110         1,867,872         1,932,365           25,390         25,414         101,559         101,654         2,070,166         2,160,528         2,163,806           27,802         27,828         111,207         111,311         2,277,690         2,377,089         2,388,898           30,443         30,471         121,772         121,886         2,506,015         2,615,355         2,627,787           33,335         33,366         146,007         146,144         3,033,615         3,165,917         3,199,623           39,570         40,007         159,878         160,028         3,337,707         3,483,239         3,497,585	40.8	649	10,533	10,533	51,382	51,382	1,472,836	1,482,188	1,524,218	1,533,570
25,390     25,414     101,559     101,654     2,070,166     2,160,528     2,163,806       27,802     27,828     111,207     111,311     2,277,690     2,377,089     2,388,898       30,443     30,471     121,772     121,886     2,506,015     2,615,355     2,627,787       33,335     33,366     133,340     133,465     2,757,226     2,877,499     2,890,566       36,502     36,536     146,007     146,144     3,033,615     3,165,917     3,179,623       39,970     40,007     159,878     160,028     3,337,707     3,483,239     3,497,585	64	626	20,291	20,295	85,255	85,274	1,847,110	1,867,872	1,932,365	1,953,165
27,802     27,828     111,207     111,311     2,277,690     2,377,089     2,388,898     30,443       30,443     30,471     121,772     121,886     2,506,015     2,615,355     2,627,787       33,335     33,366     133,340     133,465     2,757,226     2,877,499     2,890,566       36,502     36,536     146,007     146,144     3,033,615     3,165,917     3,179,623       39,970     40,007     159,878     160,028     3,337,707     3,483,239     3,497,585	76.	241	25,390	25,414	101,559	101,654	2,070,166	2,160,528	2,163,806	2,259,462
30,443 30,471 121,772 121,886 2,506,015 2,615,355 2,627,787 3 33,335 33,366 133,340 133,465 2,757,226 2,877,499 2,890,566 3 36,502 36,536 146,007 146,144 3,033,615 3,165,917 3,179,623 3 39,970 40,007 159,878 160,028 3,337,707 3,483,239 3,497,585	83	483	27,802	27,828	111,207	111,311	2,277,690	2,377,089	2,388,898	2,488,400
33,335 33,366 133,340 133,465 2,757,226 2,877,499 2,890,566 3 36,502 36,536 146,007 146,144 3,033,615 3,165,917 3,179,623 3 39,970 40,007 159,878 160,028 3,337,707 3,483,239 3,497,585 3	91	414	30.443	30,471	121,772	121,886	2,506,015	2,615,355	2,627,787	2,737,240
36,502 36,536 146,007 146,144 3,033,615 3,165,917 3,179,623 3,95,00 40,007 159,878 160,028 3,337,707 3,483,239 3,497,585 3	100	660	33,335	33,366	133,340	133,465	2,757,226	2,877,499	2,890,566	3,010,964
39,970 40,007 159,878 160,028 3,337,707 3,483,239 3,497,585 ;	109	809	36,502	36,536	146,007	146,144	3,033,615	3,165,917	3,179,623	3,312,061
	120	021	39,970	40.007	159,878	160,028	3,337,707	3,483,239	3,497,585	3,643,267

1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direction General de Estadistica Instituto Nacional de Estadistica, Geografía e Informatica. 2/ Estimated by the staff of the U.S. International Trade Commission. 3/ The projected level of imports from Mexico for 1986-90 was calculated using the compound annual growth rate of such imports during

1976-85 and assumed that imports from the border regions as a share of the total imports from Mexico would remain at estimated 1985 levels during 1986-90. The projected level of total imports for 1986-90 was calculated on the basis of a 6-percent growth rate plus an estimated 4-percent annual inflation rate, which yielded a 10-percent annual growth rate.

Table 33.--Shirts and blouses: U.S. imports for consumption from Mexico under the Multifiber Arrangement (MFA), from border and nonborder regions in Mexico, all other countries, and total, 1976-90

					(In thousands of dollars)	of dollars)				
	Imports	Imports from Mexico					Imports fro	mports from countries		
	Border region	egion	Other regions	ions	Total		other than Mexico	Mexico	Total imports	8
Year	MFA	Total	HFA	Total	MFA	Total	MFA	Total	MFA	Total
	773 00	113 00	700	700 0	93	22	975,018	978.456	1.008.956	1,012,394
19/6 1/	30,044	30,044	2,034	400.0	900,00	000.00	0000	717 700 1	300 301 1	1 126 815
1977 1/	25,986	25,986	3,212	3,212	29,138	29,198	1,0/6,/28	110,160,1	976,501,1	7,120,021,1
1978.	35,280	35,280	4,405	4,405	39,685	39,685	1,556,077	1,603,138	1,595,/62	1,642,823
1979	38.183	38.183	5.705	5.706	43.888	43,889	1,782,847	1,833,414	1,826,735	1,8//,303
1080	37.534	37,535	8.747	8.747	46.281	46.282	1,879,485	1,938,511	1,925,766	1,984,793
1981	31.577	31.577	8,343	8,343	39,920	39,920	2,140,245	2,233,056	2,180,165	2,272,976
1982	19 735	19.750	5.151	5,156	24.886	24.906	2,415,918	2,488,705	2,440,804	2,513,611
1902	20 630	20.681	5.322	5.333	25.961	26.014	2,710,187	2,803,518	2,736,148	2,829,532
1985	27.246	27.251	8.510	8.512	35,756	35,763	3,489,113	3,642,701	3,524,869	3,678,464
1085	30.053	30.080	10.018	10.027	40.071	40,106	3,886,297	4,159,538	3,926,368	4,199,644
1986 27	30.624	30.651	10,208	10.217	40,832	40.868	4,278,172	4,578,740	4,319,005	4,619,608
1987 2/	31.206	31.233	10.402	10,411	41,608	41,645	4,709,297	5,039,925	4,750,905	5,081,569
1988 2/	31.799	31.827	10,600	10,609	42,399	42,436	5,183,597	5,547,290	5,225,996	5,589,726
1969 27	32.403	32.432	10.801	10,811	43,204	43,242	5,705,391	6,105,457	5,748,595	6,148,699
1990 2/	33,019	33,048	11,006	11,016	44,025	44.064	6,279,430	6,719,505	6,323,455	6,763,569

1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direction General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.
2/ The projected level of imports from Hexico for 1986-90 was calculated using the compound annual growth rate of such imports during 1976-85 and assumed that imports from the border regions as a share of the total imports from Mexico would remain at estimated 1985 levels during 1986-90. The projected level of total imports for 1986-90 was calculated on the basis of a 6-percent growth rate plus an estimated 4-percent annual inflation rate, which yielded a 10-percent annual growth rate.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 34--Body-supporting garments: U.S. imports for consumption from Mexico under the Multifiber Arrangement (MFA), from border and nonborder regions in Mexico, all other countries, and total, 1976-90

				٠	(In thousands of dollars)	f dollars)				
	Imports	Imports from Mexico					Imports fr	Imports from countries		
	Border 1	Border region 1/	Other reg	ions 1/	Total		other than Mexico	Mexico	Total imports	8
Year	MFA	Total	MFA Tota	Total	MFA	Total	MFA	Total	HFA 2/	Total
1976 1/	23.631	23.631	2.626	2,626	26.257	26,257	52,268	54,887	78,525	81,144
1977 1/	24,212	24,212	2,992	2,992	27,204	27,204	64,016	67,059	91,220	94,263
1978	25,246	25,246	3,152	3,152	28,398	28,398	83,178	86,900	111,576	115,298
1979	24.370	24,370	3,642	3,642	28,012	28,012	103,097	103,349	131,109	131,361
1980	25,204	25,204	5,874	5,874	31,078	31,078	121,228	121,356	152,306	152,434
1981	24,235	24,235	6,404	6,404	30,639	30,639	136,921	137,122	167,560	167,761
1982	18,735	18,735	4,891	4,891	23,626	23,626	139,725	140,059	163,351	163,685
1983	19,075	19,075	4,919	4,919	23,994	23,994	156,788	157,613	180,782	181,607
1984	21,334	21,334	6,664	6,664	27,998	27,998	171,390	172,330	199,388	200,328
1985	19,327	19,327	6,442	6,442	25,769	25,769	202,542	203,891	228,311	229,660
1986 3/	19,288	19,288	6,429	6,429	25,717	25,717	225,425	526,909	251,142	252,626
1987 3/	19,250	19,250	6,417	6,417	25,666	25,666	250,590	252,223	276,256	277,889
1988 3/	19,211	. 19,211	6,404	6,404	25,615	25,615	278,267	280,063	303,882	305,677
1989 3/	19,173	19,173	6,391	6,391	25,563	25,563	308,707	310,682	334,270	336,245
1990 3/	19,134	19,134	6,378	6,378	25;512	25,512	342,185	344,357	367,697	369,870

1/ Projected data for MFA imports adjusted to reflect the MFA/total import rates for body-supporting garments for 1985.
2/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direction General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

3/ The projected level of imports from Mexico for 1986-90 was calculated using the compound annual growth rate of such imports during 1976-85 and assumed that imports from the border regions as a share of the total imports from Mexico would remain at estimated 1985 levels during 1986-90. The projected level of total imports for 1986-90 was calculated on the basis of a 6-percent growth rate plus an estimated 4-percent annual inflation rate, which yielded a 10-percent annual growth rate.

Table 35.--Yarn: U.S. imports for consumption from Mexico under the Multifiber Arrangement (MFA), from border and nonborder regions in Mexico, all other countries, and total, 1976-90

				٦	(In thousands of dollars)	of dollars)				
	Import	Imports from Mexico					Imports fr	Imports from countries		
	Border	Border region 1/	Other reg	regions 1/	Total		other than Mexico	Mexico	Total imports	<b>4</b>
Year	MFA	Total	HFA	Total	MFA	Total	HFA	Total	MFA	Total
1976	0	0	13,707	13,822	13,707	13,822	133,844	151,780	147,551	165,602
1977	0	0	11,087	11,179	11,087	11,179	165,657	187,187	176.744	198,366
1978	0	0	20,158	20,326	20,158	20,326	188.276	213,580	208.434	233.906
1979	0	0	9,835	10,149	9,835	10,149	119,602	148 247	120 437	158 306
1980	0	0	7,357	8,139	7,357	8,139	131,369	163,101	138.726	171,240
1981	0	0	12,438	13,454	12,438	13,454	160.822	186,564	173.260	200.018
1982	0	0	13,274	13,732	13,274	13,732	182,656	208,450	195,930	222,182
1983	0	0	22,911	23,847	22,911	23,847	241,852	268,556	264,763	292,403
1984	0	0	28,948	29,949	28,948	29,949	368,422	400,413	397,370	430.362
1985	0	0	19,552	19,921	19,552	19,921	380,595	408,706	400,147	428.627
1986 2/	0	0	20,334	20,738	20,334	20,738	419,828	450,752	440,162	471.490
1987 2/	0	0	21,147	21,588	21,147	21,588	463,030	497,051	484,178	518,639
1988 2/	0	0	21,993	22,473	21,993	22,473	510,602	548,029	532,596	570,503
1989 2/	0	0	22,873	23,395	22,873	23,395	562,982	604,158	585,855	627.553
1990 27	0	0	23,788	24,354	23,788	24,354	620,653	665,954	644,441	690,308

1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direction General de Estadistica 2/ The projected level of imports from Mexico for 1986-90 was calculated using the compound annual growth rate of such imports during 1976-85 and assumed that imports from the border regions as a share of the total imports from Mexico would remain at estimated 1985 levels during 1986-90. The projected level of total imports for 1986-90 was calculated on the basis of a 6-percent growth rate plus an estimated 4-percent annual inflation rate, which yielded a 10-percent annual growth rate. Instituto Nacional de Estadistica, Geografía e Informatica.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 36 .-- other textiles and apparel: U.S. imports for consumption from Mexico under the Multifiber Arrangement (MFA), from border and nonborder regions in Mexico, all other countries, and total, 1976-90

					In thousands of dollars	or dollars)				
	Imports	Imports from Mexico					Imports from countries	oountries .		
	Border 1	Border region 1/	Other regions 1/	ions 1/	Total		other than Mexico	lexico	Total imports	
Year	HFA	Total	KFA	Total	MFA	Total	MFA	Total	HFA	Total
1976	39,925	96,243	4,436	10,694	44,361	106,936	2,503,323	3,335,655	2,547,683	3,616,301
1977	42,293	108,831	5,227	13,451	47,520	122,282	2,824,982	3,725,047	2,872,502	4,056,049
1978	57,802	127,191	7,217	15,881	65,019	143,072	3,501,484	4,929,289	3,566,503	5,072,361
1979	57,504	137,711	8,592	20,577	960,99	158,288	3,342,639	4,826,215	3,408,735	4,984,503
1980	58,881	132,081	13,722	30,781	72,603	162,862	3,934,812	5,438,727	4,007,415	5,601,589
1981	53,041	142,085	14,014	37,542	67,055	179,627	4,904,064	6,679,657	4,971,119	6,859,284
1982	36,639	109,808	9,564	28,663	46,203	138,471	5,042,056	6,825,321	5,088,259	6,963,792
1983	38,857	123,135	10,020	31.,752	48,877	154,887	5,857,012	8,087,839	5,905,889	8,242,726
1984	59,366	138,852	18,542	43,369	77,908	182,221	8,155,300	11,748,637	8,233,208	11,930,858
1985	66,073	168,918	22,024	56,306	88,097	225,224	9,150,252	12,785,471	9,238,349	13,010,695
1986 2/	70,095	181,886	23,365	60,629	93,460	242,514	10,068,724	14,069,250	10,162,184	14,311,765
1987 2/	74,138	195,603	24,713	65,201	98,851	260,804	11,079,552	15,482,137	11,178,402	15,742,941
1988 2/	78,180	210,104	26,060	70,035	104,240	280,139	12,192,003	17,037,096	12,296,243	17,317,235
1989 2/	82,195	225,426	27,398	75,142	109,594	300,568	13,416,273	18,748,390	13,525,867	19,048,959
1990 2/	86,154	241,605	28,718	80,535	114,873	322,140	14,763,581	14,059,258	14,878,453	20,953,854

1/ Estimated by the staff of the U.S. International Trade Commission on the basis of data compiled by Direction General de Estadistica

Instituto Nacional de Estadistica, Geografia e Informatica.

2/ The projected level of imports from Mexico for 1986-90 was calculated using the compound annual growth rate of such imports during 1976-85 and assumed that imports from the border regions as a share of the total imports from Mexico would remain at estimated 1985 levels during 1986-90. The projected level of total imports for 1986-90 was calculated on the basis of a 6-percent growth rate plus an estimated 4-percent annual inflation rate, which yielded a 10-percent annual growth rate.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

suppliers, including Mexico. Mexico also benefits from the MFA, since it increases the likelihood that their access to the U.S. market will not be suddenly curtailed.

The textile and apparel industry in the in-bond plants of Mexico has grown significantly, because of a combination of the maquiladora program, 1/1 the use of item 807.00, and devaluations of the Mexican peso which have reduced relative labor costs. During 1980-84, employment rose by 13 percent to almost 20,000 workers and foreign investments and input rose by 29 percent to \$261 million in the Mexican in-bond plants, or maquiladoras, producing apparel. Wages and benefits paid to Mexican apparel workers in terms of U.S. dollars declined by 24 percent to \$44 million during 1980-81, in part because of the decline in the exchange rate. 2/1

Border industry developments associated with the Multifiber

Arrangement.--The effect of the MFA program on the development of border
communities is unclear. The development of the border communities has most
likely been influenced more by the general growth of the in-bond apparel
industry in Mexico, which produces most of the apparel for export. Apparel
employment in the border regions rose by 6 percent during 1980-84 to 15,161
workers, 3/ foreign investment and inputs rose by 27 percent to \$217 million,
and U.S. textile and apparel imports from the border region rose by an
estimated 2 percent to \$252 million.

In the U.S. border regions, two of the larger counties showed substantial declines in apparel employment over a longer, 7-year period, 1976-83. Apparel employment in the county of El Paso, TX, declined by 20 percent to 15,425 workers, whereas apparel employment in San Diego County, CA, declined by 46 percent to 2,600 workers.

Unlike the counties of El Paso and San Diego, some U.S. border areas recorded growth in apparel employment during 1976-83. In Pima County, AZ, apparel employment rose by 27 percent to 379 workers and in the counties of Hidalgo and Cameron, TX, apparel employment rose by 100 percent to 6,068 workers. 4/

<u>Projection of U.S. imports from Mexico under the Multifiber</u>
<u>Arrangement.--The projected level of textile and apparel imports from all sources during 1986-90 was calculated on the basis of a 6 percent annual growth rate in quantity plus an estimated 4 percent annual inflation rate, which yielded a 10 percent annual growth rate. The projected level of imports</u>

<sup>1</sup>/ See the chapter on maquiladoras.

 $<sup>\</sup>underline{2}$ / Direccion General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

<sup>3/</sup> However, primarily because of past efforts of the Mexican Government to expand the maquiladora program into interior areas of Mexico and the new National Industrial Promotion and Foreign Trade Program (Pronafice), the share of total apparel employment in maquiladoras accounted for by apparel assembly operations in the border regions went from 81 percent in 1980 to 79 percent in 1984. See American Chamber of Commerce of Mexico, "Maquiladora Newsletter," August 1984.

<sup>4/</sup> Bureau of the Census, U.S. Department of Commerce, <u>County Business</u> <u>Patterns</u>.

from Mexico for 1986-90 was calculated using the compound annual growth rate of such imports during 1976-85. In addition, it was estimated that 75 percent of the apparel imports from Mexico would continue to come from the border regions, and all of the yarn imports would still come from the interior during 1986-90, equal to the estimated percentages for 1985. On this basis, U.S. imports of MFA-covered textiles and apparel from Mexico are projected to grow by 34 percent during 1985-90 to \$368 million, and those from the border areas are projected to increase by 35 percent to \$258 million.

By product groups, total MFA-covered imports from Mexico during 1985-90 are projected to grow by 57 percent to \$160 million for trousers, by 22 percent to \$24 million for yarn, by 10 percent to \$44 million for shirts, and by 30 percent to \$115 million for the smaller product groups. For 1985-90, a decrease of 1 percent in body-supporting garment imports to \$25 million in 1990 is projected.

Most of the apparel products are produced in the maquiladoras. These plants, particularly in the border region, have suffered from a labor shortage, high employee turnover rates, and a shortage of transportation and other support facilities 1/, all of which tend to slow growth. In addition, industry sources indicate that the Mexican Government may require that in-bond apparel producers use a higher percentage of Mexican-made components in future years in order to continue receiving maquiladora benefits. On the other hand, MFA imports from Mexico have rebounded sharply from their depressed 1982 levels as the uncertainty over Mexico's financial crisis eased and U.S. demand for these products increased. In addition, the exchange-rate-induced decline in the wages paid to textile workers in terms of U.S. dollars may make the use of Mexican contractors more economically attractive to U.S. producers and accelerate the growth in imports of MFA-covered products from Mexico to the extent permitted under the bilateral agreement.

### Voluntary Restraint Agreement on the exports of Mexican steel

In December 1984, Mexico agreed to limit steel shipments to the U.S. market for a 5-year period, beginning October 1984. For 1986, the agreement limits Mexico to 0.36 percent of U.S. apparent consumption and to 100,000 tons of semifinished steel. 2/ Steel products manufactured in Mexico's in-bond plants (maquiladoras) remain outside the scope of restrictions. In exchange, the United States made a commitment to seek the termination of unfair trade investigations on steel items subject to the agreement.

## Trade in agricultural, fisheries, and forest products

 $\underline{\text{Overview}}$ .--Trade in agricultural, fisheries, and forest products  $\underline{3}/$  between the United States and Mexico has been important to the economies of

<sup>1/</sup> American Chamber of Commerce of Mexico, op. cit.

 $<sup>\</sup>frac{2}{}$ / According to data compiled by the U.S. Department of Commerce, Mexico's share of U.S. apparent consumption was 0.83 percent in 1984.

<sup>3</sup>/ These include all products classified under Schedules 1 and 2 of the Tariff Schedules of the United States, and under Schedules 1 and 2 of Schedule B, Classification of United States Exports. The term "agricultural goods or products" is used in this section to encompass all such products.

both countries. In 1985, Mexico was the fourth largest supplier of imports of agricultural, fisheries, and forest products into the United States, accounting for about 5 percent of the \$38 billion of U.S. imports of these products. Mexico was also the fourth largest market for U.S. farm, fish, and forest products exports, purchasing about 6 percent of the \$38 billion of these U.S. exports in 1985.

Prior to the mid-1970's, Mexico generally exported more to the United States in agricultural goods than it imported; however, beginning in the mid-1970's, this situation reversed with the United States generally supplying more agricultural goods to Mexico than it imported from that country. During 1978-85, the United States ran a surplus in trade with Mexico in agricultural products in 5 of the 8 years (see table 37).

Table 37.--U.S. agricultural trade with Mexico: U.S. exports to Mexico and imports from Mexico, 1978-85

Year	Exports of domestic merchan- dise to Mexico	Imports for consumption from Mexico	Net U.S. agricultural trade with Mexico (exports less imports)
1978	1,166	1,496	(330)
1979	=	1,771	(357)
1980		1,614	1,460
1981	3,086	1,672	1,414

1,814

1,975

1,987

2,083

(118)

443

562

161

(In millions of dollars)

Source: Compiled from official statistics of the U.S. Department of Commerce.

1,696

2,418

1982.....

1983.....

1984..... 2,549

U.S. imports from Mexico.--During 1978-85, U.S. imports of agricultural, fisheries, and forest products from Mexico rose from about \$1.5 billion to \$2.1 billion or by about 4.8 percent annually as shown previously in table 4. U.S. imports of these products from all countries, including Mexico, rose by about 5.9 percent annually during this same period or from about \$26 billion to slightly above \$38 billion. Based upon imports during 1978-85, U.S. imports of agricultural products from Mexico could reach a projected \$2.4 billion in 1990; this would mean an annual rate of increase of 3.4 percent of imports during 1986-90, a somewhat lower rate than that experienced during 1978-85.

U.S. duty-free imports of agricultural products from Mexico under the GSP increased from \$119 million to \$201 million during 1978-85, a rate of increase of about 7.7 percent annually. In 1985, imports entering under the GSP accounted for slightly less than 10 percent of total U.S. imports of agricultural goods from Mexico. Mexican agricultural goods entering under GSP could rise by a total of 14 percent above the 1985 level to a projected \$228 million in 1990; the share of imports entering under the GSP in 1990 is projected to be about the same as it was in 1985.

In recent years, three broad types of agricultural goods have accounted for nearly two-thirds of such imports from Mexico. Fruits, nuts, and vegetables (which consist largely of fresh vegetables and fruits); coffee, tea and spices (largely raw coffee); and fish and shellfish (largely shrimp) accounted for 66 percent of U.S. imports of agricultural, fisheries, and forest products in 1985 (see table 38). The largest single group of U.S. imports from Mexico, fruits, nuts, and vegetables, consists mainly of tomatoes, peppers, onions, broccoli, cucumbers, squash, cauliflower, grapes, cantaloupes, mangoes, and frozen strawberries. Among the other leading imported items are shrimp, crude coffee, live feeder cattle, articles of coated and cut paper, and beverages, mainly tequila and beer. The leading agricultural imports from Mexico receiving GSP treatment are beverages; paper and paperboard products; fruits, nuts, and vegetables; and wood and wood products.

Table 38.--U.S. imports from Mexico of agricultural goods, by types of commodity, 1978 and 1985

	1978		1985	
Commodity group	Total	Percent of total	Total	Percent of total
	Million dollars		Million dollars	
Fruit, nut and vege-				
table products	461	31	676	32
Coffee, tea, and				• •
spices	315	21	399	19
Fish and shellfish  Paper and paper- board, cut; and	228	15	320	15
paper, n.s.p.f Beverages, except	33	2	144	7
juice	39	3	139	7
Live animals Wood and wood products; cork and	130	9	125	6
cork products	86	6	90	4
All other	204	14	190	9
Total	1,496	100	2,083	100

Note. -- Because of rounding, figures may not add to the totals shown.

Imports from border areas within Mexico. -- In 1985, an estimated 17 percent of total U.S. imports of agricultural products from Mexico were believed to have been produced in Mexico within border areas adjacent to the United States. The primary agricultural import produced in the Mexican border areas is believed to be disposable paper medical gowns and equipment that are assembled from U.S. precut paper in maquila operations. Other leading items produced in the border regions are believed to be shrimp, fresh fruits and vegetables, and live feeder cattle. The shrimp imports consist of both shrimp landed in Mexican ports adjacent to the United States, and U.S. shrimp that has been exported to maquila operations for processing and packaging. An estimated 30 percent of U.S. shrimp imports from Mexico are believed to have been produced or processed in the border region. The U.S. shrimp are first shipped to Mexico, where they are beheaded, cleaned, packed, and then exported to the United States.

Most of the leading products imported from Mexico are produced outside the border areas of Mexico. The vast majority of fruits and vegetables are produced in the State of Sinaloa, located a considerable distance from the border. Most production in Mexico of coffee, beverages (tequila and beer), wood and wood products, and shrimp occurs in areas that are a considerable distance from the U.S. border. In total, an estimated 83 percent of U.S. imports of agricultural, fisheries, and forestry products from Mexico are produced in Mexican States not adjacent to the U.S. border.

Imports under TSUS item 807.--U.S. imports of agricultural products from Mexico under TSUS item 807.00 rose from \$32 million in 1978 to \$116 million in 1985, as shown previously in table 16. Over 95 percent of the products entered under these items consisted of disposable paper hospital and medical gowns and equipment. The disposable paper medical products are made from precut paper and assembled in the border regions of Mexico. In 1985, Mexico supplied about three-quarters of total U.S. imports of agricultural, fisheries, and forestry products entering the United States under item 807.00. By 1990, U.S. 807.00 imports of agricultural products could amount to a projected \$173 million or 49 percent above the 1985 level of imports; implying annual rate of increase of about 8.3 percent.

U.S. trade barriers to agricultural products from Mexico: U.S. tariffs. -- The leading type of imported agricultural products from Mexico consists of fruit, nut, and vegetable products, which together accounted for one-third of U.S. imports from Mexico in 1985. Fruits, nuts, and vegetables also paid the highest rate of U.S. duty on any group of agricultural products imported from Mexico in recent years. In 1985, about 86 percent of the \$676 million in U.S. imports of fruits, nuts, and vegetables from Mexico were dutiable, and those dutiable imports paid an ad valorem (AVE) duty of 10.4 percent, as shown in the table 39, compiled from official statistics of the U.S. Department of Commerce (in percent):

Table 39.--U.S. imports from Mexico that are dutiable and rates of duty paid, by commodity groups, 1978 and 1985

	1978		1985		
	Share of imports which	Rate of duty	Share of imports which	Rate of duty	
O		•	-	•	
Commodity group	are dutiable	paid	are dutiable	paid (AVE)	
Fruit mut and ware					
Fruit, nut, and vege-	07 /	10 (	06.0	16 /	
table products	97.4	12.6	86.2	10.4	
Coffee, tea, and					
spices	.5	6.9	.4	6.8	
Fish and shellfish	4.8	2.6	1.5	1.1	
Paper and paper-					
board, cut; and					
paper, n.s.p.f	96.1	6.6	80.1	5.6	
Beverages, except	70.1	0.0	00.1	5.0	
<b>9</b> , <b>1</b>	0 0	17. 6	66.6	2 7	
juice	9.2	14.5		2.7	
Live animals	99.8	6.1	99.2	1.6	
Wood and wood					
products; cork and					
cork products	72.8	9.6	67.3	3.3	
All other	55.6	5.6	40.1	3.0	
Average	53.7	9.4	49.0	7.5	

Source: Compiled from official statistics of the U.S. Department of Commerce.

Overall, about one-half of total U.S. imports of agricultural products from Mexico were dutiable in 1985, and were assessed an AVE duty of 7.5 percent. Of Mexican products entering the United States duty free, some do so under GSP provisions, and a number of others (including shrimp and crude coffee, for example) are duty free from all countries.

U.S. trade barriers to agricultural products from Mexico: U.S. nontariff barriers .-- The United States regulates the importation of plants, animals, products of both, and soil into this country in an effort to prevent the introduction or spread of pests and diseases. First, imports of plants, plant products, and soil are subject to inspection and possible seizure or exclusion under the Plant Quarantine Act (7 U.S.C. sec. 164a), the Federal Plant Pest Act (7 U.S.C. sec. 150dd), and the Mexican Border Act (7 U.S.C. sec. 149). Permits are required for the arrival, unloading, landing, or transit of such goods in or through the United States or in a U.S. FTZ (7 CFR sec. 352.5). The articles are inspected at the ports of their first arrival, with safeguard measures provided based on the type of customs entry being used and the contemplated movement of the articles (7 CFR sec. 352.10 et seq). Certain articles from Mexico--such as oranges, tangerines, and grapefruit--are subject to a higher level of scrutiny because of the previous incidence of pests and diseases (7 CFR sec. 352.30). All vehicles, aircraft, boats, freight, and baggage are inspected to control the introduction of pests (7 CFR sec. 320.3), and railway cars must be fumigated as well (7 CFR sec. 320.8). Soil may be entered only with a permit and for approved purposes, with applications for importation to be filed at the Mexican port of export (7 CFR

sec. 320.10). Some articles, such as honeybees, cannot be imported from Mexico (7 CFR sec. 322.2); dairy products from Mexico generally cannot enter into this country.

Similarly, imports of animals, birds and poultry, and products thereof are subject to regulation, detention (quarantine), or exclusion in an effort to eradicate or prevent specific diseases (9 CFR sec. 92.2). Certain exemptions are made for enumerated Mexican animals (9 CFR sec. 92.31). See sections 92.35-92.41). Mexico has been declared free of the animal ailments swine vesicular disease (9 CFR sec. 94.12) and rinderpest and foot-and-mouth disease (9 CFR sec. 94.1), so that cattle, swine, sheep, other ruminants, and meat and other animal products (except dairy) may be imported subject to quota (9 CFR sec. 94.11). Animal byproduct imports are also subject to regulatory criteria (9 CFR secs. 95.1-95.28) regardless of origin.

It may be observed that imports of such agricultural products from Mexico do not appear to receive treatment that is considerably different or worse than those from many industrialized countries. Problems for Mexican exporters may arise because the volume of such exports to the United States is large relative to the limited number of ports of entry causing delay for entry and inspection, and a lot of paperwork. However, given the concerns of U.S. farmers, some domestic interests may believe that too much access to U.S. markets is provided to Mexican products. It would appear that this question is not strictly a border area problem but relates to U.S. agriculture as a whole.

U.S. imports of winter vegetables.--As indicated earlier, about 32 percent of the \$2.1 billion in imports of agricultural products from Mexico in 1985 consisted of fruit, nut, and vegetable products. Imports of certain fresh fruits and vegetables from Mexico and elsewhere during the so-called winter months of November through April compete primarily with U.S. produce grown in Texas, California, and Florida during this same period. U.S. fruit and vegetable production is seasonally low during these months, although domestic fruits and vegetables held in cold storage that have been produced during the peak months of June-October are sold during this time. Among the leading types of fruits and vegetables imported in sizable amounts during these months are cucumbers, eggplant, onions, green peppers, squash, tomatoes, asparagus, broccoli, cauliflower, okra, strawberries, cantaloupes, and grapes.

Mexico supplied 72 percent of these fruit and vegetable imports entering the United States during the full crop year (year beginning November 1 and ending October 31) 1984/85, and 71 percent of these fruits and vegetables entering during the 6 winter months of November 1984-April 1985. The volume of winter fruit and vegetable imports entering from Mexico during the November-April period increased from \$234 million in 1978/79 to \$472 million in 1984/85, or by 60 percent. In that 7-year period, imports during the November-April period from all countries increased more rapidly than those solely from Mexico during the same period, rising by nearly 100 percent from \$254 million to \$500 million, respectively. Chile, a Southern Hemisphere producer, supplied most of the remaining fruit and vegetable imports during November-April.

Fruits and vegetables, the leading category of Mexican exports of agricultural products to the United States, has also involved considerable competition between Mexican and U.S. producers. As indicated earlier, there is a wide variety of fresh fruits and vegetables imported from Mexico that enter mostly during the months of December-May when U.S. production is seasonally low, except in certain U.S.-producing areas, such as Florida and California. At least two-thirds of the Mexican production of winter vegetables and fruits occurs in the State of Sinaloa, more than 600 miles from the U.S. border. 1/

In 1978, groups representing producers of winter vegetables in Florida filed an antidumping petition with the U.S. Department of the Treasury, alleging that Mexican vegetables were being sold in the U.S. market at less than fair value (LTFV). The Treasury Department preliminarily determined in 1979 that there had been no such sales at LTFV; a similar and final determination was then reached by the U.S. Department of Commerce in March 1980 (45 F.R. 20514). 2/

Mexican fruit and vegetable products entering the United States are subject to the same restrictions as are U.S. products with regard to phytosanitary standards and for certain provisions relating to grade, size, and quality. Federal marketing orders currently provide standards for domestic and Mexican tomatoes, onions, oranges, grapefruit, and table grapes. Mexican fresh citrus was banned in the United States because of an outbreak of citrus canker in Mexico in 1982; a U.S. ban on the use of the fumigant ethylene dibromide (EDB) against the Mediterranean fruit fly on Mexican fresh citrus, mangoes, and papayas went into effect in October 1985, restricting the entry of these imports which had been treated with EDB.

Trade in fish and shellfish. -- There have been two areas of controversy with regard to U.S.-Mexican trade in fish and shellfish relating to shrimp and tunafish. At the present time, most of what is imported from Mexico under the category of fish and shellfish consists of shrimp since the other dominant fish product of Mexico, tuna, is banned from the United States, as is explained below.

The Commission has conducted a series of investigations dating into the 1960's on the issue of shrimp imports from Mexico; as recently as August 1985, a section 332 report on shrimp from Mexico and elsewhere was completed Conditions of Competition Affecting the U.S. Gulf and South Atlantic Shrimp Industry, (Investigation No. TA-201-12) USITC Publication 1738, August 1985. 3/

<sup>1/</sup> See Bredahl, Hillman, Rothenberg, and Gutierrez, op. cit. pp 38-48, and Katharine Buckley, "Competitive Advantage in Producing Winter Fresh Vegetables in Florida and West Mexico," Vegetable Outlook and Situation Report, U.S. Department of Agriculture, February 1986, p. 11-16.

<sup>2/</sup> See Bredahl, Hillman, Rothenberg, and Gutierrez, op cit., pp. 20-28.

<sup>3/</sup> The Commission determined in investigation No. TA-201-12 on May 11, 1976, that shrimp, provided for in item 114.45 of the TSUSA were being imported into the United States in such increased quantities as to be a substantial cause of serious injury to the domestic industry. The Commission recommended that adjustment assistance would effectively remedy such serious injury.

Mexico is second only to the United States as a harvester of shrimp in the Western Hemisphere. Shrimp is the single most important marine product in Mexico, in terms of dollar value, and one of its leading nonpetroleum exports. As much as 90 percent of Mexico's shrimp harvest is exported, primarily to the United States. However, the majority of this shrimp is landed in ports not located in border areas.

Certain shrimp from the United States enter duty free under bond in Mexico to be processed and then exported to the United States. Such shrimp is processed in maquila operations, located in the border city of Matamaros, adjacent to major U.S. shrimp ports of Brownsville and Port Isabel, TX.

Most U.S. exports of frozen shrimp, the principal product form exported, pass through the Laredo customs district. Such exports consisted primarily of raw, shell-on shrimp and were exported to Mexico for further processing and are then reentered as processed shrimp into the United States. Since shrimp enter the United States free of duty, there is no use for the provisions of TSUS items 806.30 or 807.00.

U.S. imports of shrimp from Mexico must be accompanied by a "Guia de Pesca" (Guia). A Guia is a document that is required by the Government of Mexico to accompany shipments of fishery products specifying the origin and destination for a particular shipment whether destined for a domestic or foreign market. 1/ In a directive dated December 7, 1973, the U.S. Customs Service notified its ports that the documentation for all U.S. imports of shrimp from Mexico must include a Guia. As a practical matter, for a number of years, the Guia was merely collected and returned to Mexican authorities. The origin and particularly the destination on the Guia was not a concern, because once the shrimp arrived at U.S. Customs, the shrimp was assumed to be exported in accordance with Mexican regulations. However, there has been a recent rise in activity in shrimp being exported from Mexico outside of officially approved marketing channels. 2/ This situation may also be a violation of the Lacey Act, as it may involve a violation of Mexican law. 3/

There has been an upsurge in convictions of U.S. Gulf coast shrimpers in violation of the Lacey Act in recent years, a result both of increased illegal fishing activity and of stepped-up enforcement by the U.S. Coast Guard and the National Marine Fisheries Service (NMFS). According to one report, NMFS and Coast Guard agents have been working day and night at various gulf locations

 $<sup>\</sup>underline{1}/$  The Mexican Government strictly controls the marketing of shrimp, mainly because of foreign-exchange considerations.

<sup>2/</sup> According to U.S. shrimp industry members and officials of the Governments of both the United States and Mexico. U.S. shrimp industry members brought the matter to the attention of the U.S. Customs Service on May 21, 1985.

<sup>3/</sup> The Lacey Act (16 U.S.C. 3371) provides for criminal and civil penalties for the importation of and trade in wildlife products that were obtained in foreign countries in violation of U.S., State, or a foreign country's laws. Trade in shrimp that is harvested illegally in Mexican waters by U.S. flag craft is a violation of the Lacey Act.

to apprehend shrimpers suspected of violating the Lacey Act. 1/ Between June 1 and July 19, 1984, a period of only 7 weeks, more than 310 violations of the Lacey Act by Gulf coast shrimpers in Mexican waters were reported by the NMFS enforcement division. The maximum civil penalty for a violation (usually served upon a first-time offender) is \$10,000, and the maximum criminal penalty is \$20,000, or 5 years imprisonment, with possible forfeiture of the craft and equipment.

An embargo on U.S. imports of tuna products from Mexico has been in effect since July 14, 1980 (45 F.R. 137). The embargo was imposed after the Mexican Government seized a U.S. tuna fishing vessel that was fishing in territorial waters claimed by the Mexican Government but not recognized as such by the U.S. Government. The embargo was authorized under section 205 of the Fishery Conservation and Management Act of 1976 (FCMA). Prior to the embargo, U.S. imports of tuna products from Mexico in 1979 totaled 22 million pounds, valued at \$10 million, all of which consisted of raw tuna and tuna loins. The embargo currently is under consideration for removal pending negotiations with the Mexican Government. The Commission has completed, under section 332 of the Tariff Act of 1930, a factfinding study, entitled "The Competitive Conditions in the U.S. Tuna Industry (investigation No. 332-224)," which analyzes in depth the Mexican tuna industry.

Trade in live animals.--The United States has traditionally imported feeder cattle from Mexico for finishing in U.S. feedlots. U.S. imports of live cattle increased from 321,000 animals, valued at \$68 million, in 1981 to 562,000 animals, valued at \$139 million, in 1983 before declining to 476,000 animals, valued at \$124 million, in 1985. Mexican exports of live cattle are subject to export licensing, and the quantity of animals licensed for export appears to be influenced by grazing conditions and feed availabilities in Mexico, as well as by beef prices in Mexico and the United States. Some cattlemen contend that when beef supplies are scarce and prices are high in Mexico, the Mexican Government restricts exports of live cattle to put downward pressure on meat prices within Mexico.

Mexico lost authorization to ship meat to the United States in January of 1984, when it could not meet U.S. regulations with respect to species verification and pesticide residue monitoring. Consequently, there have been little, if any, U.S. imports of meat from Mexico since that time.

## Motor carrier regulation

One critical aspect of U.S.-Mexican border trade is commercial transportation, including its availability and its regulation. Until recently, at least in relation to the U.S. side of the border, delay resulting from the small number of border crossing points (especially bridges) and the associated customs clearance process was the focus of concern. Although such delay remains one of the factors most frequently mentioned to the Commission as affecting this trade, another issue--expanding regulation of foreign carriers by the Interstate Commerce Commission (ICC)--is now commonly cited as a major border area problem.

<sup>1/</sup> Notice of Enforcement Situation, National Marine Fisheries Service, Enforcement Division, Sept. 4, 1984.

In particular, two aspects of the ICC regulation have been described by many witnesses at the Commission's hearings and by submitters of written comments as hindering the free movement of goods. The first problem is the requirement that foreign motor carriers possess certificates of registration issued by the ICC before hauling certain "exempt" commodities, which by law (49 U.S.C. sec. 10526) are otherwise outside of ICC jurisdiction. 1/ This new provision, added in the so-called Motor Carrier Safety Act of 1984 (the Act of Oct. 30, 1984, P.L. 98-554; codified at 49 U.S.C. 10530), was enacted at least partly in response to Mexico's restrictions on U.S. trucking in that country. It also precludes foreign motor private carriers from transporting any articles, including exempt items, in interstate commerce in the United States without a certificate. The carrier must satisfy safety requirements, show that it is "fit, willing, and able" to carry goods and comply with ICC regulations, and that it has paid all applicable Federal taxes on the vehicle  $(49 \ U.S.C. \ sec. \ 10530(c)(1), \ (2)); \ road \ use \ taxes \ (26 \ U.S.C. \ sec. \ 4481).$  In addition, proof of financial responsibility, insurance coverage, and compliance with State laws must be shown. A waiver provision for carriers from contiguous countries is available to the President; no such waiver has been granted for Mexican carriers. Overall, the section means that, to operate in the United States, many Mexican motor carriers must now obtain certificates under 49 U.S.C. 10922 (or, if a freight forwarder, be issued a permit under sec. 10923), a difficult prospect in view of the ICC's complex rules.

The second problem often mentioned is the ICC's case-by-case interpretation of key statutory terms in provisions exempting certain motor-vehicle transportation from ICC jurisdiction. By law, the ICC lacks jurisdiction over (1) certain uses of motor vehicles by regulated carriers in a "terminal area," and (2) transportation of goods within a "commercial zone," along with other enumerated exemptions (49 U.S.C. 10523, 10526). The appropriate scope of these exemptions is frequently the subject of administrative hearings and of litigation--both of which add to existing delays and complications.

ICC regulations define a terminal area as including the pertinent commercial zone, up to the carrier's operating limits (49 CFR sec. 1049.1). A commercial zone is the area of a municipality, known as the base municipality, plus any contiguous municipalities and any unincorporated areas within 3 to 20 miles of the base municipality (depending on the latter's population), plus all of any municipality that is not contiguous but partially falls within that belt (49 CFR 1048.101). These limitations relate to the territories in which the motor carrier is permitted to operate; a narrow interpretation by the ICC would require offloading from a Mexican carrier and shifting of the cargo to an approved carrier--a barrier to efficient trade.

<sup>1</sup>/ "Exempt items" are defined in sec. 10530 as including farmers' commodities and supplies, livestock, horticultural and agricultural commodities, some fish, animal feed, shipping pallets and containers, crushed rock and glass, and wood chips. "Motor carrier" and "motor private carrier" are defined in 49 U.S.C. 10102; further detail is beyond the scope of this study.

As of July 1, 1985, Mexican motor or motor private carriers are required to have an ICC certificate if they engage in the for-hire movement of regulated commodities beyond a border commercial zone. For-hire shipments within a commercial zone are permissible if the carrier presents proof of insurance, whereas private shipments are unregulated (50 F.R. 20778 of May 20, 1985). The regulation would appear to have the effect of permitting uncertified Mexican carriers with insurance to transport commodities to and from U.S.-sited twin-plant operations if they are in a commercial zone or if the ICC deems the carriers to fall within some other exemption from certification. However, it seems likely that the U.S. operations of some Mexican carriers will still be hindered by the 1984 act's requirements.

# Customs Service procedures

Certain aspects of U.S. Customs Service procedures at border ports of entry have been described as inhibiting the movement of persons, vehicles, and goods to or from Mexico. 1/ They may be set forth briefly as follows:

- (1) The Project Exodus program and added export license review are especially a problem for twin-plant exports of raw materials to Mexican plant; licenses are issued by the Department of Commerce in Washington but the trading community at the border can effectively deal only with local customs personnel. Comments suggest a local decisionmaking authority be established in El Paso, TX
- (2) Requirements for shippers' export declarations are said to be overzealously enforced; one submission described a customs seizure of one truck of a two-truck caravan covered by a single declaration based on the lack of a separate form. 2/
- (3) Procedures for enforcement of textile and apparel restraints have been viewed as 'harsh, almost arbitrary', 'mindless', and 'unconscionable'. 3/

<sup>1/</sup> See, e.g., written statement submitted by the El Paso Foreign Trade Association, Mar. 24, 1986, p. 4 et seq.; submission of Mr. J. Chris Dobken, president, Sistemas y Proyectos Pochteca, of Apr. 15, 1986.

<sup>2/</sup> El Paso Foreign Trade Association statement, pp. 8 and 9.

<sup>&</sup>lt;u>3</u>/ <u>Ibid</u>., pp. 9 and 10.

(4) According to many comments, customs clearances can, in general, only be obtained during fixed hours rather than on a 24-hour basis. Customs officials can work overtime to clear vessels carrying passengers (19 U.S.C. 1435b), or vehicles carrying persons, baggage, or merchandise (19 U.S.C. 1451); comments indicate such services are limited and are furnished at the expense of the party requesting them. 1/

Upon a request made by the owner, master, or person in charge of a vessel or vehicle, or by or on behalf of a common carrier or by or on behalf of the owner or consignee of any merchandise or baggage, for overtime services of customs officers or employees at night or on a Sunday or holiday, the appropriate customs officer shall assign sufficient customs officers or employees if available to perform any such services which may lawfully be performed by them during regular hours of business . . .: Provided, that the provisions of this section [requiring the owner, master, etc. to pay or post bond for the payment of compensation for the services] . . . shall not apply to the owner, operator, or agent of a highway vehicle, bridge, tunnel, or ferry, between the United States and Canada or between the United States and Mexico, nor to the lading or unlading of merchandise, baggage, or persons arriving in or departing from the United States by motor vehicle, trolley car, on foot, or by other means of highway travel . . . At ports of entry and customs stations where any merchandise, baggage, or persons shall arrive in or depart from the United States . . . between the United States and Mexico, the appropriate customs officer, under such regulations as the Secretary of the Treasury may prescribe, shall assign customs officers and employees to duty at such times during the twenty-four hours of each day . as the Secretary of the Treasury in his discretion may determine to be necessary . . . . Officers and employees assigned to such duty at night or on Sunday or a holiday shall be paid compensation . . . but all compensation payable to such customs officers and employees shall be paid by the United States without requiring any license, bond, obligation, financial undertaking, or payment in connection therewith . . . .

<sup>1/</sup> It should be noted that any such overtime expense payments are required by law to go to the U.S. Treasury (the general fund) rather than to U.S. Customs Service, and personnel available for such services are limited. In addition, it should be observed that section 451 of the Tariff Act of 1930, as amended (19 U.S.C. 1451), appears to require that the U.S. Treasury reimburse U.S. Customs Service for overtime salaries when customs officers do overtime work at night or on Sundays or holidays in relation to shipments from Mexico or Canada, and that the Secretary of the Treasury may provide services 24 hours a day. The section says in pertinent part:

- (5) It is often asserted that increased inspection requirements for illegal drugs are resulting in significant delays and in the temporary closure of some border ports of entry. 1/
- (6) When U.S. Customs Service procedural changes occur and are believed to have adverse effects on transborder trade, Mexican customs officers may take corresponding actions, adding to the requirements and delay inherent in going from the U.S. to Mexico, or shipping goods to the latter.

Related matters referred to by several persons during the course of this investigation have included work slow-downs by U.S. customs inspectors, reassignments of personnel of the Immigration and Naturalization Service, and the diversion of customs border staff for other purposes (such as pistol training). 2/ No information presented to the Commission indicates that these problems continue for considerable periods, unlike those discussed above; however, the six enumerated problems tend to change in significance as U.S. Customs Service/administration policies evolve.

## Investment abroad and related programs

Investment abroad is coordinated and administered under many provisions of Federal law, with several Government agencies and the private sector involved. The programs are for the most part general in application; thus, they relate to investment in many countries, and some are connected to U.S. foreign assistance.

Foreign assistance. -- The statutes governing the provision of foreign assistance set as a principal policy goal the encouragement of free enterprise and private participation, both in the United States and in the recipient country (22 U.S.C. 2351). Foreign assistance may be accomplished through loans, advances (including credits), grants, agreements, contracts, or transactions, with any friendly government or its agency, individual, corporation, or international organization (22 U.S.C. 2395). Accordingly, the President is directed to negotiate treaties on taxation and commerce with potential beneficiary governments that include methods to facilitate and encourage private investment and to carry out U.S. aid through private channels when possible, including loans to foreign borrowers for development activities. More specifically, the President is to help small businesses participate in foreign assistance, in large part handled by the U.S. International Development Cooperation Agency (IDCA). 3/ The IDCA relies on an interagency committee in making decisions regarding development loans and handles other assigned duties.

<sup>1/</sup> See, e.g., El Paso Foreign Trade Association statement, pp. 38 and 39.

<sup>2/</sup> See Dobken submission, op cit. note 1 of previous page.

<sup>3/ 1979</sup> Reorganization Plan No. 2, E.O. No. 12163 of Sept. 29, 1979, as amended (44 F.R. 56673).

Investment abroad.--Much of the information utilized by Government agencies in evaluating investment activities--both U.S. investment abroad and foreign investment here--along with trade in services is derived in the surveys conducted every 5 years by the Office of Management and Budget (22 U.S.C. 3101; E.O. 11961 of Jan. 19, 1977, 42 F.R. 54931). These assessments, described as "comprehensive benchmark surveys" (22 U.S.C. 3103), cover all forms of investment and related activities, including capital flows and data needed to calculate the balance of payments. In addition to monitoring trade in services and foreign investments in U.S. agriculture and real property, the surveys gather information from U.S. parent corporations and affiliates, and to a lesser extent from foreign corporations doing business in this country, on employment levels, tax levies, salaries and compensation, and similar balance sheet statistics.

These surveys, along with other information from public and private sources, are used by both private parties and by entities developing Government policy. The latter includes the Investment Policy Advisory Committee, chaired by the USTR. The Committee provides policy advice and detailed information in direct investment insofar as it relates to international trade, including U.S. investment abroad and foreign investment in this country, the operations of multinational corporations, and agreements and treaties on investment and related disputes.

A more active participant in investment activity is the Overseas Private Investment Corp. (OPIC). Under the direction of its 15-member board, OPIC provides insurance, financing, or reinsurance for development projects (22 U.S.C. 2191, 2193). OPIC's insurance for eligible investors may cover up to 75 percent of the investment, though it can extend only 10 percent of its maximum contingent liability to any one investor (22 U.S.C. 2194). insurance may even cover the risk of civil strife in the developing country. Given the 75 percent limit, OPIC shares the investment risk with private insurance companies, financial institutions, persons, or groups of persons. Investors may insure, for periods up to 20 years (22 U.S.C. 2197), for possible expropriations of assets; losses because of war, revolution, or insurrection; inability to convert other currencies into dollars as needed; and other perils (22 U.S.C. 2194). OPIC's maximum contingent liability is set at \$7.5 billion in insurance and \$750 million in guaranties, with a 25 percent reserve requirement (22 U.S.C. 2195). Eligible investments include contributions of funds, patents, processes, or techniques; ownership shares; royalties, earnings, or profits; commodities or services; and project assets (22 U.S.C. 2198). In addition to these functions, OPIC can make some direct investments, run management and advisory or training programs, and undertake related activities.

In addition to U.S. involvement in the IMF and the World Bank, which are too complex to be discussed at length here, the United States is a member of the Inter-American Investment Corporation, under the auspices of the Inter-American Development Bank (22 U.S.C. 283aa et seq). The corporation, a relatively new body (Public Law 98-473 of 1984, 98 Stat. 1885), is governed by the Bretton Woods Agreement to the same extent as it applies under the IBRD and the IMF (22 U.S.C. 283cc). It would seem most likely that a portion of the corporation's activities would involve Mexico.

# Tax and export programs

U.S. taxation of Mexican corporations .-- Foreign corporations receiving income of any type from sources within the United States (whether or not such firms are connected with the United States) or deriving income from U.S. sources or in connection with the conduct of business within the United States (including from investments or the sale of real property) are subject to U.S. corporate income tax (see 26 U.S.C. 881 et seq). Foreign corporations doing business in this country may be eligible for deductions in the same fashion as U.S. corporations, although in many cases there must be a link between the deduction claimed and U.S. transactions. Although, as a rule, ineligible for certain credits, foreign corporations can choose to treat income from real property in the United States as ordinary income rather than as a capital gain (26 U.S.C. 882). Income from foreign registry ships or aircraft is not included in gross income for foreign firms (26 U.S.C. 883). Similar provisions impose income tax on nonresident alien individuals obtaining income from U.S. sources or carrying on investment or other commercial or financial activities in the United States (26 U.S.C. 871 et seq).

Under another provision, convention expenses relating to meetings held in Mexico may be eligible for deduction. 26 U.S.C. 274. Also, Mexican commuters to U.S. employment or self-employment are not subject to withholding for income tax purposes (26 U.S.C. 1441). Moreover, on the days they commute such Mexican workers are not considered to be "present in the United States" for purposes of the "substantial presence" test, one of two ways they may become subject to treatment as resident aliens for tax purposes (26 U.S.C. 7701). Finally, in relation to Federal excise taxes, the Secretary of the Treasury can, based on a bilateral agreement, waive the 225-mile provision (under which flights from a U.S. point to a point in Mexico beyond that limit) and treat all of Mexico as part of domestic travel, avoiding the international departure tax (26 U.S.C. 4262, 1982 U.S.C.C.A.N. 781).

However, this apparently ordinary tax scheme is not completely without pitfalls to a foreign corporation. It is subject to change in the event the President finds that U.S. citizens or corporations face discriminatory tax treatment by a foreign government (26 U.S.C. 891-892). When such discrimination is not eliminated or another change acceptable to the United States is not made, the President may double the tax rate on the subject country's citizens or corporations in this country. Only income of foreign governments and international organizations is exempt from this potential penalty. In addition, Federal law explicitly allows States to tax foreign banks operating therein under regulations issued by the Federal Reserve Board (12 U.S.C. 611a et seq. (the Edge Act)). As an added problem, other Federal measures regulating businesses, such as banking acts (see 12 U.S.C. 1841), apply to foreign firms as well. Mexico is not a qualified country for purposes of the Foreign Sales Corporation program, under which certain corporations are eligible for exclusion from income of foreign trade income (from non-U.S. sources), so no such treatment can be afforded to Mexican corporations. 1/ Finally, on top of the Federal income tax, many States maintain tax systems that include in the calculation of gross income all

<sup>1/</sup> See IRS Regulations sec. 7701.

revenues or other income received by a firm, regardless of the situs of the source (the so-called unitary tax schemes, potentially subject to review under the GATT).

Export trading corporations and trade associations.--Certain firms conducting export operations that do not restrain trade or otherwise distort conditions of competition may on application to the Secretary of Commerce be designated as export trading companies and receive a certificate of review to that effect. 1/ Such a certificate insulates the recipient company from civil and criminal antitrust actions and makes it subject to special restraint of trade procedures, both beneficial from an operational standpoint. Although the program is not apparently designed to benefit any particular country and has no U.S. geographic limitations, firms exporting to Mexico can qualify under the act.

Export control.--Mexico is included in country group T for purposes of export licensing along with most Central and South American countries and Greenland (15 CFR 370 Supp. No. 1.) Accordingly, in most cases, the Commodity Control List maintained by the Secretary of Commerce (15 C.F.R. 399) to regulate exports of many articles provides that a general license must be obtained before exportation. Such licenses are usually easier to obtain and are supplied after shorter periods of administrative review than validated licenses, needed for many national security, high-technology, or nuclear-related articles and for shipments to Communist countries (or countries where there is a high risk of transshipment to Communist countries).

By contrast, Canada is not included in any country group and few exports to Canada are in any way restricted or reviewed, except under special circumstances (such as short supply situations) where exports are limited under the Export Administration Act of 1979, as amended. (50App. U.S.C. 2401 et seq.) Since licenses need not be obtained, export operations can proceed more quickly. Such treatment, if afforded to Mexico, would facilitate exports to that country as well. In the alternative, a separate "country group" category could be established or differential and expedited procedures adopted with regard to license applications for exports to Mexico, or at least for some such proposals.

### State laws and programs

In general. -- The four border States, California, Arizona, New Mexico, and Texas, have enacted a wide range of statutes dealing with foreign corporations (those not established under the laws of a given State), taxation of such corporations and of individuals, trade and development, and cooperative measures. By far the greatest complexity and range of subject matter among those States' enactments is demonstrated by the laws of California. However, in all four cases few measures refer or apply to Mexico, or its citizens or corporations, to the exclusion of other foreign countries.

<sup>1/</sup> See Public Law 97-290 of Oct. 8, 1982, 96 Stat. 1233 et seq., 15 U.S.C. 4001 et seq.

The brief discussion set forth herein focuses on the application of State taxation to foreign persons, the creation of regional planning authorities, and the promotion of trade and other activities. The provisions of these State statutes are generally similar in their treatment of these matters with the exception of corporate income taxation in California.

Texas measures.--Under article 8 of the Texas Constitution, there can be no State ad valorem taxation for general revenue purposes--thus no income taxes. Only property, occupation, excise, and similar taxes are imposed. Foreign corporations, like domestic ones, therefore pay no corporate income tax but must obtain a certificate of authority to do business in Texas (TEX. REV. CIV. STAT. ANN. art. 1396-8.01 (Vernon)).

As part of a statewide program, Texas law provides for the establishment of regional planning commissions. These entities deal with such matters as health, safety, welfare, transportation, utilities, growth, the needs of agriculture and business, historic preservation, and the efficient and economical use of public funds (TEX. REV. CIV. STAT. ANN. art. 1011m (Vernon)). These commissions may comprise two or more local government authorities along with surrounding areas, and they are to make plans and recommendations to aid such local authorities with long-range development activities. In addition, the commissions can participate with Mexican agencies in studies for purposes of planning in border areas.

New Mexico provisions.--As in Texas, foreign corporations doing business in New Mexico must obtain a certificate of authority before doing business in that State. (N.M. STAT. ANN. sec. 53-17-1.) Such corporations are subject to the application of New Mexico's corporation laws. (N.M. STAT. ANN. sec. 53-17-19.) Income derived by these corporations from business activities in or from sources within New Mexico is subject to income taxation by the State (N.M. STAT. ANN. sec. 7-2A-3), as is such income derived by nonresident individuals (N.M. STAT. ANN. sec. 7-2-3).

The New Mexico Border Act (N.M. STAT. ANN. secs. 12-13-1 to 12-13-7) established the New Mexico Border Commission in 1981, along with a border research institute at New Mexico State University. The Commission is directed to communicate with the Republic of Mexico and the State of Chihuahua on matters of cultural, artistic, economic, and industrial affairs; to communicate with the private sector in all three locations; to communicate with international commissions involved in border affairs; and to suggest legislation to help the area.

Arizona laws.--Foreign corporations wishing to do business in the State must first be admitted to do so (ARIZ. REV. STAT. ANN. sec. 10-106) and must file an annual report on their activities and condition (ARIZ. REV. STAT. ANN. sec. 10-126). Arizona imposes an income tax on each nonresident and each corporation with a business situs in the State; the tax applies to income the result of activity in or derived from sources in the State. (ARIZ. REV. STAT. ANN. secs. 43-301) [individuals] and 43-307 [corporations].

<u>California measures</u>.--The State has elaborate tax and corporation codes and, with its diverse economy and large export volume, pays considerable attention to export promotion. A primary and controversial difference in California's treatment of corporate income is its use of a unitary tax scheme,

so that taxes are imposed on income arising from activities in California or in interstate or foreign commerce--that is, income from all sources worldwide treated without distinction, even though a very small portion of a firm's total world income might be attributable to California activity (CAL. REV. AND TAX. CODE sec. 23040 (West)). Nonresident individuals are subject to income tax on gross income from California sources (CAL. REV. AND TAX. CODE secs. 17041(b), 17951 et seq.) and to withholding of tax (CAL. REV. AND TAX. CODE sec. 18806).

Various provisions exempt specified products or activities from California taxation. A foreign air carrier's aircraft, and aircraft owned by foreign governments or diplomats, are tax exempt (CAL. REV. AND TAX. CODE secs. 5303 and 5331.) Purchases of fuel for foreign air carriers for use in business (CAL. REV. AND TAX. CODE sec. 6385) and the cost of watercraft and their parts and repairs in foreign commerce (sec. 6368) are exempt from sales tax and gross receipts tax, respectively. Vehicles intended for foreign use and cargo containers in commerce are similarly exempt. (CAL. REV. AND TAX. CODE secs. 6388, 6388.5-.6.) Commercial aircraft and waterborne vessels are exempt from local sales and use tax ordinances. (CAL. REV. AND TAX. CODE secs. 7702-3.) As to tangible personal property, its purchase for export and delivery outside the United States makes it exempt from sales tax. (CAL. REV. AND TAX. CODE sec. 6387.)

As with the other border States, a foreign corporation must obtain a certificate of qualification before doing business in California. (CAL. CORP. CODE sec. 2105.) Such corporations are then subject to almost all State corporation laws. (CAL. CORP. CODE sec. 2115.) In the securities law area, only securities issued or guaranteed by a foreign government are exempt from California's securities qualification laws. (CAL. CORP. CODE secs. 25100(b), 25110.)

In the area of international trade, the State has enacted several promotional and regulatory devices. First, a California State World Trade Commission was created to encourage international trade, tourism, and development. (CAL. GOVT. CODE secs. 15364.1-.2.) The 15-member commission (10 of them public officials) serves as the state's official representative to foreign governments and is aided by a 20-member advisory council. (CAL. GOVT. CODE secs. 15364.2, -.6.) The Commission is to handle research, analysis, and coordination in the above areas; provide offices and funding for programs; aid and represent California businesses; recruit foreign capital investment and business; encourage travel and tourism; and suggest legislation. (CAL. GOVT. CODE sec. 15364.5.)

Within the Commission and under the California Export Finance Board is a California Export Finance Office, which works with Eximbank, the International Trade Administration of the Department of Commerce, the Foreign Credit Insurance Association, and other organizations to locate funding for export transactions. (CAL. GOVT. CODE secs. 15392.-.3.) The Office is to make contacts, provide information and technical aid, conduct seminars, and provide insurance, co-insurance, and loan guarantees under the Board's regulations. Thus, the Export Finance Board determines State financing policy, with loan guarantees limited to 70 percent of the total needed for the transaction, \$350,000, or 5 years in duration or the useful life of the product involved.

(CAL. GOVT. CODE secs. 15394.-.1, 15396.1.) The Board administers the Export Finance Fund, which receives State, Federal, and private moneys and investment income and which must maintain a 25 percent reserve requirement. (CAL. GOVT. CODE secs. 15395.-.5.)

Finally, under the Tourism Policy Act, a five-member California Tourism Commission is to create a tourism marketing plan (CAL. GOVT. CODE secs. 15364.50-.56; see sec. 15334), and overseas trade offices are being studied (CAL. GOVT. CODE secs. 15364.70 and .72).

# COOPERATIVE AND OTHER TRADE PROGRAMS: EXISTING AND PROPOSED

Various other trade programs and efforts at bilateral cooperation affect trade and development along the U.S.-Mexican border. This chapter decribes the existing trade and cooperative programs and provides a review of suggestions  $\underline{1}$ / for new programs to encourage trade between the United States and Mexico or to promote economic development along the border.

## Other trade programs

Federal and state sponsored trade laws and programs affect U.S.-Mexican trade. One additional measure 2/ permits U.S. citizens returning from Mexico to utilize their personal exemption from U.S. customs duties for articles acquired abroad without the 48-hour foreign stay required as to travel to other countries (TSUS item 813.30). This provision is of benefit to both short-term visitors and those workers crossing the border daily.

Like imports from other countries (both MFN and column 2), Mexico's imports into the United States may be eligible for entry under the other, not previously mentioned, special classification provisions in schedule 8 of the TSUS. Their scope ranges from articles not advanced or improved abroad to samples for soliciting orders to articles admitted temporarily free of duty under bond. The provisions cover articles imported by way of any U.S. customs port of entry, and none appears to benefit Mexico or the U.S.-Mexican border area in particular. In general, these provisions have not been as significant as TSUS items 806.30 and 807.00, with some exceptions.

<sup>1/</sup> The majority of the proposals were made in testimony to the Commission during the three public hearings held in cities along the U.S.-Mexican border or in written submissions. Additional suggestions were obtained from a review of the academic literature, prior public and private sector studies, and news articles.

<sup>2/</sup> Found in Customs regulation 19 CFR sec. 148.35(a).

## Cooperative programs

Water management and the International Boundary and Water
Commission.--Transborder water management by the United States and Mexico,
including allocations for water usage, began in an organized way in the early
1800's. In 1889, a bilateral pact, the Treaty on Boundary Waters: Rio Grande
and Rio Colorado (26 Stat. 1512, T.S. 232), was negotiated and entered into
force on December 24, 1890. This treaty went beyond previous, less detailed
agreements to deal over the long term with boundary changes caused by shifts
in these rivers, by means of an International Boundary Commission (IBC). That
Commission was given power to bind the two Governments as well as the
authority to control manmade works on the rivers. 1/ As the management of the
boundary waters became more complex and more development of the border region
occurred, it became clear that underground waters and other issues required
attention as well.

Accordingly, on February 3, 1944, a Treaty on Utilization of Waters of Colorado and Tijuana Rivers and of the Rio Grande (59 Stat. 1219, T.S. 994; entered into force Nov. 8, 1945) was signed. The treaty restructured the IBC into the International Boundary and Water Commission (IBWC), with jurisdiction over surface and certain underground waters of the border rivers and over coordinated actions in a delimited area for sewage, flood, salinity, pollution control, and hydroelectric power production. 2/ The Commission comprises six commissioners, three from each country, and engineering, legal, and support staffs; it functions as liaison, administrator, and adjudicator in a flexible way, bypassing most diplomatic channels and recommending generally technical solutions. Minutes of its meetings have the status of executive agreements rather than treaties, presenting opportunities for interpretation or legal challenges. 3/ Even the IBWC, however, cannot resolve all ground water problems, and additional agreements between the Governments may be needed.

The 1944 treaty deals only with the specified rivers and their waters along with surface works; it sets parameters for water allocation, and conservation and storage are goals. It affords jurisdiction to the IBWC not only over its contents but also over any U.S.-Mexican treaties relating to the boundary and its waters. Thus, the IBWC's annual joint report and minutes may not only provide useful information about past and current issues but also point to areas needing attention by the two Governments.

<sup>1/</sup> See Convention of Nov. 12, 1884 (Boundary Waters: Rio Grande and Rio Colorado), 24 Stat. 1011, T.S. 226; Treaty of Guadalupe Hidalgo of Feb. 2, 1848, 9 Stat. 922, T.S. 207; 22 U.S.C. 277-277f.

<sup>2/</sup> For a detailed discussion, see Mumme, The U.S.-Mexican Conflict over Transboundary Groundwaters: Some Institutional and Political Considerations, 12 CASE W. RES. J. INT'L. L. 505 (1980). 3/ Ibid.

One such area, though not one completely within the purview of the IBWC or the 1944 treaty, is the prevention and control of pollution. In addition to the cooperative arrangements established by the IBWC for the boundary waters, the United States and Mexico have reached formal and informal agreement on dealing with pollution in larger areas. One such agreement is the Agreement of Cooperation Between the United States of America and the United Mexican States Regarding Pollution of the Marine Environment by Discharges of Hydrocarbons and Other Hazardous Substances of July 24, 1980. The agreement stated that the two Governments would create a joint contingency plan for remedying discharges of hydrocarbons (petroleum) and other dangerous substances in that area of the sea, with its adjoining shore, within 200 nautical miles of a specified base line. Various annexes set forth technical details for such a plan, which would only become effective following consensus of the Governments. This 5-year accord was negotiated in light of the operations of and discharges by Petroleos Mexicanos (PEMEX) in the Gulf of Mexico, as well as other oil spills.

State and local programs. -- Cooperative relations between the four border States and Mexico are handled in a variety of ways, among them are the four "bilateral" Good Neighbor Commissions and various local bureaus and offices. The local entities are especially notable given the high degree of interdependence and communication between the transborder cities, from the Texas gulf coast to California. 1/ They comprise urban and regional planning and development bodies, transborder business and study groups, and other public and private sector entities that develop and/or advocate policy changes. City and county governments in the United States usually maintain contact with their Mexican counterparts, since specific problems (mentioned below) may require regular attention; the burden of dealing with some of these issues often falls on the wealthier or better equipped U.S. Government subdivisions. In addition, universities and other organizations have conducted studies dealing with border area issues and trends. Finally, merchants and other individuals are involved in transborder trade and the movement of people--more or less on a daily basis--as more citizens on each side shop and work in the other country.

Much of the need for localized and regional cooperation arises from the nature of the issues to be addressed. For example, environmental and health-related problems do not stop at the boundary line. Insects (such as fire ants and "killer bees") and communicable diseases, including those spread by viruses and mosquitoes, spread without regard to the artificial and invisible barrier. Similarly, issues related to police protection, education, health care, water and sewer facilities, and transportation require both short- and long-range planning on both sides of the national frontier.

<sup>1/</sup> For a detailed discussion, see note, City Growth and Cooperation Along the United States/Mexican Border, 10 GA. J. INT'L & COMP. L. 619 (1980).

Other cooperative programs. -- Many other U.S.-Mexican efforts at bilateral cooperation in a wide range of areas, not just relating to trade, may be cited. For the purposes of this report, they will be briefly noted along with available statutory citations:

- (a) The U.S. interstate highway system was directed to connect, to the greatest extent possible, "routes of continental importance" in Mexico and Canada (23 U.S.C. 103, part of the Federal-Aid Highway Act found at 23 U.S.C. 101 et seq.);
- (b) Cooperation between the U.S. Secretary of Agriculture and his Mexican counterpart on the elimination of insect pests to plants (7 U.S.C. 147a(b)) and of "killer bees" (7 U.S.C. 284);
- (c) Cooperation between the Secretary of Agriculture, by way of the Secretary of State, and his Mexican counterpart on the elimination of animal diseases (21 U.S.C. 114b);
- (d) Cooperation, under a 1935 bilateral treaty (Treaty on Assistance to and Salvage of Vessels, 49 Stat. 3359, T.S. 907), on dealing with ocean wrecks and salvage rights (46 U.S.C. 316);
- (e) Cooperation on U.S. citizens imprisoned in Mexico (22 U.S.C. 2291 note);
- (f) Special facilities for U.S. exports under programs of Eximbank (12 U.S.C. 635i-1);
- (g) Cooperation on the construction and operation of ocean ports (33 U.S.C. 1521);
- (h) Cooperation under various treaties on matters relating to migratory birds (16 U.S.C. 1531) and fisheries (16 U.S.C. 1823);
- (i) Cooperation and consultations on the Texas band of Kickapoo Indians (25 U.S.C. 1300b-16);
- (j) Cooperation on developing rubber production in the border area (7 U.S.C. 178e);
- (k) Negotiations to reach a bilateral accord on whale conservation and protection (16 U.S.C. 917);
- (1) Cooperation on international bridges (33 U.S.C. 535a);
- (m) Cooperation in matters of legislation and policy development under the Mexico-United States Interparliamentary Group, comprising 24 members of Congress and representatives of the Chamber of Deputies and the Chamber of Senators of the Mexican Congress and meeting jointly at least annually (22 U.S.C. 276i);

- (n) The promotion of freedom, security, economic development, friendship, progress, education, cooperation, and related goals through the Inter-American Foundation (22 U.S.C. 290f);
- (o) Operation of programs of the Inter-American Development Bank (22 U.S.C. 283), a multilateral effort at assisting Central and Latin American countries;
- (p) The granting and execution of development assistance, including support for cultural exchanges, private investment, trade, trade unions, and other matters (22 U.S.C. 1942; Foreign Assistance Act of 1961, Pub. L. 87-195, 75 Stat. 424, codified at 22 U.S.C. 2151 et seq.);
- (q) Cooperation the United States and all developing countries under the auspices of the Institute for Scientific and Technical Cooperation (22 U.S.C. 3501 et seq.);
- (r) Operation of the Southwest Regional Commission, which serves as liaison for the four border States and Mexico;
- (s) Cooperation under authority of the IBWC on management of the undersea coastal zone near the boundary rivers (16 U.S.C. 1456);
- (t) Exemption from quantitative ceilings of exports of Alaska natural gas to Mexico (15 U.S.C. 719j); and
- (u) Authority for the National Railroad Passenger Corp. to operate an intercity rail passenger service to Nuevo Laredo and other Mexican cities (45 U.S.C. 545(e)).

#### New Programs

It has been proposed that new programs be created to stimulate investment spending or to encourage the relocation of businesses to the border region. Generally, the proposals' principal incentives are to be provided either by the reduction of taxes or by the elimination of trade barriers for the products of firms that locate within the region or designated areas within the region. For instance, the concept of enterprise zones relies principally on the use of tax breaks as incentives, whereas the suggestion that a coproduction zone be established by the United States and Mexico contains both: taxes would be reduced and trade preferences provided for the products of U.S.-Mexican joint ventures located within the border region. 1/

<u>Productivity zones.</u>--According to this proposal,  $\underline{2}$ / businesses would have the option of investing in productivity zones, areas 15 miles in radius established on either side of the United States-Mexico border. The incentive

<sup>1</sup>/ During the hearings, there was confusion as to what constitutes a foreign-trade zone, a free-trade zone, a free-trade area, a coproduction zone, etc. A brief explanation of these terms is provided in app. F.

<sup>2/</sup> Gary D. Jacobs, "Time to Put Border Productivity Zone to Work," The Corpus Christi Caller-Times, Jan. 26, 1986.

for firms to locate in the zones, particularly on the U.S. side, is to be provided by a provision that permits firms in zones on the U.S. side to hire Mexican labor at either the prevailing market wage in Mexico or the Mexican minimum wage; the actual wage being the higher of the two. Firms would also be encouraged to make purchases of natural gas and electricity from Compania Federal de Electricidad (CFE) and PEMEX.

There would, however, be three restrictions on firms located on the U.S. side. First, they would be required to hire U.S. workers in fixed proportion to the number of Mexican laborers employed (i.e., for each 10 Mexican workers, one U.S. citizen would have to be employed). Second, the firms would have to ensure that Mexican workers have adequate working conditions. Third, firms would be required to pay an additional income tax that would be remitted to the Mexican Government.

According to a proponent of the productivity zone concept, the benefits of this proposal stem largely from a reduction in two types of costs: labor costs and the risk associated with offshore investment. By employing Mexican laborers at prevailing Mexican wages, U.S. firms could become more competitive without the exposure to political risks that are associated with offshore investment. The resulting investment on the U.S. side would then indirectly, as well as directly, create employment and income in the United States. Furthermore, the concentration of nonagricultural jobs in certain areas along the border would help stem the flow of illegal immigration into the United States. In summary, it is argued that the proposal would produce the following benefits: 1/

- Make U.S.-owned companies more competitive with the Far East. Bring production back to the United States and Mexico. Directly and indirectly create new U.S. jobs.
- 2. Transfer technology to Mexico, and allow Mexico to go through an orderly transition to a more open economy.
- 3. Allow Mexico to generate foreign exchange for debt repayment.
- Drastically reduce illegal immigration into the United States.
- 5. Save the U.S. auto industry and other U.S. industries seriously threatened by cheap production costs in the Far East.
- Restore U.S. confidence that Mexico is a desirable business and tourist area.

A critic of this proposal 2/ has argued that it would probably be ineffective, possibly doing more harm than good, particularly for U.S. workers in the Southwest. Rather than stemming the flow of illegal immigration, the

<sup>1</sup>/ Gary D. Jacobs, "Time to Put Border Productivity Zone to Work," The Corpus Christi Caller-Times, Jan. 26, 1986.

<sup>2/</sup> David C. Holiman, "Border Factory Zone Would Hurt U.S. Workers," The Corpus Christi Caller-Times, Jan. 26, 1986.

proposal would "at best" lead to the creation of a limited number of jobs that would only be a "stopgap measure," and illegal immigration would still continue. The proposal would instead increase profits for American business and "further undermine South Texas wage rates." The critic questions whether the United States can or should adopt any measure that would be at the expense of wages and jobs for U.S. workers.

Comment.--There are a number of legal, administrative, and economic issues raised by this proposal. First, legally, the suggestion that taxes be collected on firms located within the U.S. zones and then remitted by the U.S. Government to the Mexican Government is an unusual and certainly unprecedented measure. We are unaware of any instance in which one country (willingly) has collected taxes for another country. Second, the notion that Mexican workers should be paid the prevailing Mexican wage while employed in zones on the U.S. side may be controversial. Permitting the entry of Mexicans to work in the United States is, of course, not without controversy, but it has precedent in the Bracero Program. This provision is likely to generate opposition not only among labor groups, but also among individuals who feel that paying different wages to workers that are working side by side and performing the same task is unfair. Moreover, in time, it is likely to generate resentment among Mexican workers.

The third set of issues are economic: the effect on investment, wages and employment, land rents, and illegal immigration.  $\underline{1}$ /

The proposal will not attract additional U.S. investment into Mexico, since it does not offer firms any additional incentives to locate in Mexico. U.S. firms already have the option of locating in Mexico in order to have access to Mexican labor. Furthermore, if the transfer of technology to Mexico was to be effected through an increase in U.S. direct investment, then the zone proposal will also not increase the flow of technology to Mexico.

Depending on the size of the income tax and the required hiring ratio, the creation of the productivity zone could raise the level of investment in the border region. Without the additional tax or the required hiring ratio, the productivity zone proposal would unambiguously raise the level of investment. However, by raising the average cost of employing Mexican labor, the hiring restriction lessens the magnitude of increase in investment. As long as the cost of hiring the combined laborers remains below the initial cost, investment will rise in the U.S. productivity zones. In addition, the proposed profits tax raises the cost of capital to firms within the zone. A sufficiently high tax could eliminate the advantage provided by the lower labor costs. However, if the tax is sufficiently small, investment should increase in the border regions.

<sup>1</sup>/ Although difficult to predict, the number and location of zones will certainly have a bearing on the size of their economic effects.

The impact on the Southwest labor market for unskilled workers would be mixed. Certainly, without the hiring requirement, U.S. workers who compete for the same positions as Mexican laborers would lose employment and experience a decline in wages. The U.S. workers would then be induced to move into nonzone labor markets. However, with the hiring requirement, the impact is less clear: employment (and wages) of U.S. workers may rise or fall depending on the amount of new investment that is stimulated by the creation of the zone, the size of the wage differential between U.S. and Mexican workers, and on the responsiveness of firms in the zones to changes in the wage rate. A more likely outcome is that both employment and wages for U.S. workers will decline. Mexican laborers, on the other hand, are likely to benefit from this program with or without the hiring restriction. Their wages and income earning opportunities should increase.

Other beneficiaries of this proposal are likely to be property owners. Rents in the border area will be stimulated by firms seeking land on which to locate.

The final consideration is the impact of this proposal on migration--legal and illegal. Generally, one would expect that the creation of employment opportunities in the border region would lessen the flow of illegal immigration to the nonborder region of the United States. It is equally likely, however, that the creation of employment opportunities may increase the flow of undocumented workers by increasing participation rates among the existing labor force and increasing the flow of migrants from other areas of Mexico. Both factors may increase the potential pool of laborers at a faster rate than the creation of employment opportunities. 1/

Enterprise zones.--According to its proponents, enterprise zones are designed to provide income and employment to individuals by creating incentives for businesses, primarily small businesses, to locate within distressed areas. The package of incentives that include the elimination of Government regulatory burdens, as well as income and investment tax credits, are intended to counter the business risks associated with locating within depressed areas. Other incentives of the program are designed to encourage businesses to provide training for unskilled workers. Although the specific provisions vary from proposal to proposal, the incentives for businesses may include the following:

- The elimination of capital gains taxes on investments within the zone.
- An investment tax credit of 5% for zone personal property and 10% for new construction property.

<sup>1/</sup> See the analysis by Francisco L. Rivera-Batiz, "Can Border Industries Be a Substitute for Immigration?," American Economic Review, vol. 76, No. 2, May 1986, pp. 263-68.

- 3. An income credit for hiring disadvantaged workers equal to 50% of each worker's wage for three years, phasing out to 40%, 30%, 20%, and 10% over the following four years of employment. This credit has no cap which gives employers a major incentive to train and retrain disadvantaged workers for higher wage jobs.
- 4. An income credit for 10% of the enterprise's total zone payroll (or increase in payroll for existing businesses).
- 5. All of the unused tax credits earned in an enterprise zone may be carried forward for 15 years (or the life of the zone whichever is longer) or carried backward 3 years.
- 6. Small issue industrial development bonds (IDBs) will continue to be available within zones, and accelerated cost recovery for IDB financed property will be permitted, even if these tools are phased out in the rest of the country.
- 7. General regulatory relief incentives.
- 8. An employee of a zone business will receive a personal income tax credit for wages earned in the zone equal to 5% of the first \$10,500 in wages. 1/

Although the concept of enterprise zones was advocated earlier by others, it was President Reagan's interest in the idea that drew national attention to the concept. The President made reference to enterprise zones during his 1980 campaign and announced his commitment to the idea during his State of the Union Message in January 1982. That announcement was soon followed by a legislative proposal sent to Congress on March 23, 1982, that formalized his commitment to the concept. As of this writing, the President's proposal has not been acted upon by the Congress and, instead of the Federal Government, it is the States that have taken the lead in implementing the program. Nineteen states have passed enterprise zone legislation and there are approximately 450 zones in operation. 2/

Although enterprise zones have only been in operation a relatively short period, advocates argue that the zones have already been effective in stimulating investment and employment. In testimony provided at the public hearing, a proponent of the enterprise zone concept cited a recent study conducted for the U.S. Small Business Administration and the U.S. Department of Housing and Urban Development, which indicated that the zones "have

<sup>1/</sup> Marc Bendick, Jr., and David Rasmussen, "Enterprise Zones and Inner City Economic Revitalization," unpublished manuscript, The Urban Institute, Washington, DC, February 1984.

<sup>&</sup>lt;u>2</u>/ Dick Cowden, "Not Crying Uncle: States Are Taking the Initiative on Enterprise Zones," <u>Barron's National Business and Financial Weekly</u>, Sept. 23, 1985, pp. 24-26.

attracted over \$2 billion of new capital investment and have created or saved 60,000 jobs nationwide." 1/

Proponents also note that States and cities have found that the added payroll taxes, as well as the reduction in relief payments to those who without the existence of the enterprise zones would be unemployed, more than offset the reduction in revenues because of tax abatements. In testimony presented to the Commission, it was noted that an internal assessment conducted by the State of Louisiana found that \$1.51 was saved in unemployment benefits, or obtained in added sales tax revenues, for each dollar abated in the State's enterprise zones. 2/

Critics of the enterprise zone concept argue that the enterprise zones have little or no impact on the level of economic activity. 3/ Since an investment tax credit is valuable only if there is taxable income or profit, which is less likely during the first few years of a new firm's existence, the tax abatements provide no incentive for the creation of new firms and are of little value to struggling firms during the critical, early years. Instead, the tax incentives encourage firms to alter their location decision. Investments that would have occurred in other areas are made in the zone, and many investments that would have been made in or near the zones receive a windfall for doing what they would have done had there not been a program. As a result, city and State governments find that they are now confronted with a new level of competition for businesses and the jobs that they create. If

<sup>1/</sup> Transcript of the Commission hearing at p. 221. This estimate is similar to that made by the Sabre Foundation: "Taken together, states' enterprise zones have inspired up to 2 billion dollars in private investment, saving or creating at least 55,000 jobs, estimates the Sabre Foundation, a research organization in Washington, D.C." Cited in "Enterprise Zones: States Act as Washington Talks," U.S. News & World Report, Mar. 18, 1985, p. 70. However, there appear to be a number of versions of the HUD estimate. In Dick Cowden, "Not Crying Uncle: States Are Taking the Initiative on Enterprise Zones," Barron's National Business and Financial Weekly, Sept. 23, 1985, p. 24, HUD is said to have identified "about 50,000 jobs created and \$2 billion invested in state-designated zones since 1982." In addition, Lee L. Verstandig, former Underscretary of HUD, writing in "Zone Initiatives in the States," Enterprise Zone Notes, U.S. Department of Housing and Urban Development, September 1985, p. 1, states that the enterprise zones have created or saved over 75,000 jobs and have led to more than \$2.5 billion of capital investment.

Karin Richmond, President, Karin Richmond Associates, has indicated this recent study is Susan Jones, Allen Marshall, and Glen Weisbrod, "Business Impacts of State Enterprise Zones," prepared for U.S. Small Business Administration, Cambridge Systematics, Inc., Cambridge, Mass., September 1985.

 $<sup>\</sup>underline{2}/$  Transcript of the Commission hearing at p. 221. The results of the internal assessment were communicated privately to the individual testifying.

<sup>3/</sup> Statement by Marc Bendick, formally a senior researcher at the Urban Institute, a research organization in Washington, DC. Cited in "Enterprise Zones: States Act as Washington Talks," <u>U.S. News & World Report</u>, Mar. 18, 1985, p. 70.

they do not provide incentives, they stand to lose existing firms or discourage firms from investing in their area. But, if they do provide tax incentives, they lose part of the benefits that would have been obtained from an expanded tax base.  $\underline{1}/$ 

Taking what can be described as a middle position, researchers at the Urban Institute contend that the benefits of enterprise zones can be realized, but only by modifying the original concept. 2/ First, these researchers challenge the notion that Government regulations have been an important impediment to new business activity. They cite indirect evidence that supports their view based on empirical studies of the causes of the slowdown of productivity growth in the United States. Such studies have found that only a small percent of the reduction in productivity in recent years could be attributed to Government regulation. 3/ Furthermore, they question whether any substantive relief would be publicly acceptable. For instance, they find it inconceivable that the public would permit restaurant health codes to be lowered or building codes relaxed.

Second, like other critics of the use of tax incentives, the researchers are particularly critical of the ability of tax incentives to encourage the formation of new firms in an enterprise zone. They argue that the new activity in zones is more likely to be the consequence of the relocation of firms from other sites within the area. Their conclusions are based on a two-step characterization of the firm's location decision. In the first step of the location decision, businesses are primarily concerned about the availability of markets and the cost of material inputs and labor. these considerations that determine the choice between different metropolitan areas. In the next stage, once having selected an area, the firm chooses a specific site. It is at this point that tax incentives can have an important effect on the site that the firm selects since the major determining factors are equalized within the area. Moreover, since the tax incentives are greatest for those firms that would have chosen to locate in or near the area, it is highly possible that the enterprise zone proposal could induce a firm to relocate across the street from one block to another. 4/

Since deregulation is unlikely to be a major part of any enterprise zone project and because the use of tax incentives suffers from the shortcomings discussed above, these researchers propose that the concept be modified in a

<sup>1/</sup> Ibid.

<sup>2/</sup> Marc Bendick, Jr., David Rasmussen, and Larry Ledebur, "Enterprise Zones: A Land Banking Approach," A Statement before the Senate Minority Task Force on Economic Development, Legislature of the State of New York, Sept. 24, 1981; Marc Bendick, Jr., and David Rasmussen, "Enterprise Zones: Area Designation is a Key to the Job Creation Process," A Statement Submitted to the Subcommittee on Savings, Pensions, and Investment, Committee on Finance, United States Senate, Apr. 15 and 16, 1982; Marc Bendick, Jr., and David Rasmussen, "Enterprise Zones and Inner City Economic Revitalization," Unpublished manuscript, The Urban Institute, February 1984.

<sup>3/</sup> Ibid.

<sup>4/</sup> Marc Bendick, Jr., and David Rasmussen, op. cit., pp. 17-18.

number of ways. The authors argue that planners should not limit themselves to small businesses, but should also focus on attracting and fostering large-scale industrial and office developments outside of the residential areas. Larger firms are important because they provide a number of advantages that small businesses do not. For instance, the quality of employment is substantially greater: larger fringe benefits, opportunities for training, higher wages, and greater stability. In addition, larger firms are more likely to produce products that are exportable, as opposed to being dependent upon retail or service sales within the area. The latter is an obvious constraint on growth since the low levels of income that characterize depressed areas limit the market size.

As an indication of the type of modification that would be necessary for the enterprise zone concept to be effective, the authors cite the results of two types of studies that attempt to give an indication of the factors that are important in the firm's location decision. The authors first cite survey evidence that indicates that a firm's decision to locate or expand an existing plant is based on four considerations:  $\underline{1}/$ 

- 1. The <u>physical security</u> of the plant site, including absence of threat to personnel, plant and equipment, and goods;
- 2. Adequate space to construct a modern single-story plant and related storage and parking;
- Access to transportation modes, particularly railroads and highways; and
- 4. <u>Facilities within the site</u>, including water and sewage hookups, local roads, and other infrastructure.

They also cite a study conducted by researchers at the Urban Institute to determine the most cost effective way to assist industry. The study concluded that  $\underline{2}/$ 

offering developed plant sites was one of the most cost-effective ways for Government to support private industry. Such aid is much more attractive to firms, per dollar of cost to the Government, than, for example, worker training subsidies or local tax exemptions. This is because land is not a depreciable asset or expendable outlay, and therefore none of the benefits to the firms are offset by lower expenses or depreciation credits against the firm's Federal corporate income tax liabilities.

<sup>1/</sup> Marc Bendick, Jr., and David Rasmussen, "Enterprise Zones and Inner City Economic Revitalization," Unpublished Manuscript, The Urban Institute, February 1984, p. 23.

<sup>2/</sup> Marc Bendick, Jr., David Rasmussen, and Larry Ledebur, "Enterprise Zones: A Land Banking Approach," A Statement Before the Senate Minority Task Force on Economic Development, Legislature of the State of New York, Sept. 24, 1981, p. 5.

From this, these researchers conclude that the enterprise zone proposal should be modified to permit firms of all sizes to have an environment that is secure, have the capacity to expand, and have a well-developed infrastructure. This can be done by creating "secure, modern, large-scale, nonresidential in-city industrial and office parks which can compete by offering the same sorts of security, space and facilities found in suburban locations. And for inner-city residents seeking employment, government-financed training to equip them with occupational skills in demand by private firms seems to be the most direct and cost-effective approach." 1/

Comment.--As the preceding discussion illustrates, enterprise zones and the use of tax incentives to promote industrial development are controversial issues. However, it is generally agreed that tax incentives affect the investment and location decision of the firm. Those that argue that the location decision of the firm is not affected by tax incentives by describing the location decision of the firm as a two-stage process are incorporating within their analysis an implicit assumption as to the significance of tax incentives relative to other factors that affect the profitability of locating in specific regions. Or, they are basing their conclusion on the effect of modest tax incentives. Tax incentives, particularly if generous, can affect the location decision of firms.

Anecdotal as well as systematic studies support the conclusion that tax incentives can have an effect on the location decision of the firm. For instance, there have been serious arguments between various U.S. States and Canada over tax incentives to attract auto investments. Also, the U.S. Treasury has found it necessary to establish tax rules to apply to firms that locate production abroad for tax purposes. Furthermore, a study recently conducted for the World Bank on the movement of industry in response to investment incentives indicates that tax incentives are effective, particularly for international investment flows. 2/ Finally, despite data and methodological problems, a growing body of empirical evidence does support

<sup>1/</sup> Marc Bendick, Jr., and David Rasmussen, op. cit.

<sup>2/</sup> The study is reviewed in Stephen E. Guisinger, "Do Performance Requirements and Investment Incentives Work?," The World Economy, vol. 9, No. 1, March 1986, pp. 79-96.

the view that the location decision of a firm, particularly within metropolitan areas, is affected by tax differentials.  $\frac{1}{2}$ 

1/ There are many good survey articles that discuss the data and methodological weaknesses of most empirical studies on the effectiveness of tax incentives on a firm's location decision. These obstacles also pose serious constraints for studies that attempt to assess the effectiveness of enterprise zones. A recently completed study by the U.S. Department of Housing and Urban Development on enterprise zones has concluded:

Assessing the impact of zone designation is likely to remain an imprecise and highly subjective endeavor. Consequently, not all these impacts can be attributed to the State-designated enterprise zone programs.

- o Tracing the actual number of jobs created and retained from economic development programs is notoriously difficult.
- o State and local governments, on the whole, have not established requirements for comprehensive data collection on the impact of zone designation.
- o Even where information on new investment is available and interviews are conducted with officials of zone businesses, it is difficult to conclude reliably how much of the investment occurred directly as a result of the zone incentives.
- o Reliable information on previous investment patterns in the zones is rarely available.

See State-Designated Enterprise Zones: Ten Case Studies, Office of Program Analysis and Evaluation, Office of the Assistant Secretary for Community Planning and Development, U.S. Department of Housing and Urban Development, July 1986. A summary of the findings of this study can be found in National Council for Urban Economic Development, "Enterprise Zone Benefit Goes Beyond Incentives, HUD Finds, " Economic Developments, Vol. 11, No. 14, Aug. 15, 1985. 2/ See Gerald Carlino and Edwin S. Mills, "Do Public Policies Affect County Growth?" Business Review, Federal Reserve Bank of Philadelphia, July-August 1985, pp. 3-16; Michael Kieschnick, "Taxes and Growth: Business Incentives and Economic Development," in Michael Barker, editor, State Taxation Policy (Durham, NC: Duke Press Policy Studies, 1983), pp. 155-281; David Mulkey and B.L. Dillman, "Location Effects of State and Local Industrial Development Subsidies, Growth and Change, vol. 7, No. 2, April 1976, pp. 37-43; William Morgan and Merlin Hackbart, "An Analysis of State and Local Industrial Tax Exemption Programs," Southern Economic Journal, vol. 41, No. 2, October 1974, pp. 200-205; John Due, "Studies of State-Local Tax Influences on Location of Industry," National Tax Journal, vol. 14, No. 2, June 1961, pp. 163-173.; W. Warren McHone, "Supply-Side Considerations in the Location of Industry in Suburban Communities: Empirical Evidence from the Philadelphia SMSA," Land Economics, vol. 62, No. 1, February 1986, pp. 64-73; William Fox, "Fiscal Differentials and Industrial Location: Some Empirical Results," Urban Studies, vol. 18, 1981, pp. 105-111; Rodney Erickson and Michael Wasylenko, "Firm Relocation and Site Selection in Suburban Municipalities," Journal of Urban Economics, vol. 8, 1980, pp. 69-85; Michael Wasylenko, "Evidence of Fiscal Differentials and Intrametropolitan Firm Relocation," Land Economics, vol. 56, 1980, pp. 339-349; Ronald E. Grieson, William Hamovitch, Albert Levenson, and Richard Morgenstern, "The Effect of Business Taxation on the Location of Industry," Journal of Urban Economics, vol. 4, 1977, pp. 170-185.

All models of the location decision of the firm recognize that, in addition to taxes, a firm's choice of locations is influenced by the availability of raw materials and other factors of production, proximity to markets, and access to a reliable transportation system. When all these elements are available in varying amounts at each location, the firm makes tradeoffs. For instance, the lack of an ideal transportation system may be offset by a particular location's proximity to markets, the availability of factors of production such as labor, or by tax incentives. However, the value of making tradeoffs is limited if raw materials and labor are inaccessible, product markets are distant, and the transportation system is inadequate. In this case, no amount of tax incentives may make the investment profitable relative to investments elsewhere. Thus, the two-stage construct implicitly assumes that regions differ to such a degree in the availability of the other factors that tax incentives are unable to counter the benefits of locating in a particular region. However, in general, tax incentives when sufficiently generous are certain to affect the location of industry.

Consider the implications of the bill for the level and location of investment within the United States. The creation of the enterprise zones would stimulate investment in the zones located in the border region. Investment outside the zone may, however, decline because of the increased demand for capital and the revenue losses from the tax abatements granted firms locating within the enterprise zones. The increased demand for capital by firms in the enterprise zones would put upward pressure on the lost of capital in the United States and cause investments outside the zones to fall. 1/ The tax abatements would also require the Government to reduce expenditures, or to raise taxes. If the Government holds expenditures constant and raises taxes to compensate for revenue losses, the level of investment outside the enterprise zones would decline even further. The latter will depend directly on the generosity of the incentives and the responsiveness of firms to the incentives that the bill provides. The greater the increase in demand for capital and the greater the revenue losses because of the tax abatements, the larger the effect on the nonzone region of the United States.

Now consider the implications of the proposal on the labor market. As in the discussion of the earlier proposals, the implications for the labor market depend both upon the treatment of undocumented Mexican workers and on the investment generated by the bill. There are two possibilities. First, if, as is sometimes claimed, undocumented workers are free to enter the United States in search of employment and U.S. firms face no disincentives when hiring undocumented workers, there would be little additional increase in employment opportunities in the United States beyond those created by the increase in investment. That is, the employment incentives of the bill would have little effect on actual employment. The employment incentives would instead alter the distribution of existing employment: U.S. nationals would replace undocumented workers since the personal income tax credit on wages earned in the zone would increase the attractiveness of hiring U.S. nationals. In addition, the income of existing and newly hired employees would rise as a result of the tax abatement.

<sup>1</sup>/ Although the increase in the rate of interest may be small, it will be spread among all investors and the aggregate may be as large as the increase in investment in the enterprise zones.

The second case is, however, more likely: undocumented workers are confronted with some impediments to their free migration into the United States and U.S. firms do face disincentives when employing undocumented workers, i.e., possible disruptions in production because of raids by the Immigration and Naturalization Service, critical during a short harvest period, and with the passage of the immigration revision bill, fines for knowingly hiring undocumented workers. 1/ Under these conditions, the effect of the employment incentives provided by the enterprise zone proposal would depend on the sensitivity of U.S. firms' demand for labor to changes in the wage rate and on the responsiveness of U.S. workers to changes in the wage rate. Generally, U.S. laborers are likely to experience an increase in income and employment opportunities.

Finally, landowners within and contiguous to the zones would benefit: the demand for land by firms will increase rents. It is possible that an important part of the benefits of the enterprise zone proposal, will be capitalized in the value of land and claimed by landowners.

A final effect of the bill is the implications for economic efficiency. As structured, the bill may lead to an inefficient allocation of resources since firms within enterprise zones would be subsidized relative to those outside the zones. Specifically, firms in the enterprise zone are favored only because of their location.  $\underline{2}/$ 

An important provision of the enterprise zone proposal may be the incentives provided for the training of labor. There is anecdotal evidence consistent with the view that an educated, skilled labor force is attractive to business. Gene Rodriquez, a former San Antonio, TX, economic development director and founder of a firm that operates in San Antonio's center city, argues that the lack of a skilled labor force inhibits firms from locating in the center city. In addition, when retired Admiral Robert Inman selected Austin, TX, over San Antonio for the site of Microelectronics and Computer Technology Corp. (MCC), he is reported to have told San Antonio Mayor Henry Cisneros that "the city's 'superb presentation' had been undercut by the absence of a quality education system, at all levels, and a skilled labor pool." 3/ A recent study exploring the sources of economic growth among regions of the United States also found that education was important in promoting the growth of employment. 4/

<sup>1/</sup> The immigration revision bill also provides aditional funding for increased border enforcement.

<sup>2/</sup> Zoning regulations or rent controls, it is often claimed, are distortions that may cause an underinvestment in the area. If so, it is often argued among economists that a more effective policy would be to deal directly with the distortion rather than creating one to counterbalance an existing distortion

<sup>3/</sup> See David S. Broder, "San Antonio's Uneven Growth Reflected in Wider Income Gap," The Washington Post, Mar. 11, 1986.

<sup>4/</sup> Gerald Carlino and Edwin S. Mills, "Do Public Polices Affect County Growth?" Business Review, Federal Reserve Bank of Philadelphia, July-August 1985, pp. 3-16.

H.R. 3199, "United States-Mexico Border Revitalization Act".1/--According to its proponents, this bill is designed to stimulate economic growth and development along the United States-Mexico border. 2/ The bill also has the long-term objective of moving the United States and Mexico towards the creation of free trade between the two countries. 3/ The principal feature of the bill is the provision of trade and tax incentives to (U.S.-Mexican) joint ventures that locate in an area 200 miles along either side of the United States-Mexico border. Other provisions provide for the creation of a United States-Mexico Bilateral Commission, a Multilateral Commission on Immigration, and a United States-Mexico Joint Development Bank.

The bill requires that areas on either side of the United States-Mexico border be designated as zones. Firms that are located or locate within these areas and satisfy an equity-ownership restriction (discussed below) would be eligible for certain trade and tax incentives. For instance, eligible firms that locate in the Mexican Zone would be permitted to export their intermediate or final product to the United States duty free. 4/ The bill defines the United States (Mexican) Zone sector as--

that area of lands and waters within the United States (Mexico) the outer boundary of which is the entire international boundary between United States (Mexico) and Mexico and the inner boundary of which is a line drawn so that each point on it is 200 statute miles from the outer boundary.

To be able to use the trade and tax benefits provided by the bill, a firm must be an "eligible venture." This means a corporation, partnership, association, or other legal entity--

- i. that is organized or existing under the laws of the country in which it is located,
- ii. that is either located within, or carries out industrial or agricultural operations within that country's Zone Sector, and
- iii. in which individuals who are citizens or nationals of the country in which it is located own the controlling interest, but in which citizens or nationals of the other country own not less than 35 percent of the interest.

<sup>1</sup>/ This bill is also referred to as the "Coproduction Zone" bill, and as the "Richardson" bill, after its sponsor.

<sup>2/</sup> See Jesse Trevino, "Free-trade Zone Backed," <u>San Antonio Express-News</u>, Dec. 14, 1985. Albelardo L. Valdez, Testimony to the Commission, pp. 70-97.

<sup>3/</sup> A free-trade area is formed when countries agree to eliminate tariffs and other nontariff trade barriers among themselves, but maintain separate tariff schedules in trade with countries that are outside the free-trade area. During the hearings the coproduction zone proposal was often confused with a free-trade area limited to the border area.

<sup>4/</sup> To enter duty free, the Mexican intermediate input would have to be incorporated in the final product of an eligible firm located in the United States Zone. These and other requirements are discussed below in greater detail.

Thus, a firm must be a legal entity that is physically located in the areas designated as zones on either side of the border and in which not less than 35 percent of the equity is owned by citizens of the other country. The controlling interest, however, must be local.

The trade incentives that are provided to "eligible ventures" consist of granting duty-free treatment to two types of articles: component articles that are exported from one zone to another and used by an eligible enterprise to produce a final good, and final goods that are exported from the exporting country's zone sector.

An "eligible component article" is defined as an article--A. that is--

- grown, produced, or manufactured within a Zone Sector (hereafter referred to in this paragraph as the "Sector of origin") by an eligible venture of that Sector;
- ii. exported directly from the Sector of origin to the other Sector, and
- iii. after exportation under clause (ii) is used within the other Zone Sector by an eligible venture of that Zone Sector in the production or manufacture of a finished Sector article;
- B. with respect to which the sum of the cost or value of the materials grown, produced, or manufactured in, and the direct costs of processing operations performed in, the Sector of origin is not less than 50 percent of the appraised value of the article at the time of its customs entry into the other Zone Sector.

Thus, if an article qualifies as an "eligible component article," duties are exempted on the article when it is exported to the other country's zone sector and incorporated into a commodity that is produced by an eligible zone sector firm.

- A "finished sector article" is defined as an article--
- A. that is--
- i. produced or manufactured within a Zone Sector by an eligible venture of that Zone Sector,
- ii. contains or, is in part composed of, one or more eligible component articles of the other Zone sector, and
- iii. after such production or manufacture is completed, is either--
  - I. exported to a foreign country, or
  - II. introduced into the domestic commerce of the country (including the Zone Sector) in which that production or manufacture occurs; and

- B. with respect to which--
- i. the sum of the cost or value of materials grown, manufactured, or produced in, and the direct costs of processing operations in, that Zone Sector, and
- ii. the value of all eligible component articles incorporated therein, is not less than 50 percent of the wholesale value of the article.

"Finished sector articles" that are exported from the exporting country's zone sector to the customs territory of the other country are exempted on the portion of the costs and values of the article that are described in B-i and -ii above. Thus, no duties would be attached to any product that was composed of materials made entirely on either side of the border within the two zones.

In addition to the trade incentives, the second major incentive component of the bill is tax incentives. The tax incentives are described as follows:

- A. The elimination of capital gains taxes on investments within the Sector.
- B. An increase in the investment tax credit for both personal property and real property used in the operation of an eligible venture, including a 3 percent credit for 3-year property (as used within the meaning of 168(c)(2) of the Internal Revenue Code of 1954), a 5 percent credit for 5-year property (as defined in such section 168(c)(2)), and a 10 percent credit for real property that is reconstructed or constructed for purposes of such operation.
- C. The extension of loss carry forwards, in the cases of eligible ventures, to 25 years.
- D. An income tax credit for employees of eligible ventures equal to 5 percent of the first \$9,000 of wages earned.
- E. A tax credit for eligible ventures equal to 10 percent of any increases in their payrolls.
- F. A separate tax credit for eligible ventures that employ certain disadvantaged indviduals equal to 50 percent of the wages of such persons for the first three years of employment with percentage declines by 10 points in the fourth year and each year thereafter.
- G. The continued availability of tax-exempt bond financing within the Sector beyond the 1986 sunset date for small issue bonds.

As is clear from the diversity of the tax credits, the tax incentive component of the bill has multiple purposes: (i) to encourage investment, (ii) to increase the income of employees of eligible ventures, (iii) to encourage

firms to increase their employment of labor in general and the employment of "certain disadvantaged individuals" in particular, and (iv) to facilitate the availability of finance capital.

Comment. -- Of the proposals on which testimony was given at the hearings, this proposal is the most ambitious both in terms of the geographic area to be targeted and in terms of the potential cost of implementation. The proposal would provide trade and tax incentives for firms and individuals located within an area 200 miles on either side of the United States-Mexico border. Thus, the U.S. side of the zone would include major nonborder cities such as San Diego, Los Angeles, Tucson, Phoenix, Albuquerque, Austin, San Antonio, and Corpus Christi. Like the Enterprise Zone proposal (which is more modest in scope), the proposal's main instrument is the use of tax abatements as incentives. The proposal calls for the elimination of duties on products produced by eligible firms and traded between Mexico and the United States, and for these firms to receive tax credits on investments and increases in their payrolls. Individuals employed by the firms would also be eligible for income tax credits. However, unlike any other proposal, the eligibility criteria requires that a firm be a U.S.-Mexican joint venture with a minimum of 35 percent of the equity held by citizens of the host country. Thus, to be eligible, at least 35 percent of the equity of a U.S. firm must be held by Mexican citizens.

The following is a qualitative analysis of the implications of bill for the allocation of resources. Briefly, as intended by the authors, the bill would provide incentives to direct resources towards the border region. However, the bill might also have three unintended effects.

First, the bill may lead to a reduction in investment outside the 200 mile region. 1/Because of the expansiveness of the proposal in terms of the affected area, the increased demand for capital by this region may place upward pressure on the cost of capital, and, in turn, cause investment in other areas to decline. In addition, the Government (which is assumed to face a budget constraint) will be required to make up revenue losses by cutting expenditures or raising taxes outside the region. Either action might lead to a reduction of investment in the rest of the United States.

Second, the bill may lead to an inefficient allocation of resources. Since the tax abatements act as a subsidy to firms located within the 200 mile region, firms are rewarded and encouraged to expand on the basis of geographical location, as opposed to a criteria based on efficiency.

Third, it may facilitate and promote capital flight from Mexico to the United States. To be eligible for the bill's trade and tax incentives, U.S. firms located in the United States within the zone must sell at least 35 percent of their equity to Mexican citizens. To do so, the Mexican Government must relax its controls on capital outflows.

<sup>1/</sup> The terms "border region" and "nonborder region" are used to indicate the areas within and outside the 200 mile limit. This is a much broader definition than used throughout the rest of the report.

Consider the implications of the bill for the level and location of investment within the United States. Three provisions of the bill are designed to stimulate investment spending in the U.S. zone. Firms that locate within the zones are (1) eligible for tax credits for hiring labor, (2) granted duty-free access to the Mexican market for their product, and (3) can import duty-free inputs produced by eligible firms in the Mexican zone. 1/1 In the absence of any other factors, these provisions should cause investment to increase in the 200 mile U.S. zone.

Investment outside the zone may, however, decline because of the increased demand for capital and the revenue losses from the tax abatements granted firms in the U.S. zone. The increased demand for capital of firms in the U.S. zone will put upward pressure on the cost of capital in the United States and cause investments in the nonborder area of the United States to fall. However, total investment in the United States will rise. The tax abatements will also require the Government to reduce expenditures or to raise taxes. If the Government holds expenditures constant and raises taxes to compensate for revenue losses, the level of investment in the rest of the Nation will decline even further. The latter will depend directly on the generosity of the incentives and the responsiveness of firms to the incentives that the bill provides. The greater the increase in demand for capital and the greater the revenue losses due to the tax abatements, the larger the effect on the nonzone region of the United States.

The responsiveness of firms to the incentives may be tempered by the equity-sharing provision of the bill. U.S. firms may be unwilling to share their equity. 2/ The experience of U.S. firms abroad when required by foreign governments to share equity with local businessmen may be suggestive of what their reaction to this provision of the bill will be. 3/ In sharp contrast to foreign firms abroad, U.S. firms have exhibited a greater reluctance to share equity with foreigners and, in certain celebrated instances, have chosen to

<sup>1/</sup> There are many examples of market distortions: the existence of monopolies; externally set prices, interest rates and wages; externalities (effects on others not directly involved in production or consumption); etc.
2/ In testimony given to the Commission (p. 123), McAllen, Texas Mayor Othal

 $<sup>\</sup>underline{2}$ / In testimony given to the Commission (p. 123), McAllen, Texas Mayor Othal Brand made the following comment on the equity-provision of the bill:

I think they call that the Richardson Bill. Well, they had better come down here and have some hearings and get some input. If they think I'm going to sell 51 percent of my business to somebody in Mexico, or 49 percent, or they're going to sell it to me, they don't know what they're talking about.

<sup>3/</sup> A good discussion of equity-sharing laws in certain developing countries can be found in Richard Robinson, National Control of Foreign Business Entry, New York, Praeger Publishers, 1976. A detailed listing of the equity requirements by country can be found in "Investing, Licensing, and Trading Conditions Abroad," Business International.

withdraw from the country rather than be forced to share their equity with host country nationals. 1/ There is also some evidence, 2/ which indicates that equity-sharing laws imposed by developing countries on foreign investors (not only U.S. investors), may have had an inhibiting effect on the inflow of foreign investment. Thus, equity-sharing provisions may discourage U.S. firms from responding to the bill's incentives. 3/ As discussed in greater detail below, this provision may also discourage use of the advantages provided in the bill by U.S. firms investing in Mexico. Numerous authors have pointed out that the growth of the maquiladora plants along the border is attributable, to a large extent, to the relaxation of Mexico's strict foreign investment code.

There may also be other unintended consequences of the equity-sharing provision. It may encourage the outflow of Mexican capital to the United States. Although the nominal rate of interest in Mexico is presently higher than that in the United States, the risk-adjusted real rate of interest is probably lower given the need of the Mexican Government to impose capital controls to stem the outflow of capital. Thus, at the present time, the equity provision of the bill could become a vehicle for Mexican capital flight to the United States. 4/

<sup>1/</sup> See the discussion and references cited in C. Fred Bergsten, Thomas Horst, and Theodore H. Moran, American Multinationals and American Interests, Washington, DC, The Brookings Institution, 1978, pp. 354-400.

<sup>2/</sup> Much of this evidence is anecdotal and fragmentary, although it is consistent with several more systematic studies that have found that the existence of these laws is negatively correlated with investment flows into the country. See Robert Grosse, "Foreign Investment Regulation in the Andean Pact: The First Ten Years," <u>Inter-American Economic Affairs</u>, vol. 33, spring 1980, pp. 77-92; Jose A. Mendez, <u>A General Equilibrium Analysis of the Multinational Firm in a Less Developed Country</u>, Southern Methodist University, Dallas, Ph.D. dissertation, 1980; William A. Stoever, "LDC Governments: Takeovers and Renegotiations of Foreign Investments," <u>California Management Review</u>, vol. 22, winter 1979, pp. 5-14.

Nevertheless, there still remains a considerable degree of uncertainty as to the economic implications of the equity-sharing provisions. In addition to constraints imposed by the lack of data, this uncertainty is due to the limited theoretical treatment of these laws. To date, there are only two theoretical treatments of the economic effects of ownership restrictions; see Jose A. Mendez, <u>A General Equilibrium Analysis</u>, or John K. Hill and Jose A. Mendez, "The Allocative Effects of Equity Controls of Multinationals by Less Developed Countries," Working paper, Arizona State University, 1982, and Homi Katrak, "Multinational Firms' Global Strategies, Host Country Indigenisation of Ownership and Welfare," <u>Journal of Development Economics</u>, vol. 13, December 1983, pp. 331-348.

<sup>3/</sup> Foreign nationals are currently free to purchase equity in U.S. firms. In developing countries, it may be the case that the reluctance to sell equity by U.S. firms is due to the fact that the price of that equity is set by the government below what would be established by the market.

<sup>4</sup>/ This point was brought to the Commission's attention by Ms. Bernice Leyton, Vice President Greater San Diego Chamber of Commerce. See Commission testimony, San Diego, CA, p. 76.

The equity-sharing provision also creates incentives to change behavior in other ways. For instance, it raises the cost of financing equity relative to debt or other sources of capital, i.e., retained earnings. A firm can keep the total value of the capital that it uses constant, but reduce the value of its outstanding equity by repurchasing its own share of stock and issuing bonds or commercial paper. Once having reduced the value of the firm's equity, it can then divide that equity as required between Mexican and American ownership. By doing so, it will serve to reduce the dividend income that would accrue to a Mexican owner of 35 percent of the equity.

Consider the implications of the proposal for the labor market. As in the discussion of the earlier proposals, the labor market implications are dependent both upon the treatment of Mexican undocumented workers and on the investment generated by the bill. There are two possibilities. First, if as is sometimes claimed undocumented workers are free to enter the United States in search of employment and U.S. firms face no disincentives when hiring undocumented workers, then there would be little additional increase in employment opportunities beyond those created by the increase in investment. That is, the employment incentives of the bill would have little effect on the total number of job opportunities. The employment incentives would instead alter the distribution of existing employment: U.S. nationals would replace undocumented workers since the personal income tax credit for income earned if employed by eligible firms would make U.S. nationals more attractive to hire. In addition, the income of existing and newly hired employees would rise as a result of the tax abatement.

The second case is, however, more likely: undocumented workers are confronted with some impediments to their free migration into the United States and U.S. firms do face disincentives when employing undocumented workers, i.e., possible disruptions in production due to raids by the Immigration and Naturalization Service, critical during a short harvest period, and with the passage of the immigration revision bill, fines for knowingly hiring undocumented workers. 1/ Under these conditions, the effect of the employment incentives of the bill would depend on the sensitivity of U.S. firms' demand for labor to changes in the wage rate and on the responsiveness of U.S. workers to changes in the wage rate. Generally, U.S. workers are likely to experience an increase in income and employment opportunities.

As in the discussion of the productivity zone proposal, landowners within the 200 mile area will benefit. As firms expand, the demand for land by firms will increase. Rents on productive land will rise as firms are forced to use less productive, marginal land. Again, it is possible that an important part of the benefits will be capitalized in the value of land and claimed by landowners.

A final effect of the bill is the implications for economic efficiency. As structured, the bill may lead to an inefficient allocation of resources since firms in the zone are subsidized relative to those outside the zone.

<sup>1</sup>/ The immigration revision bill also provides aditional funding for increased border enforcement.

Specifically, firms in the zone are favored only because of their geographical location. 1/

A brief discussion of the effects of the bill for Mexico is useful. The bill raises a number of important questions. First, what impact will a program that consists principally of tax abatements have on Mexico's efforts to resolve its present fiscal crisis? Second, a major objective of the bill is to encourage the inflow of capital, particularly U.S. capital, into the border region. It has already been noted that equity-sharing provisions serve to discourage foreign investors. Will this provision discourage the inflow of U.S. capital into the border area? Most observers argue that the relaxation of the equity requirements by Mexico have been instrumental in attracting U.S. investors to the border region. For example, in discussing the growth of inbond industries along the United States-Mexico border, Frank Meissner writes, 2/

The operation of the <u>maquila</u> [twin-plant] arrangement is facilitated by special legislation on both sides of the 2,000 mile long U.S.-Mexican border. Mexico removed barriers to entry for U.S. companies, and provisions were made to allow foreign enterprises to lease land along the border. By making the extension of leases virtually automatic, the Mexican government bypassed a constitutional prohibition against foreign ownership of land within 100 kilometers of its borders and coasts. Furthermore, regulations requiring that Mexican nationals share in ownership of any foreign plant were virtually waived, allowing foreign ownership of the <u>maquila</u> plants.

<sup>1/</sup> It is difficult to argue that the "Sunbelt" cities included within the 200 mile zone have suffered from underinvestment. Moreover, those that argue that there has been underinvestment along the border because of "informational" problems, i.e., lack of information about opportunities in the border region, ignore the fact that U.S. firms have been cognizant of opportunities to locate on the U.S. side of the border. During the conception of the maquiladora program, it was believed that twin plants would develop along the border. labor-intensive activities would occur on the Mexican side and the supervisory, managerial, and capital-intensive activities would occur on the U.S. side. U.S. firms, for instance, would make the components that would be assembled on the Mexican side. Yet, two decades after its inception, it is generally recognized that the U.S. counterpart of the twin plant did not materialize. U.S. firms did not find it economical to shift their managerial and capital-intensive portion to the U.S. side of the border. Instead, components that are assembled in Mexico are made by U.S. facilities located away from the border. For more details, see Joseph Grunwald, "The Assembly Industry in Mexico, "in Joseph Grunwald and Kenneth Flamm, The Global Factory: Foreign Assembly in International Trade, Washington, DC, The Brookings Institution, The latter is an excellent source on the maquiladora program.

Thus, it is unlikely that U.S. firms have lacked "information" about investment opportunites on the U.S. side, particularly since directly across the border U.S. investment was growing rapidly as envisioned by early proponents of the twin-plant concept.

<sup>2/</sup> Frank Meissner, "Mexican Border and Free Zone Areas: Implications for Development," Inter-American Development Bank, Reprint Series No. 148. Also published in <u>U.S.-Latin American Trade Relations</u>, Issues and Concerns, Michael R. Czinkota, ed., Praeger, 1983.

Along similar lines, Joseph Grunwald has written, 1/

Subsequent Mexican legislation, decrees, and administrative regulations expanded the scope of the maquila, first, by exempting the maquiladora from the "Mexicanization" requirement of Mexican majority ownership, and second, by permitting the establishment of maquiladoras anywhere in the country, subject to approval by the authorities.

In addition, as in the discussion of the productivity zone proposal, the bill's incentive may intensify the problem of undocumented immigration by encouraging more Mexican citizens to migrate from the interior to the northern frontier. This migration, coupled with increasing participation rates among the existing labor force, may intensify pressures to migrate to the United States.  $\underline{2}/$ 

Finally, the proposal may intensify the infrastructure problems that currently plague border cities in Mexico. At the same time that the Government is to be asked to reduce taxes, greater demands will be placed on already overburdened roads, public utilities, schools, and other public services.

Increasing the number of FTZ's along the border.--During the hearings, it was proposed that the number of FTZ's along the border be increased as a way to stimulate trade between Mexico and the United States. It was argued that such zones would also generate benefits for border area communities.

Comment.--Several factors limit the number of additional foreign-trade zones that can be established in the United States-Mexico border area. Current law requires that they be situated in or adjacent to a customs port of entry. In addition, an official of the Foreign-Trade Zones Board stated that Board regulations allow a customs station, an outpost of a port of entry, to serve as a representative of the port in extending zone or subzone status. Fourteen border ports of entry do not have a zone or subzone. Three are located in Texas, one in New Mexico, and five each in Arizona and California. Virtually all of these ports in Texas, New Mexico, and Arizona are located in isolated rural areas with very small populations and none has a city of any size located across from it in Mexico. Since the zones in the border area exist primarily to facilitate cross-border trade, the absence of an adjacent large city in Mexico reduces the likelihood of new zones in these ports.

Of the five border ports of entry in California, San Diego and Calexico are the most promising. San Ysidro could have promise also. San Diego and San Ysidro are across the border from Tijuana, Mexico, and Calexico is across the border from Mexicali, Mexico. Both of these Mexican cities have large concentrations of maquiladora plants, which suggests that a large potential might exist for U.S. firms to take advantage of FTZ benefits in connection with their plant operations in Mexico. As noted earlier, San Diego is considering an application for a zone in the Otay Mesa area and an application for the El Centro-Imperial valley may be forthcoming in a year or two, presumably using Calexico as the port of entry.

<sup>1/</sup> Joseph Grunwald, "The Assembly Industry in Mexico," in Joseph Grunwald and Kenneth Flamm, The Global Factory: Foreign Assembly in International Trade, Washington, DC, The Brookings Institution, 1985.

<sup>2/</sup> See the discussion of immigration in productivity zone section.

Thus California has the greatest promise for expansion in growth of the number of zones. Experience in other zones along the border suggests that the success of any new zones and their contribution to economic activity and job creation will be dependent upon the prior existence of economic activity such as the existance of the maquiladoras and the utilization of the provisions of TSUS items 806.30 and 807.00. In that context, FTZ's can greatly facilitate economic activity and contribute to job creation as adjuncts to an overall economic development program.

# APPENDIX A

COPY OF LETTER TO CHAIRWOMAN PAULA STERN
FROM CHAIRMAN BOB PACKWOOD, COMMITTEE ON FINANCE, UNITED STATES SENATE,
REQUESTING AN INVESTIGATION

BOB PACKWOOD, OREGON, CHAIRMAN

BOB DOLE KANSAS
WILLIAM V ROTH JR. DELAWARE
JOHN C. DANFORTH MISSOUR
JOHN H. CHAFEE RHODE ISLAND
JOHN HEMAZ PENNSYLVAMIA
MALCOLM WALLOP WOMING
DAVID DURENBERGER. MINNESOTA
WILLIAM L. ARMSTRONG, COLORADO
STEVEN D. SYMMS IDAMO
CHARLES E. GRASSLEY, IOWA

RUSSELL B. LONG, LOUISIANA
LLOYD BENTSEN, TEXAS
SPARK M. MATSUNAGA. HAWAII
DANIO BORRIO, KILAHOMA
BILL SRADLEY. NEW JERSEY
GEORGE J. MITCHELL MAINE
DAVID PRYOR, ARKANSAS

WILLIAM DIEFENDERFER, CHIEF OF STAFF MICHAEL STERN, MINORITY STAFF DIRECTOR

United States Senatgue of USIIC

COMMITTEE ON FINANCE WASHINGTON, DC 20510

1091

Office of the Secretary

UJCKET RECKUR

85 NOY 25 Trade Commission A/

HOMAN

November 22, 1985

The Honorable Paula Stern Chairwoman U.S. International Trade Commission 701 "E" Street, N.W. Washington, D.C. 20436

Dear Madam Chairwoman:

This is to request an investigation, to be completed within 12 months, pursuant to section 332(g) of the Tariff Act of 1930 of conditions of competition along the United States border with Mexico. investigation should include:

- A complete report on the nature of trade a. benefits Mexico receives under current U.S. trade programs, including mostfavored-nation duty-free treatment; the Generalized System of Preferences; the U.S. Foreign Trade Zones Act; items 806.30 and 807 of the Tariff Schedules of the United States treatment; and other programs;
- b. A report on the value and volume of imports from Mexico that benefit from each program identified under (a) in the period 1975 to 1985 and the reasonably anticipated value and volume of such imports from 1985 to 1990;
- An investigation of the impact of U.S. c. imports from Mexico and U.S. exports to Mexico upon U.S. communities near the border;

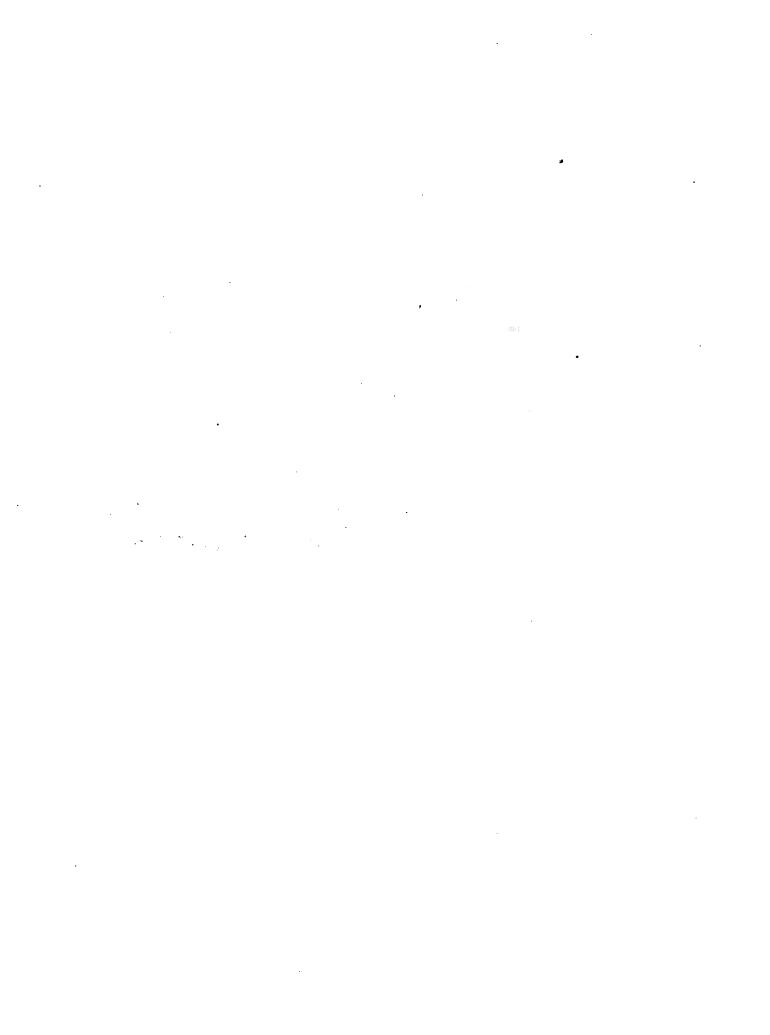
The Honorable Paula Stern November 22, 1985 Page Two

- d. A report of Mexican programs, including programs of States of Mexico, to encourage imports from the United States and to encourage industrial and other development along the border; and of U.S. programs, including programs of States of the United States, designed to encourage development along the border; and
- e. Possible cooperative programs to encourage development along the border, including industrialization and processing, through increased merchandise trade along the border.

Sincerely,

Bob Packwood Chairman

& Packwa



# APPENDIX B

NOTICE OF THE COMMISSION'S INVESTIGATIONS

imports from Korea and Taiwan of topof-the-stove stainless steel cooking ware, including skillets, fry pans, omelette pans, sauce pans, double boilers, stock pots, sauce pots, dutch ovens, casseroles, and other stainless steel vessels used primarily for cooking on stove top burners, except teakettles, provided for in item 653.94 of the Tariff Schedules of the United States, which are alleged to be sold in the United States at less than fair value. As provided in section 733(a), the Commission must complete preliminary antidumping investigations in 45 days. or in this case by March 7, 1986.

For further information concerning the conduct of these investigations and rules of general application, consult the Commission's rules of practice and procedure, part 207, subparts A and B (19 CFR part 207), and part 201, subparts A through E (19 CFR part 201).

EFFECTIVE DATE: January 21, 1986.

FOR FUTHER INFORMATION CONTACT: Valerie Newkirk (202–523–0165), Office of Investigations, U.S. International Trade Commission, 701 E Street NW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202–724–0002. Information may also be obtained via electronic mail by accessing the Office of Investigations' remote bulletin board system for personal computers at 202–523–0103.

#### SUPPLEMENTARY INFORMATION:

Background.—These investigations are being instituted in respose to a petition filed on January 21, 1986, by counsel on behalf of the Fair Trade Committee of the Cookware Manufacturers

Association, Walworth, Wisconsin.

Participation in the investigations.—Persons wishing to participate in the investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission's rules (19 CFR 201.11), not later than seven (7) days after publication of this notice in the Federal Register. Any entry of appearance filed after this date will be referred to the Chairwoman, who will determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Service list.—Pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d)), the Secretary will prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to these investigations upon the expiration of the period for filing entries of appearance. In accordance with §§ 201.16(c) and

207.3 of the rules (19 CFR 201.16(c) and 207.3), each document filed by a party to the investigations must be served on all other parties to the investigations (as identified by the service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate of service.

Conference.—The Commission's Director of Operations has schedule a conference in connection with these investigations for 9:30 a.m. on February 12, 1986, at the U.S. International Trade Commission Building, 701 E. Street NW., Washington, DC. Parties wishing to participate in the conference should contact Valerie Newkirk (202-523-0165) not later than February 10, 1986, to arrange for their appearance. Parties in support of the imposition of countervailing and/or antidumping duties in these investigations and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference.

Written submissions.—Any person may submit to the Commission on or before February 14, 1986, a written statement of information pertinent to the subject of the investigations, as provided in § 207.15 of the Commission's rules (19 CFR 207.15). A signed original and fourteen (14) copies of each submission must be filed with the Secretary to the Commission in accordance with § 201.8 of the rule\$ (19 CFR 201.8). All written submissions except for confidential business data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any business information for which confidential treatment is desired must be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform with the requirements of § 201.6 of the Commission's rules (19 CFR 201.6).

Authority: These investigations are being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.12 of the Commission's rules (19 CFR 207.12).

By order of the Commission. Issued: January 29, 1986

Kenneth R. Mason.

Secretary.

[FR Doc. 86–2563 Filed 2–5–86; 8:45 am] BILLING CODE 7020–02-M

[investigation 332-223 ]

Impact of Increased U.S.-Mexican Trade on Southwest-Border Development

**AGENCY:** United States International Trade Commission.

**ACTION:** Institution of investigation and scheduling of public hearings.

**FFECTIVE DATE:** January 23, 1986. **FOR FURTHER INFORMATION CONTACT:** Jose Mendez (202–523–8267), Research Devision, Office of Economics, U.S. International Trade Commission. Washington, DC 20436 (telephone 202–523–0075).

#### Background

The Commission instituted the investigation No. 332–223 under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)) following receipt on November 25, 1985 of a request therefor from the Committee on Finance of the United States Senate. Pursuant to the Committee's request, the Commission's study shall address the following topics:

(1) A complete report on the nature of trade benefits Mexico receives under current U.S. trade programs, including most-favored-nation duty-free treatment; the Generalized System of Preferences; the U.S. Foreign Trade Zones Act; items 806.30 and 807 of the Tariff Schedules of the United States treatment; and other programs.

(2) A report on the value and volume of imports from Mexico that benefit from each program identified under (1) in period 1975 to 1985 and the reasonably anticipated value and volume of such imports from 1985 to 1990.

(3) An investigation of the impact of U.S. imports from Mexico and U.S. exports to Mexico upon U.S. communities near the border.

- (4) A report of Mexican programs, including programs of States of Mexico. to encourage imports from the United States and to encourage industrial and other development along the border; and of U.S. programs, including programs of States of the United States, designed to encourage development along the border.
- (5) Possible cooperative programs to encourage development along the border, including industrialization and processing, through increased merchandise trade along the border.

#### **Public Hearings**

The Commission will hold two public hearings in connection with this investigation in McAllen, Texas on April 7, 1986 and El Paso, Texas on April 8, 1986. The location and times of these hearings shall be announced at a later date. All persons shall have the right to appear, by counsel or in person, to present information to be heard. Requests to appear at the public hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on March 24, 1986. All persons desiring to appear at the hearings and make oral presentations should file prehearing briefs. The deadline for filing prehearing briefs is March 26, 1986.

#### Written Submissions

In lieu of or in addition to appearances at the public hearings, interested persons are invited to submit written statements concerning the investigation. Commercial or financial information which a party desires the Commission to treat as confidential must be submitted on separate sheets of paper, each clearly marked 'Confidential Business Information" at the top. All submissions requesting confidential treatment must conform with the requirements of § 201.6 of the Commission's rules of practice and procedure (19 CFR 201.6). All written submissions, except for confidential business information, will be made available for inspection by interested persons. To be assured of consideration by the Commission, written statements should be received no later than March 24. 1986. All submissions should be addressed to the Secretary at the Commission's office in Washington, DC.

Posthearing briefs must be submitted not later than the close of business on April 21, 1986. A signed original and 14 true copies of each submission must be filed with the Secretary to the Commission in accordance with § 201.8 of the Commission's rules (19 CFR 201.8).

Hearing-impaired persons are advised that information on this matter can be obtained by contacting our TDD terminal on (202) 724-0002.

By order of the Commission.
Issued: January 28, 1986.
Kenneth R. Mason,
Secretary.
[FR Doc. 86-2562 Filed 2-5-86; 8:45 am]
BILLING CODE 7020-02-M

INTERSTATE COMMERCE
COMMISSION
[Ex Parte No. 388 (Sub-32)]
Intrastate Rail Rate Authority; Utah
AGENCY: Interstate Commerce
Commission.

**ACTION:** Assumption of Commission jurisdiction over Utah Intrastate Rail Transportation.

SUMMARY: Pursuant to a request from the Public Service Commission of Utah (PSUC), the Commission will assert jurisdiction over intrastate freight rates in Utah and vacate the provisional certification of PSCU.

EFFECTIVE DATE: March 7, 1986.

FOR FURTHER INFORMATION CONTACT: Louis E. Gitomer, (202) 275–7245.

SUPPLEMENTAL INFORMATION: In Ex Parte No. 388 (Sub-No. 32), Intrastate Rail Rate Authority-Utah (not printed), served October 10, 1984, the Commission extended the provisional certification, pursuant to 49 U.S.C. 11501, of Utah to allow the State time to make necessary statutory amendments, in conformance with Federal law; as set forth in that decision.

As requested by the Public Service Commission of Utah in a letter filed January 9, 1986, the Commission is vacating the provisional certification of the PSCU and assuming jurisdiction over Utah intrastate rail rates.

Rail carriers in Utah shall comply with Commission regulations including the filing of intrastate tariffs with the Commission. Parties that wish to continue litigating cases that were pending before PSCU shall so advise Deputy Director Louis E. Gitomer, Rail Section, Office of Proceedings. In the case of any remaining pending State section 229 cases, parties shall consult immediately with Chief Administrative Law Judge David Allard. In this way, we will develop, with the parties, appropriate steps in each case to transfer the records and establish procedural schedules.

This decision does not significantly affect either the quality of the human environment or conservation of energy resources.

Authority: 49 U.S.C. 11501.

Decided: January 30, 1986.

By the Commission, Chairman Gradison, Vice Chairman Simmons, Commissioners Sterrett, Andre, and Lamboley.

James H. Bayne, Secretary.

[FR Doc. 86-2603 Filed 2-5-86; 8:45 am]
BILLING CODE 7035-01-M

[Finance Docket No. 30757]

Norfolk and Western Railway Co. Trackage Rights Exemption; Consolidated Rail Corp.

Consolidated Rail Corporation has agreed to grant overhead trackage rights to Norfolk and Western Railway Company for a term of 5 years, over 4.3 miles of its line in Toledo, OH, between Milepost 287.9 and Rockwell Junction (Milepost 2.4) and Stanley (Milepost 4.0). The trackage rights were effective on December 16, 1985.

This notice is filed under 49 CFR 1180.2(d)(7). Petitions to revoke the exemption under 49 U.S.C. 10505(d) may be filed at any time. The filing of a petition to revoke will not stay the transaction.

Dated: January 31, 1986.

By the Commission, Jane E. Mackall, Director, Office of Proceedings.

James H. Bayne,...
Secretary.

[FR Doc. 86-2804 Filed 2-5-88; 8:45 am] BILLING CODE 7035-01-M

[Docket No. AB-33 (Sub-36X); AB-36 (Sub-22X)]

Union Pacific Railroad Co.—Exemption to Discontinue Operations in Salt Lake County, UT; Oregon Short Line Railroad Co.; Exemption; Abandonment in Salt Lake County, UT

**AGENCY:** Interstate Commerce Commission.

**ACTION:** Notice of Exemption.

SUMMARY: The Interstate Commerce Commission exempts from the prior approval requirements of 49 U.S.C. 10903 et seq., the discontinuance of operations by the Union Pacific Railroad Company and the abandonment by the Oregon Short Line Railroad Company of 1.66 miles of track in Salt Lake City, UT, subject to standard labor protective conditions.

DATES: This exemption shall be effective on March 7, 1986. Petitions to stay must be filed by February 21, 1986. Petitions for reconsideration must be filed by March 3, 1986.

ADDRESSES: Send pleadings referring to Docket No. AB-33 (Sub-No. 36X) and Docket No. AB-36 (Sub-No. 22X) to:

(1) Office of the Secretary, Case Control Branch, Interstate Commerce Commission, Washington, DC 20423

(2) Petitioners' representatives, Joseph D. Anthofer, Jeanna L. Regier, Union Pacific Railroad Company, 1416 Dodge Street, Omaha, NE 68179.

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# APPENDIX C CALENDAR OF PUBLIC HEARINGS

#### CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject : The Impact of Increased U.S.-Mexican

Trade on Southwest-Border Development

Inv. No. : 332-223

Date and time: April 7, 1986 - 9:00 a.m.

Sessions were held in connection with the investigation in the Conference Room, Sheraton Fairway Inn, South 10th Street at Wichita Avenue, McAllen. Texas

## Congressional appearances:

Honorable Lloyd Bentsen, United States Senator, State of Texas

Sol Marroquin - on behalf of Honorable E. (Kika) de la Garza, United States Representative, State of Texas

# State appearances:

Alex Marino, Border Economic Development Task Force

# County appearances:

Al Cisneros, General Manager and Port Director, Port of Brownsville, Navigation District of Cameron County, Texas

Floyd Buch, Consultant, Port of Corpus Christi Authority, Corpus Christi, Texas

#### City appearance:

McAllen Industrial Board (a joint venture of the City of McAllen and the McAllen Chamber of Commerce)

Frank Birkhead, Jr., Executive Vice President

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#### WITNESS AND ORGANIZATION

Asociacion Regional de Maquiladoras De Reynosa, A.C., Reyosa, TAM, Mexico

Randy Dobbs, Vice-President and Plant manager, General Electric Company Maguila Operation, Reynosa Mexico Industrial Park

Finely, Kumble, Wagner, Heine,
Underberg, Manley & Casey--Counsel
Washjington, D.C.
on behalf of

Proposal for the Establishment of U.S. Mexican Free Trade and Co-Production Zone

Albelardo L. Valdez--OF COUNSEL

Texas Commerce Bank, McAllen, Texas

James B. Bexley, Chairman & Chief Executive Officer

Griffin and Brand of McAllen, Inc., McAllan, Texas

Othal E. Brand, Chairman of the Board

Petroleos Mexicanos, Washington, D.C. on behalf of:

The Mexican Oil Company

Alfredo Guitierrez Kirchner, General Representative

Squire, Sanders & Dempsey--Counsel Washington, D.1C.
on behalf of

Valley Builders Supply Manufacturing Company, Inc.

Jon P. McCoy, President

William D. Kramer--OF COUNSEL

· - 3 -

### WITNESS AND ORGANIZATION

Mike's Man Shop, McAllen, Texas

Larry Fallek

Pan American University, Edinburg, Texas

Charles J. Ellard, Ph.D., Professor of Economics and Chairman

Pan American University, Edinburg, Texas

Gilbert Cardenas, Ph.D., Professor of Economics and Director

Pan American University, Edinburg, Texas

Dr. Micheal Patrick, Director of Entrepreneurship and economic Development

Karin Richmond Associates, McAllen, Texas

Karin Richmond, President

Laredo Morning Times, Laredo, Texas

Mike Herrera III, Publisher

The Texas Shrimp Association, Austin, Texas

Ralph Rayburn, Executive Director

Rio Grande Valley Trucking Coalition, Weslaco, Texas

and

Mexico-Texas Bridge Owners Association

S. F. Vale, Spokesman

# CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject : The Impact of Increased U.S.-Mexican

Trade on Southwest-Border Development

Inv. No. : 332-223

Date and time: April 8, 1986 - 9:00 a.m.

Sessions were held in connection with the investigation in the Conference Room, Sheraton Fairway Inn, South 10th Street at Witchita Avenue, McAllen, Texas

Honorable Othal E. Brand, Mayor, McAllen, Texas

O'Connor & Hannan--Counxel Washington, D.C.

on behalf of:

Sigberto R. Alarcon Marseille, Director General, Hules Mexicanos, S.A.

Francisco A. Bunt del P., Director Juridico, Grupo Tolteca

Dean Dearmont, President, Housemex, Inc.

Charles W. Garrison--OF COUNSEL

- 2 -

### WITNESS AND ORGANIZATION

Brownstein, Zeidman and Schomer--Counsel Washinton, D.C.

on behalf of

Grupo Industrial Interamericano, S.A. of Mexico City and Wallas Industries, Inc., Cleburne, Texas

Ron Istre, Wallas Industries, Inc.

Donald S. Stein)

--OF Counsel

David R. Amerine)

Brownstein, Zeidman and Schomer--Counsel Washington, D.C. on behalf of

The Camara Nacional de la Industria de Transformacion, de Nuevo Leon (CAINTRA)

Jesus Charles Arreazola

Jorge Fernandez

William Kane

David R. Amerine -- OF Counsel

North Texas State University, Denton, Texas

David J. Molina, Ph.D., Economics Department

Pike Enterprises, Inc., DBA McAllen Avaiation Center, McAllen International Airport, McAllen, Texas

H. M. Pike, President

#### CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject : The Impact of Increased U.S.-Mexican

Trade on southwest-Border Development

Inv. No. : 332-223

Date and time: April 8, 1986 - 10:00 a.m.

Sessions were held in connection with the investigation in the 4th floor auditorium, Texas Commerce Building, Main and Mesa, El Paso, Texas

# Congressional appearances:

Honorable Lloyd Bentsen, United States Senator, State of Texas

Honorable Ronald D. Coleman, United States Representative, State of Texas

#### City appearances:

Honorable Jonathan Rogers, Mayor, City of El Paso, Texas

#### County appearance:

Honorable Pat F. O'Rourke, County Judge, County of El Paso, Texas

### WITNESS AND ORGANIZATION

Honorable Edgardo Flores Rivas, Consul General de Mexico

Texas Commerce Bank, El Paso, Texas

Merriman, Morton, Chairman of the Board

Grupo Bernudez, E. Paso, Texas

William L. Mitchell, Director of Marketing

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# WITNESS AND ORGANIZATION

The University of Texas at El Paso, Texas

Dr. Richard Spinkle, Expert Witness on U.S.-Mexican Trade

Dilmus D. James, Professor Economics & Finance

# EL PASO FOREIGN TRADE ASSOCIATION

Rudolph Miles, Jr., President

Veronica Kastrin Callaghan, Member, Board of Directors

Donald A. Michie, Ph.D., Member, Board of Directors

# EL PASO CHAMBER OF COMMERCE

Donald Shuffstall, Co-Chairman, International Department

# WITNESS AND ORGANIZATION

- Dr. E. R. Stoddard, Borderlands Systems and Maquiladores
- Task Force on Border Economic Development for the State of Texas

  John K. Best, El Paso, Texas
- Amalgamated Clothing and Textile Workers Union, AFL-CIO, CLC, El Paso, Texas

Antonio Sanchez, Manager, ACTWU, El Paso Joint Board

Fashion Enterprises, El Paso, Texas

William Boyd

S. & J. Technologies Corporation, Alamogordo, New Mexico

Gerald Thiedt, President United Transportation Union, E. Paso, Texas

Lance E. Ruck, Local Chairman, Legislative Representative & Secretary

Southern Pacific Transportation Company, E. Paso, Texas

Robert A. Cushing, Jr., Chairman, T.P.S. Committee #1

J. M. Wylie, Co-Chairman, T.P.S. Committee #1

Jim Aziz, Co-Chairman, T.P.S. Committee #1

#### CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: : The Impact of Increased U.S.-Mexican

Trade on Southwest-Border Development

Inv. No. : 332-223

Date and time: April 10, 1986 - 10:00 a.m.

Sessions were held in connection with the investigation in the Board of Supervisors Room, County of San Diego Administration Building, 1600 Pacific Highwary, San Diego, California

#### State appearances:

Evonne Schultz, Field Representative, on behalf of Honorable Alan Cranston, United States Senator, State of California

State of California--Office of the Governor, Office of California/Mexico Affairs, San Diego, California

Phil Saenz, Director

Kathy Halladay, District Director, on behalf of Honorable Pete Wilson, United States Senator, State of California

#### City appearances:

City of Sanger, California

Honorable Elliott C. Martinez, City Council

City of Calexico, California

Honorable Arturo Rioseco, City Council

The City of San Diego, California

Honable Ed Struiksma, Deputy Mayor

City of San Diego, California

Dana M. Herbst, Director of the International Affairs board of the City of San Diego and First Vice President of the World Trade Association of San Diego

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#### WITNESS AND ORGANIZATION

### County appearances:

Honorable Susan Golding, Supervisor, Third District, San Diego County Board of Supervisors

Honorable Lewis M. Legaspi, Supervisor, First District, Imperial County Board of Supercisors

#### WITNESS AND ORGANIZATION

Chamber of Commerce, Calexico, California

Fred Knechel, Manager

Greater San Diego Chamber of Commerce, San Diego, California
Berniece Leyton, Vice President

California Farm Bureau Federation, Sacramento, California

Ann C. Burton, Program Director, Commodity Sercices Division

William F. Joffroy, Jr., President, William F. Joffroy Custom House Brokers, Inc.

Dr. Carl A. Nelson, D.B.A., Global Business Systems, Chula Vista, California

San Diego Economic Development Corporation, San Diego, California

Jane Signaigo-Cox, President

The American Dehydrated Onion & Garlic Association of California

George E. Clausen, President, Gilroy Food Inc.

Institute for Regional Studies of the Californias, San Diego State University, San Diego, California

Paul Ganster, Director

Norris Clement, Associate Director

James Platler, Research Associate

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# WITNESS AND ORGANIZATION

Western Growers Association

Ken Gillaland

Chris Dobken, Business Consultant, Tijuana, Mexico

American International Enterprises, Inc., San Diego, Californai

Roque DE La Fuente II, President

#### APPENDIX D

DEFINING THE BORDER REGION

### Defining the Border Region

The 25 counties on the U.S. side of the border comprise the U.S. border region, and the 35 municipios that lie adjacent to the border on the Mexican side comprise the Mexican-border region. The definition adopted by this study is not intended to settle the issue of proper definition of the border region. The definition was chosen on the hypothesis that those areas immediately adjacent to the border are the ones most strongly influenced by its location. It is recognized that in analyzing the border across different disciplines, a broader or narrower definition may be appropriate.

Defining the border region is important, since a particular analysis may reach different conclusions depending on the definition adopted. For example, in assessing the level of economic development, different conclusions may be reached if Los Angeles, Phoenix, and San Antonio are included in the definition of the border region as opposed to considering only those cities immediately adjacent to the border. 1/ Nowotny and Peach have commented on the problems associated with obtaining a proper definition of the region: 2/

Discussions in the literature focus on the homogeneous character of a region but this leaves a lot of room for argument as to what exactly a region should include. Should the definition of a border region be based upon a notion of a common trade area? What about labor market mobility? If so, should Chicago be included as a border city? Should we try to find a definition which would apply to border areas generally, or just to the U.S.-Mexico border area?

This appendix examines three previously employed definitions of the U.S.-border region.

The Southwest Border Regional Commission (SBRC) was established in 1976 at the request of the governors of California, Arizona, New Mexico, and Texas. The SBRC was concerned with problems stemming from underdevelopment within the region. 3/ Whereas the SBRC was not in existence long enough to have a significant effect on the development of the border region--it was

<sup>1/</sup> For further discussion of this issue, see Kenneth Nowotny and James Peach, "The Economics of Border Areas," in <u>Teaching about International</u> <u>Boundaries</u>, Las Cruces, Joint Border Research Institute, October 1985.

<sup>2/</sup> Nowotny and Peach "The Economics of Border Areas."

<sup>3/</sup> Niles Hansen, The Border Economy: Regional Development in the Southwest, Austin. University of Texas Press, 1981. The commission was patterned after other regional commissions established under the Public Works and Economic Development Act (PWEDA) of 1965. These regional commissions and the Economic Development Administration were created to propose and implement programs that would attempt to alleviate the high levels of unemployment and low per capita income of these regions.

dismantled in 1981--it, nonetheless, focused attention on approaching the problems of the area on a regional basis. In total, the SBRC consisted of three counties in California, four counties in Arizona, five counties in New Mexico, and 48 counties in Texas. 1/

In 1968, the Economic Development Administration (EDA) prepared a study that outlined strategies for developing the border.  $\underline{2}/$  The EDA defined the border region as consisting of 25 counties. With the exception of Grant County, New Mexico, all the counties touched the border. The EDA further divided the area into 10 subregions. The subregions were defined in terms of a county or group of counties that had developed "traditional economic and social relationships" and, were centered around a town or city economically dominate in the subregion. These 10 subregions are depicted in figure D-1.  $\underline{3}/$ 

A similar definiton was made by Hansen based on the 1977 Bureau of Economic Analysis (BEA) functional economic areas. 4/ The border region was defined as the five (BEA) functional economic areas of San Diego, Tucson, El Paso, San Antonio, and Brownsville. The functional economic area is a concept of regional economics that defines spatial units on the basis of journey-to-work patterns. The functional economic area is constructed around a core city or region where a large share of the region's employment occurs. The outer boundary for the area is determined by journey-to-work flows from the outlying areas to the core city.

These definitions emphasize two factors about the border region: First, the border region is not a single, homogeneous area, but rather a group of subregions, each with a distinct economy and set of economic issues. Second, although counties, cities, or regions may not be adjacent to the border, they can nonetheless be a part of the border in an economic sense.

<u>l</u>/ Hansen, <u>ibid</u>.

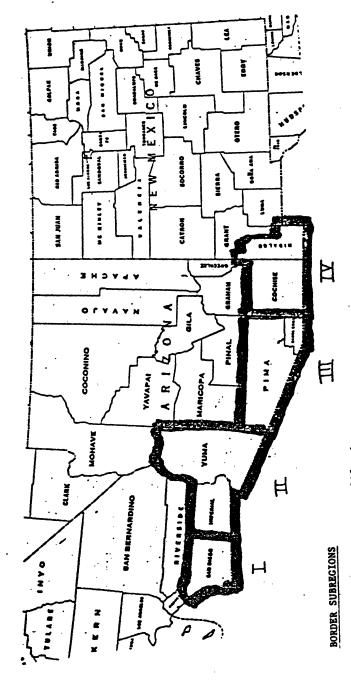
- San Diego County, California.
- II. Imperial County California; Yuma County, Arizona.
- III. Pima and Santa Cruz Counties, Arizona.
- IV. Cochise County, Arizona; Hidalgo County, New Mexico
- V. Grant and Luna Counties, New Mexico
- VI. Dona Ana County, New Mexico; El Paso, County, Texas.
- VII. Hudspeth, Culberson, Jeff Davis, Presidio, Brewster, and Terrell Counties, Texas.
- VIII. 'Val Verde, Kinney, and Maverick Counties, Texas.
  - IX. Webb and Zapata Counties, Texas.
  - X. Starr, Hidalgo, and Cameron Counties, Texas.

<sup>2/</sup> Economic Development Administration, <u>Industrial and Employment Potential</u> of the United States-Mexico Border, 1968.

<sup>3/</sup> These 10 subregions were--

<sup>4/</sup> Hansen, op. cit.

Figure D-1.--U.S. border subregions



I: San Diego County, California

- II: Imperial County, California; Yuma County, Arizona
- III: Pims and Santa Cruz Counties, Arizona
- IV: Gochise Gounty, Arizona; Hidalgo County, New Mexico

Source: Prepared from U.S. Geological Survey. The National Atlas, 1970.

Figure D-1.--U.S. border subregions--Continued

Commission and Luna Counties, New Mexico

Will Walte, Kinney, and Maverick Counties, Texas

X: Starr, Hidalgo, and Cameron Counties, Texas

Source: Prepared from U.S. Geological Survey, The National Atlaa, 1970.

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# APPENDIX E

ECONOMIC AND DEMOGRAPHIC DATA FOR THE BORDER REGION

#### Description of the Border Regions

Although areas on both sides of the border share a common history 1/ and often have a common set of problems resulting from their proximity to each other, the border region is not a single homogeneous area. As discussed in Appendix D, the border region consists of a group of distinct subregions. The first part of this appendix briefly outlines the common economic history of the border region. It highlights the development of the twin-city complexes that dominate the region's economic activity. The second part of this appendix describes both sides of the border region in terms of their economic and demographic characteristics. Not only does it illustrate that the two regions on either side of the border are diverse, but also that the U.S. border region is itself a diverse area that differs dramatically from one coast to the other.

#### Economic history

The economic history of the border region can be divided into two time periods. The first period, from the mid-1800's to the 1940's, was characterized by the establishment of communities on the north-south transportation routes that crossed the border. The second period, from the 1940's to the present, was characterized by industrialization and rapid population increases.

The nature and type of economic development that took place during the first period resulted from (1) the existence of the border, necessitating facilities to process the flow of goods and persons between the United States and Mexico; (2) the isolation of the border regions from the rest of their respective countries; and (3) the relative scarcity of resources. 2/

Twin cities were established during this period that became the hubs of economic activity for their respective subregions. These communities were along existing north-south transportation routes and serviced the cross-border flow of people and goods. The integration of twin cities was also encouraged by the region's relative isolation.

<sup>1/</sup> The present border between the United States and Mexico is the result of the Guadalupe Hidalgo (1848) and Gadsden (1853) Treaties. Prior to this, the area which now composes much of the Southwest United States (i.e., the states of California, Arizona, Colorado, New Mexico, and Texas) was first part of colonial New Spain and then the Republic of Mexico. Between 1836 and 1853, the United States acquired these territories from Mexico as a result of the Texas Revolution (1836), the United States-Mexico War (1845), and the Gadsden Purchase (1853).

<sup>2/</sup> Jerry R. Ladman, "The U.S. Border Regional Economy," edited by Stanley Ross in <u>Views Across the Border</u>, Albuquerque: University of New Mexico Press, 1985.

In some parts of the border region, agriculture, ranching, or mining complemented the cross-border economic activity of the twin cities. Later, communities were established at other border region sites where the dominant economic activity centered on natural resource endowments. This was particularly important where public programs developed irrigation districts along the Colorado and Rio Grande Rivers.

During this period, the manufacturing sector and the overall level of industrialization remained at a low level. The natural resources that were exported outside the region did not require much processing, and the small size of the population did not generate a large enough market to support a manufacturing base. It was more economical to import consumer and capitals goods despite the transportation costs involved. The trade pattern that evolved was one where goods derived from the region's natural resources (mining, ranching, and irrigation farming) were exported and manufactured products were imported. The income earned from the export of services and the servicing of border trade also financed part of imports of manufactured goods.

Since the border region's isolation and small populatin did not provide incentives for large industrialization, manufacturing was relatively unimportant to the region's economic development during this period. Nonetheless, it was during this period that much of the infrastructure for future industrialization was introduced. In particular, the major transportation and communication routes which ended the region's isolation were established during this period. But perhaps of more importance with respect to building infrastructure were the aformentioned public programs which developed irrigation districts. In addition to stimulating agricultural growth in many areas, the programs developed the water supplies (by diverting rivers and building dams) necessary to sustain large populations and industrialization 1/

Until the 1940's, the border region was generally characterized by small populations and low levels of economic development. This stemmed from the isolation of the area from the centers of economic activity in the Southwest and Mexico and, in most instances, from the scarcity of natural resources. Although cross-border activity and natural resource endowments had encouraged the development of the individual subregions, the border region remained remote and, for the most part, economically unimportant in the overall economies of the United States and Mexico. 2/

However, during the 1940's, rapid urbanization of the border region occurred. Large increases in population were observed on both sides of the border. Even though the population growth rates during this period were high for the entire region, the largest concentrations of population were limited to the following three areas: San Diego, El Paso, and the Lower Rio Grande Valley.

<sup>1</sup>/ Jerry R. Ladman, "The U.S. Border Regional Economy." Niles Hansen, The Border Economy.

<sup>2/</sup> Jerry R. Ladman, "The U.S. Border Regional Economy."

The rapid urbanization on the U.S. side of the border coincided with the development of economically important industries in each of the U.S. subregions. During this period, agri-industry based on produce and citrus expanded in southern California and southeastern Texas. Manufacturing became especially important to San Diego. Military installations located in San Diego and El Paso during World Wars I and II were expanded and continued operation into the postwar years. In addition, tourism became an important industry, especially during winter months when midwesterners ("snowbirds") came south.  $\underline{1}/$ 

Simultaneously, significant migration occurred from the interior of Mexico to the Mexican border region. These migrants were attracted both by the economic opportunities and higher incomes of the northern Mexico border region and by the possibility of employment in the United States.

The Mexican Government also initiated a series of policies to promote the economic development of the border area.  $\underline{2}$ / The purpose of these programs was to improve the regional infrastructure, develop the region's cultural and tourist sites, and provide incentives for the urbanization of the border region.  $\underline{3}$ /

## Demographic and economic description of the region

The demographic description presented below covers both sides of the border and concentrates on population, age, income, and poverty characteristics. Since economic data for Mexican municipios 4/ along the border region are nonexistent, the economic description of the region covers U.S. counties of the border region only. 5/

<u>Demographic profile</u>.--The border regions of Mexico and the United States are demographically distinct from their respective countries overall. The rate of urbanization and population growth in the region between 1950 and 1980 exceeded the national average in Mexico and the United States. Part of the

<sup>1/</sup> Jerry R. Ladman, "The U.S. Border Regional Economy."

<sup>2/</sup> The programs were: (1) the National Border Program (PRONAF), (2) the Border Industrialization Program (BIP), and (3) the <u>articulos gancho</u> program. See section on "Mexican Programs" for a more extensive discussion.

<sup>3/</sup> Ladman, Economic Growth and U.S. Industrial Strategies in the U.S.-Mexico Border Region, Arizona State University, Tempe, 1985.

<sup>4</sup>/ Geographically, Mexican municipios are closer to U.S. counties than to U.S. cities.

<sup>5/</sup> The sources for these data were the 1970 and 1980 Census of the Population, the County and City Data Book 1983, and James Peach, Demographic and Economic Change in Mexico's Northern Frontier: Evidence from the X Censo General de Poblacion y Vivienda, New Mexico State University, November 1984. In addition, unemployment data were obtained from the State employment agencies of Arizona, California, New Mexico, and Texas. See Jerry R. Ladman, "The U.S. Border Regional Economy," for an economic profile of the U.S. border region between 1950 and 1980.

border region population on the U.S. side of the border, particularly in Texas, is younger, less educated, and poorer than the average for the United States, whereas the reverse is true for the other parts of the border region. Conversely, the Mexican side of the border region generally exhibits levels of income and education that are higher than the average in Mexico.

Population .-- In 1980, the population of the United States-Mexico border region was 7,134,819 inhabitants, with 4,023,916 living in the United States and 3,110,903 living in Mexico. This population was unevenly distributed across the border region. For example, the States of California (United States) and Baja California (Mexico) accounted for 44 percent of the region's total population. In the U.S. border region, the population was concentrated in five counties: (1) San Diego County, CA; (2) Pima County, AZ; (3) El Paso County, TX; (4) Hidalgo County, TX; and (5) Cameron County, TX. The five counties accounted for 84 percent of the U.S. border population. With the exception of Pima County, the population in these counties was concentrated in twin cities along on the border. In the Mexican border region, the population was concentrated in seven municipios: (1) Ensenada, Baja California; (2) Tijuana, Baja California; (3) Mexicali, Baja California; (4) Ciudad Juarez, Chihuahua; (5) Nuevo Laredo, Nuevo Leon; (6) Reynosa, Tamaulipas; and (7) Matamoros, Tamaulipas. Together, these seven municipios accounted for 76 percent of the Mexican side's or subregion's population.

Between 1970 and 1980, the U.S. border region experienced higher population growth than the state and national levels. 1/ The growth rates for each were as follows: U.S. border region growth rate, 40.7 percent; U.S. border state growth rate, 23.4 percent; and U.S. national growth rate, 11.4 percent. Although the Mexico border region also experienced a population growth during this period, its growth rates were below those of the State and national levels. These growth rates were as follows: Mexico border region growth rate, 32.2 percent; Mexico border State growth rate, 36.2; and Mexico national growth rate, 38.6 percent.

Population growth was not uniformly distributed along the border region. The population growth rates ranged from an increase of 115 percent in Sonora to a decrease of 18 percent in Texas. In general, the highest growth rates in the U.S. border region took place in the south Texas border counties, whereas certain counties in west Texas had negative growth rates. The highest growth rates along the Mexico border region were experienced by municipios in Baja California and Sonora, whereas certain municipios in Chihuahua and Coahuila had negative growth rates. The nonuniform distribution and the wide range for the rates of growth suggest that the counties and municipios that did experience positive growth did so for reasons other than border location. 2/

<sup>1/</sup> Between 1950 and 1980, the border States experienced higher population growth rates relative to those experienced at the national levels: the Mexican border State population grew by 184.1 percent compared to the national rate of 151.2 percent for Mexico. The U.S. border State population increased by 112.4 percent compared to the national rate of 50 percent for the U.S. Overall, growth has been substantial and sustained for States on both sides of the border.

<sup>2/</sup> Jerry R. Ladman, The U.S. Border Regional Economy.

In 1980, the number of Mexican-Americans (Americans of Mexican ancestry) residing in the U.S. border region totaled 1,433,201 inhabitants, or 35.6 percent of the total U.S. border region population. The concentrations of Hispanic 1/population varied by subregion. In absolute numbers, El Paso County had the largest Mexican-American population of the border counties. In terms of percentages, San Diego had the lowest percentage of the total population that was Hispanic, 14.8 percent, whereas Starr County, TX had the highest percentage, 97 percent. In general, the percentage of the population that was Mexican-American increased from west to east along the border with 60 percent of the region's Hispanics residing along the Texas-Mexico border.

Between 1970 and 1980, the percentage of the border region's population that was Mexican-American remained constant at 35.6 percent. Examination by county indicates that 11 of the 25 counties experienced decreases in the percentage of the population that was Hispanic, whereas 14 of the counties experienced increases. In general, the largest percentage changes in the portion of the population that is Hispanic occurred in the less populated rural counties. Of the the five border counties with the largest total populations (San Diego, Pima, El Paso, Hidalgo, and Cameron) four experienced only modest increases in the percentage of the population that was Hispanic, and one, Pima, experienced a modest decrease.

Age.--Age data were available for the U.S. border region only. In general, the U.S. border region has a median age below the national average. In 1980, the U.S. median age was 30.0 years. In comparison, 23 of the 25 border counties indicated median ages below the national average, ranging from a low of 22.3 years in Starr County to a high of 33.7 years in Luna County. The median ages for the five largest border counties were as follows: San Diego, 28.7; Pima, 29.4; El Paso, 25.0; Hidalgo, 24.1; Cameron, 25.0. In general, the border counties of New Mexico and Texas have median ages lower than those in Arizona and California.

Between 1970 and 1980, the median ages in each of the border counties increased. During this period, the median age in the U.S. increased by 1.9 years, or 6 percent. The percentage increases in median age for the five largest border counties were as follows: San Diego, 12 percent; Pima, 7 percent; El Paso, 11 percent; Hidalgo, 16 percent; and Cameron, 14 percent.

In 1980, the median age for the Hispanic population in every border county was lower than the median age for the non-Hispanic (white) population. The median age for the Mexican-American population ranged from a low of 19.9 years in Yuma County, AZ, and Culberson County, TX, to a high of 28.5 years in Terrell County, TX. The median age difference between the Hispanic and non-Hispanic population in the five largest border counties were as follows: San Diego, 8.4 years; Pima, 10 years; El Paso, 8.7 years; Hidalgo, 23.2 years; and Cameron, 19.9 years.

Between 1970 and 1980, the relative median age between the Hispanic portion and the respective county's total population--the ratio of the two median ages--remained fairly constant. The change in the relative median in the five largest border counties ranged from a 6-percent increase in Pima

<sup>1/</sup> The terms Hispanic and Mexican American are used interchangeably.

County to a 2-percent decrease in Hidalgo County. Therefore, although the median age for both the Hispanic and the respective county's total population increased, the median age difference between the two remained relatively constant.

Education. --In 1980, the average education levels varied by subregion. In California, Arizona, and New Mexico, the median years of school completed ranged from a low of 12.0 years in Imperial Valley County to a high of 12.8 years in San Diego County. On average, the Texas border population has lower levels of education. Brewster County had the highest median years of school completed, 12.8 years, and Starr County had the lowest, 6.7 years.

The regional distribution for the population with at least a high school education appeared similar to the distribution of median years of school completed. The border regions of California, Arizona, and New Mexico had percentages close to the U.S. national average of 66.5 percent. San Diego County indicated the highest percentage of at least high school educated population, 78.0 percent, and Imperial County indicated the lowest, 50.9 percent. In general, the Texas border region had percentages below the national average with a high of 67.5 percent in Brewster County and a low of 26.6 percent in Starr County.

In 1980, the median years of school completed by the Mexican-American population was lower than the median years completed by the total population in each county. The median years of school completed by Hispanics ranged from a low of 6.2 years in Hudspeth and Jeff Davis Counties (TX) to a high of 11.9 years in San Diego County. The percentage difference between the median years of education for the total population and the Hispanic population for the five largest counties were as follows: San Diego, 8 percent; Pima, 7 percent; El Paso, 27 percent; Hidalgo, 39 percent; and Cameron, 38 percent.

Between 1970 and 1980, the median years of school completed and the percentage of the population with at least a high school education increased in each of the border counties. The percentage increases in median years completed for the five largest border counties were as follows: San Diego, 2.4; Pima, 2.4; El Paso, 1 percent; Hidalgo, 22 percent; and Cameron, 18 percent. Similarly, the percentage increase in the share of the population with at least a high school education for the the five largest counties ranged from an 11-percent increase in El Paso County to a 25-percent increase in Cameron County. In general, the largest increases in the share of the population with at least a high school education occurred among the Mexican-American population in the Texas border region. Hidalgo County experienced the largest increase (76 percent) in the share of the Hispanic population with at least a high school education.

Although the U.S. border region, Texas in particular, exhibited education levels below the U.S. national average in 1980, the Mexico border region experienced levels generally above the Mexican national average. For Mexico,

the percentage of the population 12 years old and older with some secondary education was 25.3 percent. In comparison, the five Mexican border States indicated the following percentages: Baja California, 34.5; Sonora, 31.1; Chihuahua, 25.2; Coahuila, 29.2; Nuevo Leon, 38.1; and Tamaulipas, 28.0. The education levels of the 10 largest border municipios ranged from a low of 28.1 percent for San Luis Rio Colorado to a high of 37.1 percent for Mexicali, Baja California.

Income. --The border region is often perceived as a low-income area. This view may be due in part to the fact that the three poorest metropolitan areas in the United States--Laredo, Brownsville, and McAllen--are located in the Texas border region. 1/ However, income levels in the border region are not homogeneous.

In 1979, per capita income in the U.S. border region decreased from the west to the east, with counties in California having the highest per capita incomes and counties in Texas having the lowest per capita incomes. 2/Although, the U.S. border region had a median family income and a per capita income below the U.S. national average, \$19,587 and \$7,960 respectively, one county, San Diego, exhibited median and per capita incomes above the national average, \$20,304 and \$7,960 respectively, and this county had over 46.3 percent of the U.S. border region's population. However, Starr County, TX, had the U.S. border region's lowest median family income, \$8,627, and per capita income of \$2,668, both far below the national average. The percentages by which per capita income were below the U.S. national average for four of the five largest border counties were Pima, 2 percent; El Paso, 27 percent; Hidalgo, 45 percent; and Cameron, 41 percent.

With respect to median family income and per capita income, Mexican-Americans had incomes lower than the average in each of the counties of the U.S. border region. In 1979, per capita income and median family income ranged from lows of \$2,371 and \$8,125, respectively, in Kinney County, TX, to highs of \$4,606 and \$15,004, respectively, in San Diego County. The percentages by which Hispanic average per capita income was lower than the U.S. national average in the five largest border counties were San Diego, 36 percent; Pima, 44 percent; El Paso, 52 percent; Hidalgo, 60 percent; and Cameron, 58 percent.

Between 1969 and 1979, median family income and average per capita income increased in real terms in each county. However, the growth of income varied by subregion. The percentages by which real per capita income increased for the total population in the five largest counties were as follows: San Diego,

<sup>1/</sup> Ellwyn Stoddard, Patterns of Poverty along the U.S.-Mexico Border, El Paso, Center for Inter-American Studies, 1978.

<sup>2/</sup> Per capita income in the U.S. border region falls from west to east. The percentage of the population composed of Mexican-Americans increases from west to east. As would be expected, a negative linear relation exists between these two variables. Employing least squares, Hansen found that per capita income dropped by \$35.50 for every one percentage point increase in the proportion of Mexican-Americans. See Hansen, The Border Economy.

18 percent; Pima, 21 percent; El Paso, 14 percent; Hidalgo, 34 percent; and Cameron, 39 percent. In general, the largest increases in real average per capita income occurred in the south Texas border region.  $\underline{1}$ /

The changes in Hispanic income between 1969 and 1979 also varied, with the largest increases in per capita real income occurring in south Texas. The percentage increases in Hispanic real per capita income for the five largest border counties were as follows: San Diego, zero percent; Pima, 9 percent; El Paso, 12 percent; Hidalgo, 46 percent; and Cameron, 43 percent. Hispanic average per capita real income and median family real income increased in four of the five largest border counties between 1969 and 1979. Yet, San Diego County, where Hispanics exhibited the highest median family income in both years, experienced a decrease of 12 percent in median family real income for the Hispanic population.

Whereas the U.S. border counties had some of the lowest per capita income levels in the United States, the Mexican municipios had some of the highest income levels in Mexico. The six Mexican border States all had per capita income levels higher than the Mexican national average. Using a per capita base index of 100 for all of Mexico, the comparable per capita indices for the six States were Baja California, 151.8; Sonora, 124.3; Chihuahua, 102.1; Coahuila, 112.0; Nuevo Leon, 150.5; and Tamaulipas, 121.8. For the border municipalities, the per capita income index ranged from a high of 207.0 in Tecate, Baja California, to a low of 51.4 in Janos, Chihuahua. 2/

In addition, the Mexican border region did not have the same marked disparity in per capita income as the U.S. border region, i.e., per capita income did not decrease from west to east. On average, per capita income in the border municipios was highest in Baja California, evenly distributed between Sonora, Coahuila, and Tamaulipas, and the lowest was in Chihuahua.

<u>Poverty measures.--Poverty levels increased from west to east in the U.S. counties along the border.</u> 3/ In 1979, the percentage of families living below the poverty level in the United States was 9.6 percent. For the border counties, the percentage of families living below the poverty level ranged

<sup>1/</sup> However, interpretation of these percentage increases must be tempered with the understanding that average per capita income in these counties in 1969 was extremely low.

<sup>2/</sup> Peach, Demographic and Economic Change in Mexico's Northern Frontier.

<sup>3/</sup> The definition for poverty, which is derived from the U.S. Department of Agriculture's 1961 Economy Food Plan, is based on the food consumption requirements of families with respect to their size, composition by sex, age of the family head, and number of children under 18 years of age. In the 1955 Survey of Food Consumption, the United States Department of Agriculture found that families of three or more persons spent approximately one-third of their income on food. Therefore, the poverty level was defined as three times the cost of the Economy Food Plan. See Census Bureau, 1980 Census of the Population.

from a low of 8.4 percent in San Diego County to a high of 45.0 percent in Starr County, TX. The percentages of families living below the poverty level in the five largest border counties were San Diego, 8.4 percent; Pima, 9.1 percent; El Paso, 18 percent; Hidalgo, 29 percent; and Cameron, 25 percent. The highest poverty levels were found in the south Texas border region.

The percentage of Mexican-American families living below the poverty level was higher than the percentage of total families living below the poverty level in each of the border counties. In 1979, the percentage of Hispanic families living below the poverty level ranged from a high of 48.0 percent in Kinney County to a low of 18.1 percent in San Diego County. The percentage of Mexican-American families living below the poverty level in the five largest border counties were San Diego, 18.1 percent; Pima, 17.1 percent; El Paso, 26.5 percent; Hidalgo, 36.6 percent; and Cameron, 33.7 percent.

With the exception of El Paso County, each of the border counties experienced a decrease in the percentage of families living below the poverty level between 1969 and 1979. The largest percentage decrease, 52 percent, occurred in Zapata County, TX, where the percentage of families living below the poverty level decreased from 50.6 percent to 23.8 percent. The percentage decreases for four of the five largest border counties were San Diego, 2 percent; Pima, 16 percent; Hidalgo, 31 percent; and Cameron, 32 percent. The percentage increase for El Paso was 1 percent. The counties with the largest percentage decreases in the poverty level were those which during the same period had the largest percentage increases in per capita income.

Between 1969 and 1979, the percentage change in the share of Mexican-American families living below the poverty level varied by subregion. In 6 of the 25 border counties, the percentage of Mexican-American families living below the poverty level increased. The largest percentage increase in the share of Hispanic families living below the poverty level, 37 percent, was in San Diego County, with an increase from 13.2 to 18.1 percent. The largest percentage decreases occurred in south Texas.

<u>Unemployment</u>.--In 1985, the average U.S. unemployment rate was 7.2 percent. Unemployment rates in the U.S. border region ranged from a low of 5.5 percent in San Diego to a high of 34.6 percent in Imperial County, CA. 1/The unemployment rates for the five largest border counties were San Diego, 5.5 percent; Pima, 14.2 percent; El Paso, 10.8 percent; Hidalgo, 19.1 percent; and Cameron, 14.5 percent.

In 1980, the unemployment rates of Mexican-Americans were higher than the unemployment rates of the total population in each border county, ranging from a high of 15.5 in Luna County, NM, to a low of 9.1 in Pima County. The

<sup>1/</sup> In 1985, 6 of the 25 border counties indicated unemployment rates below the national average. The counties were San Diego County and five rural counties in the Texas border region.

unemployment rates for Mexican-Americans in the five largest border counties were San Diego, 9.2 percent; Pima, 9.1 percent; El Paso, 9.3 percent; Hidalgo, 9.8 percent; and Cameron, 9.2 percent. 1/

In 1985, unemployment in the border region was positively correlated with the percentage of the population that was Mexican-American and the degree to which the county's economic activity was dependent on cross-border shopping from Mexican consumers. The unemployment rates for the five counties with the highest percentage of Hispanic population were Maverick, 29.1 percent; Webb, 14.0 percent; Starr, 33.8 percent; Hidalgo, 19.1 percent; and Cameron, 14.5 percent. The unemployment rates for those counties highly dependent on cross-border shopping were Imperial County, 34.6 percent; Santa Cruz County, 16.4 percent; and Webb County, 14.0 percent.

To summarize, part of the border region is characterized by per capita income levels below the national and State averages. However, the region is not uniformly a low-income area, nor is poverty uniformly dispersed along the border region. San Diego County, with 46.3 percent of the U.S. border region population, had a per capita income above the U.S. national average; and Pima County had a per capita income that was only 2 percent below the national average. Poverty does appear to be concentrated along the Texas border region, particularly in south Texas, and among the Mexican-American population. However, even among the latter, the period between 1969 and 1979 was a period of increasing per capita income. Moreover, the Mexico border region has income levels that are uniformly above the Mexican national average.

#### Economic profile

As with population, the major share of economic activity in the U.S. border region was concentrated in the following five counties: San Diego, Pima, El Paso, Hidalgo, and Cameron. This profile describes the composition of production within the U.S. border counties. Only data for the U.S. border counties were available.

Agriculture.--The market value of agricultural products produced within the U.S.-border counties in 1982 was \$2,393 million. The composition of agricultural sales was \$1,427 million in crops including nursery and

<sup>1/</sup> Between 1970 and 1980, the composition of the labor force that was Mexican-American remained relatively constant in each of the industry categories in each county. In general, the share of an industry's labor force that was Mexican-American reflected the share of Mexican-Americans in the total labor force. The one exception was manufacturing. Between 1970 and 1980, the share of the labor force that was Mexican-American decreased in those counties where manufacturing was concentrated. Consequently, Mexican-Americans were under represented in the manufacturing labor force in 1980. The percentage decreases in the share of the labor force that was Mexican-American for the five largest border counties were San Diego, 12 percent; Pima, 71 percent; El Paso, 80 percent; Hidalgo, 34 percent; and Cameron, 71 percent.

greenhouse products and \$923 million in livestock and their products. The major share of agricultural sales occurred in the following five counties: San Diego, 16.4 percent; Imperial, 31 percent; Yuma, 14.9 percent; Dona Ana, 5 percent; and Hidalgo, 12 percent. Together, these five counties accounted for 79 percent of the agricultural production within the U.S. border region. Between 1978 and 1982, agricultural sales increased in real terms by 2 percent.

Agricultural production in the border region was highly diversified. Imperial and Yuma Counties were the location for major growers of cotton and vegetables. Dona Ana County specialized in fruit and vegetable farming. Cotton was an important agricultural product in El Paso County. Cameron and Hidalgo Counties in south Texas concentrated in cotton, citrus, and vegetable farming. Cattle ranching was dispersed along the border deserts and rangelands. However, feed lots were located generally near the major centers of irrigation farming to obtain a source of feed. 1/

Mining.--The value of nonfuel mineral production in 1982 was approximately \$757.5 million. Between 1977 and 1982, nonfuel mineral in the border region production decreased in real terms by 50 percent. The minerals varied by type but consisted mainly of copper, stone, sand and gravel, zinc, and silver. The major share of the value of mining production occurred in three counties: Pima and Cochise, AZ, 63 percent, and Grant, NM, 23.2 percent. In 1977, Arizona accounted for one-fourth of the copper production in the United States. In 1977, petroleum and natural gas production for eight of the Texas border counties amounted to \$513.8 million. 2/ In 1982, petroleum and natural gas production for 10 of the Texas border counties amounted to \$1.3 billion. 3/

Manufacturing.--In 1982, the value added by manufacture totaled \$8,423.1 million. The number of manufacturing establishments was 4,262. The major share of value added by manufacture occurred in the following five counties: San Diego, 57 percent; Pima, 8.7 percent; El Paso, 20.2 percent; Hidalgo, 3.0 percent; and Cameron, 5.3 percent. Together, these five counties accounted for 94.4 percent of the value added by manufacture in the U.S. border region. Between 1977 and 1982, the value added by manufacture increased in real terms by 44 percent.

A diversity of products are produced in the border region manufacturing sector. However, the major share of firms were concentrated in food processing. Other types of products manufactured included apparel and textile

<sup>1/</sup> Jerry R. Ladman, "The U.S. Border Region Economy," in <u>Views Across the</u> <u>Border</u>, 1985.

<sup>2/</sup> Ibid.

<sup>3</sup>/ Letter dated Aug. 19, 1986, from Texas Comptroller of Public Accounts.

products, electric and electronic equipment, printing and publishing, and stone, clay, and glass products. In addition, San Diego was a major producer of transportation equipment, in particular airplanes and ships.  $\underline{1}$ /

Manufacturing is a less important employer in the border region than the trade and service sectors and is unevenly distributed among States. Most establishments are relatively small. 2/

Even though a small percentage of U.S. manufacturing activity is located in the border region, industrialization of the border region is perceived as one method of promoting growth and development in the depressed regions of the U.S. border. There are several reasons why growth in manufacturing has been inhibited in the border. Some border cities are too isolated from existing suppliers and product markets. As a result, transportation costs have been too great for manufacturing enterprises to be viable. Another problem has been a shortage of skilled labor. Some analysts argue that another problem is the region's lack of amenities, making it unattractive to executives. 3/

Retail and wholesale trade and selected services. -- In 1982, the border region indicated 35,174 establishments were in retail trade. The total value of retail sales was \$19,630 million. The major share of retail trade occurred in the following five counties: San Diego, 48 percent; Pima, 13.2 percent; El Paso, 11 percent; Hidalgo, 7 percent; and Cameron, 5 percent. Together, these counties accounted for 84 percent of retail sales in the border region. Between 1977 and 1982, retail sales increased in real terms by 7 percent.

In 1982, the region included 5,965 establishments in wholesale trade. The total value of wholesale trade was \$16,083 million. As with retail trade, the same five counties accounted for a major share of wholesale trade--San Diego, 45.4 percent; Pima, 9 percent; El Paso, 17.6 percent; Hidalgo, 8.4 percent; and Cameron, 5 percent. Together, these five counties accounted for 85 percent of wholesale trade in the region. Between 1977 and 1982, wholesale trade increased in real terms by 18 percent.

 $<sup>\</sup>underline{1}$ / Jerry R. Ladman, "The U.S. Border Region Economy," in <u>Views Across the</u> Border, 1985.

<sup>2/</sup> Jerry R. Ladman, "Economic Growth and U.S. Industrial Strategies in U.S.-Mexico Border Region," paper presented at the Workshop on Industrial Strategy and Policy: Mexico and the United States, 1984, p. 16.
3/ Jerry R. Ladman, "The U.S. Border Regional Economy: Interdependence,

<sup>3/</sup> Jerry R. Ladman, "The U.S. Border Regional Economy: Interdependence, Growth and Prospects for Change," <u>Views Across the Border</u>, Albuquerque, NM, University of New Mexico Press, 1985, p. 23.

In 1982, 23,392 establishments provided selected services in the U.S. border region. 1/ The gross receipts for these establishments were \$6,969 million. The five counties which accounted for the major share of wholesale and retail trade accounted for 92 percent of selected service receipts in the border region were San Diego, 62.5 percent; Pima, 13.7 percent; El Paso, 8.6 percent; Hidalgo, 3.6 percent; and Cameron, 3.6 percent. Between 1977 and 1982, selected service receipts increased in real terms by 107 percent.

Government expenditures.--In 1982, local Government expenditures totaled \$5,569 million. In addition, total federal government expenditues amounted to \$13,736.8 million. Of this amount \$7,067.4 million, or 51 percent, were Department of Defense expenditures.

Federal Government expenditures, especially defense expenditures, were an important source of income for the U.S. border region. However, in Arizona, New Mexico, and Texas, federal government per-capita expenditures in the border region were lower than Federal Government per capita expenditures in the States concerned. This is illustrated by comparing border region expenditures as a share of total expenditures for the States with border region population as a share of total population for the States. In 1980, border region (Federal) expenditures as a share of total (Federal) expenditures for the States were Arizona, 26.6; California, 9.8 percent; New Mexico, 8.9 percent; and Texas, 7.6 percent. Border region populations as a share of total population for the States were Arizona, 28.5 percent; California, 8.3 percent; New Mexico, 9.0 percent; and Texas, 8.4 percent. 2/

The following counties had major military installations: San Diego (CA), Cochise County (AZ), Pima County (AZ), Yuma County (AZ), Dona Ana County (NM), Hidalgo County (TX), and Val Verde County (TX). In 1980, Department of Defense expenditures in the border region as a share of total expenditures for the States were Arizona, 43.1 percent; California, 14.7 percent; New Mexico, 20.2 percent; and Texas, 6 percent.  $\underline{2}/$ 

<sup>1/</sup> Selected services are defined by the Census Bureau as "hotels, motels, trailering parks, and camps; personal services; business services; automotive repair services, and garages; miscellaneous repair services; amusement and recreation services, including motion pictures; dental laboratories; legal services; and engineering, agricultural, and surveying services." See Bureau of Census, County and City Data Book 1983.

<sup>2/</sup> Jerry R. Ladman, "The U.S. Border Region Economy," in <u>Views Across the</u> <u>Border</u>, 1985.

<sup>&</sup>lt;u>3</u>/ <u>Ibid</u>.

Table E-1.--Population by States and counties, 1970, 1980, and 1970-80

-	Total population	Total population	Percentage change
State and county	1970	1980	1980 over 1970
California:			
San Diego	1,357,782	1,861,846	37.1
Imperial		92,110	23.7
Arizona:	•	•	
Yuma	60,827	90,554	48.9
Pima	351,667	531,443	51.1
Santa Cruz	13,966	20,459	46.5
Cochise	61,910	85,686	38.4
New Mexico:			
Hidalgo	4,822	6,049	27.8
Grant	22,030	26,204	18.9
Luna	11,706	15,585	33.1
Dona Ana	69,773	96,340	38.1
Texas:			
El Paso	359,291	479,899	33.6
Hudspeth	2,372	2,728	14.0
Culberson	3,429	3,315	-3.3
Jeff Davis	1,483	1,647	7.9
Presidio	4,842	5,188	7.1
Brewster	7,780	7,573	-2.7
Terrell	2,006	1,595	-17.8
Val Verde	27,471	35,910	30.7
Kinney	2,025	2,279	13.6
Maverick	18,093	31,398	73.5
Webb	72,859	99,258	36.2
Zapata	4,352	6,628	52.3
Starr	17,707	27,266	54.0
Hidalgo	181,535	283,229	56.0
Cameron	140,368	209,727	49.4

Source: Bureau of the Census, <u>Census of Population</u>, 1980. Bureau of Census, <u>County & City Data Book</u>, 1972.

Table E-2. -- Persons of Spanish origin, 1970 and 1980

	1970		1980	
	Population of	Percentage of	Population of	Percentage of
State and county	Spanish origin	total population	Spanish origin	total population
California:		<i>,</i> *		
San Diego	174,209	12.8	275,177	14.8
Imperial	34,260	46.0	51,384	55.8
Arizona:	•			
Yuma	16,250	26.7	26,638	29.4
Pima	82,916	23.6	111,418	21.0
Santa Cruz	10,792	77.3	15,229	74.4
Cochise	20,594	33.3	22,846	26.7
New Mexico:		•		
Hidalgo	2,784	57.7	2,849	47.1
Grant	12,354	56.1	13,452	51.3
Luna	5,441	46.5	6,148	39.4
Dona Ana	35,439	50.8	50,204	52.1
Texas:				
El Paso	204,349	56.9	279,001	58.1
Hudspeth	1,445	6.09	1,589	58.2
Culberson	1,719	50.1	2,101	63.4
Jeff Davis	941	63.5	777	47.2
Presidio	3,646	75.3	3,989	76.9
Brewster	3,717	47.8	3,262	43.1
Terrell	834	41.6	169	43.3
Val Verde	15,549	56.6	22,601	62.9
Kinney	1,448	71.6	1,301	57.1
Maverick	16,347	90.3	28,366	90.3
Webb	62,380	85.6	90,842	91.5
Zapata	3,984	91.5	5,042	76.1
Starr	17,330	97.9	26,428	97.0
Hidalgo	143,611	79.1	230,212	81.3
Cameron	107,000	76.2	161,654	17.1

Characteristics. Bureau of Census, 1970 Census of General Social & Economic Characteristics. Source: Bureau of Census, 1980 Census of Population, General Population

Table E-3.--Age characteristics of population in 1970 and 1980

	1970				1980		
		Median age	e l			Median age	
			White not of	t of			White, not
	Median	Spanish	Spanish origin	origin		Spanish	of Spanish
Area	ake	origin	Male	Female	Median age	origin	origin
California:				•			
San Diego	25.6	20.6	24.2	29.0	28.7	22.9	31.3
Imperial	23.9	18.0	23.9	24.1	26.3	22.0	35.5
Arizona:		٠					
YumaX	24.6	19.0	24.3	26.0	27.8	19.9	33.3
Pima	27.4	20.5	26.2	29.1	29.4	23.4	33.4
Santa Cruz	24.8	20.0	22.5	26.5	27.2	23.6	38.8
Cochise	24.2	19.4	23.5	26.2	28.8	22.7	32.1
New Mexico:							
Hidalgo	24.2	18.4	23.4	25.6	26.0	21.2	31.4
Grant	24.5	20.3	24.3	25.2	28.4	24.6	34.0
Luna	27.2	17.6	25.6	28.6	33.7	22.3	48.3
Dona Ana	21.7	18.8	21.8	22.3	24.7	22.2	30.0
Texas:							
El Paso	22.4	19.5	21.9	23.6	25.0	22.3	31.0
Hudspeth	20.6	18.4	23.9	23.6	25.4	21.2	32.3
Culberson	21.8	17.1	21.1	21.8	24.3	19.9	34.9
Jeff Davis	33.6	27.9	30.2	31.4	32.6	29.1	36.3
Presidio	28.8	56.6	25.9	29.5	29.7	25.8	40.4
Brewster	22.1	20.7	22.6	23.4	8.92	22.7	32.5
Terrell	28.5	22.0	31.3	31.1	31.6	28.5	33.7
Val Verde	22.9	19.6	22.4	23.5	24.6	21.6	28.1
Kinney	25.3	20.7	25.5	30.6	27.9	24.3	48.0
Maverick	19.4	18.6	19.1	21.2	22.3	21.3	35.0
Webb	21.8	20.4	20.5	23.4	23.5	22.8	31.3
Zapata	27.8	26.0	26.6	28.5	29.6	23.9	59.2
Starr	21.5	21.1	19.7	22.8	22.7	22.4	37.2
Hidalgo	20.7	18.6	19.8	22.4	24.1	21.1	44.3
Cameron	21.8	18.8	20.2	23.6	25.0	21.6	41.5
United States	28.1	À	À	71	30.0	7	7
Arizona	26.3	1	1/	11	29.5	7	7
New Mexico	23.9	1	1	7	27.4	7	, <b>&gt;</b> ,
California	28.1	1	1	7	30.0	~	<b>-</b>
Texas	26.5	7	7	7	28.0	7	7
		l	l			I	

1/ Not available.

Source: Bureau of Census, 1980 Census of Population, General Population Characteristics. Bureau of the Census, County & City Data Book 1972. Bureau of Census, 1970 Census of Population - General Social & Economic Characteristics. Bureau of Census, 1970 Census of Population - General Population Characteristics.

Table E-4.--Percentage distribution of sthool years completed, 1970 and 1980

	1970				-				1980					
	227						Less than	4+ Years of	Median years	years	-			
	Median	Median years c	completed		High school	hool	5 years	college	completed	ed	High School	hool		
			Spanish			Spanish							Less	4
	fotal		origin		Total Per-	origin	Total			Spanish		Spanish	5 years	years
Area	Male	Female	Male	Female	cent	Percent	Percent	Total	Total	origin	Total	origin	(total)	(total)
							٠	-						
California:									13.0	9 [1	0 87	7 64	9.6	20.9
San Diego	12.5	12.4			65.3	45.4	رد د د د	14.0	12.0	8 2	9.0	31.5	14.3	9.6
Imperial	10.7	10.2	7.7	0.,	43.1	9. 67	13.4		7		:	:		
Vilma	11.9	12.0	8.5	9.6	50.4	28.8	13.9	17.3	12.3	8.4	61.6	31.6	7.5	10.9
Pima	12.4	12.4	10.2		63.0	36.6	4.7	15.7	12.7	11.9	74.6	49.5	5.9	20.7
Santa Cruz	11.1	6.6	9.5		43.5	30.8	12.1	9.1	12.2	8.6	54.0	39.7	9.3	13.2
Cochise	12.2	12.1	9.0		55.9	31.2	7.4	10.7	12.5	4.6	8.89	40.0	4.3	13.8
New Mexico:							•		,	,	4	•	•	-
Hidalgo	10.2	10.8	8.9		39.0	22.1	9.3	8.9	12.3	10.7	6.60	43.2	o (	1.6
Grant	11.7	11.8	8.8		48.5	27.7	9.5	10.5	12.4	11.0	63.2	45.2	6.3	12.6
Luna	10.4	10.8	•		40.0	20.1	12.1	28.7	12.2	9.1	57.0	33.6	6.1	10.7
Dona Ana	12.3	12.1	8.7		54.2	30.6	14.0	15.8	12.8	10.3	76.5	42.4	2.8	22.8
Texas:					:	•	_						,	
El Paso	12.2	11.5	9.1	8.1	53.6	31.5	14.2	11.4	12.3	6.7	59.5	40.8	11.5	14.0
Hudspeth	9.5	10.2	5.2		45.8	14.0	25.0	8.6	11.1	6.2	46.3	21.7	21.7	9.3
Culberson	10.3	6.6	0.9	5.3	46.8	14.3	18.8	12.0	11.1	6.5	44.3	17.5	20.5	8.6
Jeff Davis	8.4	10.6	6.1	5.9	43.4		24.6	11.6	12.3	6.2	55.0	18.8	18.4	22.4
Presidio	6.9	9.9	5.0	2	28.6	•	38.6	7.3	8.9	6.3	41.0	25.5	31.1	12.2
Brewster	12.0	11.7	6.5		49.7		17.1	15.9	12.8	8.3	67.5	37.9	12.5	23.5
Terrell	10.3	10.9	6.4		39.7		16.7	4.9	12.3	7.4	59.9	28.4	13.2	11.4
Val Verde	11.1	10.2	9.9	6.1	42.9	•	21.9	0.6	12.0	7.7	51.1	30.4	19.3	12.2
Kinney	7.8	6.3	4.5	4.4	23.2		35.0	2.9	10.3	٠.٠ ٠.٠	40.1	19.1	7.67	4. 4
Maverick	9.9	6.3	5.8		21.4	18.8	37.2	æ. «		0.,	32.2	20.4	23.0	<del>.</del> 0
Webb	8.1	7.1	7.0		41,3	30.8	42.0		C .	0.0	41.0	7.70	63.3	
Zapata	6.2	5.7	5.3		21.6	18.7	41.6	6.4	10.2	7.5	41.3	31.1	24.9	7.,
Starr	5.9	5.9	5.7		24.7	20.7	43.4	5.9	6.7	4.9	26.6	25.1	39.7	•
Hidalgo	9.1	7.0	5.2	۴.9	58.8	16.4	30.0	14.2	9.3	6.7	41.1	28.9	29.0	8.01
Cameron	8.7	8.7	0.9	5.7	34.9	37.5	30.5	7.4	10.3	7.5	43.8	29.8	23.6	10.5
								,		;	,	;	ì	
United States	12.2	77	7	7	52.3	7	1/	21	12.5	<b>-</b> ;	0.99	\	};	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Arizona	12.3	1/	7	7	58.1	7	7	71	12.7	7	72.4	\i	À;	7
New Mexico	12.3	77	7	7	55.2	7	7	<b>&gt;</b> ;	12.6	<b>⊣</b> ;	68.9	77 -	717	717
California	12.4	77	7	7	62.6	1	7	<b>&gt;</b> 1	12.7	<b>}</b> i :	73.0	7	À,	À1
Texas	11.6	1	7	7	47.4	77	7	7	12.4	7	97.9	/ī	/₹	/7
										,				

1/ Not available.

Source: Bureau of Census, 1980 Census of Population, General Social and Economic Characteristics. Bureau of Census, 1970 Census of Population, General Social & Economic Characteristics.

Table E-5.--Median family income for population for 1969 and 1979

	1969						1979					
					Percentage of	ige of					Percentage of	age of
	Median family	amily	Per capita	ta	families below	below	Median family	ami 1 y	Per capita	ta	families below	s below
	income		income		poverty level	level	income		income		poverty level	level
	Total	Spanish	Total	Spanish	Total	Spanish	Total	Spanish origin	Total	Spanish origin	Total	Spanish origin
	18301	111111										
California:							,			;		,
San Diego	\$10,133	\$8,679	\$3,392	\$2,322	9.6	13.2	\$20,304	\$15,004	\$7.960	\$4,606	4.8	18.1
Imperial	8,257	6,592	2,459	1,588	16.1	25.5	16,658	14,130	5,809	3,793	12.7	19.1
Arizona:								,			(	;
Yuma	8,188	7,278	2,586	1,761	13.4	21.1	15,022	12,700	5,738	3,524	12.3	21.9
Pima	8,943	7,564	2,988	1,892	10.8	19.6	19,000	16,609	7,147	4,089	9.1	17.1
Santa Cruz	7,948	6,904	2,324	1,782	20.0	24.8	16,155	13,507	5,447	3,841	13.4	18.1
Cochise	8,333	7,275	2,563	1,709	13.4	20.9	15,484	12,694	5,738	3,695	11.8	21.1
New Mexico:												
Hidalgo	6,568	6,092	1,923	1,369	21.7	23.3	16,166	13,150	5,242	3,970	14.7	19.6
Grant	7,898	7,183	2,330	1,744	11.9	13.3	17,839	16,096	5,703	4,308	12.4	17.6
Luna	6,472	5,471	2,075	1,256	20.5	31.5	11,555	10,139	4,790	3,200	19.2	32.0
Dona Ana	7,395	5,587	2,250	1,487	20.5	32.8	14,914	11,451	5,284	3,496	18.3	27.6
Texas:												
El Paso	7,792	6,496	2,359	1,594	17.4	25.9	15,366	12,222	5,306	3,529	18.0	26.5
Hudspeth	5,314	4,127	1,652	1,046	28.2	42.2	11,204	8,987	4,480	2,561	25.7	35.4
Culberson	7,216	4,408	2,073	1,174	18.6	30.7	12,894	9,919	4,290	2,890	17.3	24.8
Jeff Davis	5,590	3,915	1,893	1,425	26.5	36.7	11,365	8,576	5,675	2,805	19.6	30.4
Presidio	4,189	3,368	1,723	1,0,1	40.9	52.6	10,394	8,727	3,751	2,533	34.6	44.7
Brewster	5,643	4,734	1,995	1,181	27.1	39.4	13,147	11,049	4,837	2,821	14.8	26.1
Terrell	6,577	3,719	2,169	1,281	23.6	44.0	18,750	14,079	7,069	4,283	16.1	22.4
Val Verde	6,472	4,859	1,966	1,250	24.5	39.8	12,274	9,819	4,542	2,759	24.3	36.6
Kinney	3,905	3,088	1,514	199	44.2	63.9	11,483	8,125	4,146	2,371	29.0	48.0
Maverick	4,510	3,906	1,280	1,037	44.2	51.2	10,623	9,882	3,100	2,767	34.4	37.3
Webb	4,978	4,445	1,573	1,352	38.4	43.6	12,181	11,346	3,980	3,467	29.0	31.6
Zapata	3,788	3,313	1,276	1,121	9.05	57.8	11,523	11,332	4,395	3,673	23.8	30.6
Starr	3,593	3,593	1,123	1,102	51.9	52.1	8,627	8,415	2,668	2,589	45.0	46.2
Hidalgo	4,776	3,958	1,523	1,006	42.0	52.8	12,883	10,418	4.040	2,911	29.0	36.6
Cameron	5,068	4.074	1,580	1,091	38.5	49.7	12,931	10,984	4,336	3,076	26.0	33.7
U.S	9,590	7,	3,119	7.	10.7	1/	19,587	17	7,298	1/	9.6	7
Arizona	9,187	7.	2,937	7	11.5	7.	19,017	7.	7,041	7	9.5	7
New Mexico	7,849	7	2,437	7.	18.5	7.	16,928	7	6,119	7	14.0	7
California	10,732	7.	3,614	1/	8.4	\alpha \cdot	21,537	77	8,295	7	8.7	1/
Texas	8,490	7	2,792	1/	14.6	ĭ	19,618	1/	7,205	7.	11.11	7

1/ Not available.

Source: Bureau of Census-1970 Census of Population, General Social & Economic Characteristics. Bureau of Census, 1980 Census of Population, General Social and Economic Characteristics.

Table E-6.--Unemployment rates for civilian labor force for 1980 and 1985

	1980		
	Percentage	of civilian	
•	labor forc	e unemployed	
•	1	Spanish	
Area	Total	origin	1985
California:			
San Diego	7.0	9.2	5.5
Imperial	9.6	13.0	34.6
Arizona:			
Yuma	8.0	12.7	19.6
Pima	6.5	9.1	14.2
Santa Cruz	5.2	5.6	16.4
Cochise	10.1	13.4	8.0
New Mexico:			
Hidalgo	8.8	11.6	8.2
Grant	5.8	7.6	14.6
Luna	9.4	15.5	15.9
Dona Ana	8.1	10.0	8.4
Texas:			
El Paso	8.0	9.3	10.8
Hudspeth	2.4	2.7	2.6
Culberson	6.0	7.2	9.3
Jeff Davis	2.5	4.2	4.5
Presidio	4.1	5.3	12.9
Brewster	5.4	7.2	3.3
Terrell	1.3	2.6	5.3
Val Verde	8.9	11.8	15.9
Kinney	5.4	9.2	4.2
Maverick	13.5	14.6	29.1
Webb	6.8	7.3	14.0
Zapata	12.7	11.3	12.4
Starr	12.4	12.8	33.8
Hidalgo	8.5	9.8	19.1
Cameron	7.8	9.2	14.5

Source: Bureau of Census, 1980 Population Census, General Social and Economic Characteristics. Unemployment rates for 1985 were obtained from the Arizona Department of Economic Security, the California Employment Development Department, the New Mexico Employment Security Department, and the Texas Employment Commission.

Table E-7.--Employment by industry for 1970

State and	Total industry	dustry	Agriculture	ure 1/	Mining		Manufacturing	turing	Wholesa	Wholesale trade	Retail (	trade
county	Total	Spanish	Total	Spanish	Total	Spanish	Total	Spanish	Total	Spanish	Total	Spanish
		Percent		Percent		Percent		Percent		Percent		Percent
California:												
San Diego	430,495	11.5	10,209	27.9	533	7.3	75,464	13.1	14,259	14.3	80,128	11.2
Imperial	23,479	36.5	4,590	55.2	11	77	1,581	38.0	1,251	48.0	4,818	38.0
Arizona:										•		
Yuma	19,746	26.9	2,887	53.7	26	/31	934	34.8	899	35.3	3,752	21.8
Pima	117,405	20.8	1,968	35.0	7,493	35.8	10,034	22.3	3,443	21.7	21,184	18.1
Santa Cruz	4.416	68.1	2,764	4.3	83	45.8	239	59.8	550	77.8	985	87.9
Cochise	17,621	29.6	1,060	34.8	1,321	36.4	1,947	54.5	317	30.9	3,097	33.8
New Mexico:											,	
Hidalgo	1,505	53.4	216	19.0	201	77.6	12	91.7	13	92.3	395	60.2
Grant	6,993	48.2	262	27.9	2,388	59.0	355	63.4	87	17.2	907	52.6
Luna	3,676	35.4	402	46.8	127	53.5	202	32.2	87	18.4	832	32.3
Dona Ana	21,552	.45.9	1,829	71.0	53	9.4	1,486	74.2	424	50.9	3,382	46.7
Texas:												
El Paso	106,919	55.0	1,597	62.0	1,401	26.1	18,359	75.3	4,999	48.9	19,537	56.2
Hudspeth	805	47.8	268	52.2	58	89.3	25	40.0	S	3/	141	42.6
Culberson	1.252	45.6	79	67.1	89	33.7	34	17.6	10	80.0	333	51.4
Jeff Davis	593	. 61.6	125	66.4	/2	/21	72	77	72	77	99	40.9
Presidio	1,471	8.69	270	71.9	က	100.0	S	3	14	85.7	348	81.3
Brewster	2,822	41.6	202	39.6	32	/21	65	15.4	36	25.0	576	62.8
Terrell	637	40.3	120	30.0	18	/21	S	77	72	77	113	62.8
Val Verde	5,852	56.2	507	60.4	56	30.8	599	88.3	92	13.0	1,445	65.0
Kinnev	999	55.9	278	58.3	77	77	/2	/2	9	/2	95	65.3
Maverick	4.573	82.6	503	81.9	202	70.0	194	3/	113	93.8	994	89.4
Webb	18.974	86.3	1.225	88.7	198	77.3	1,234	81.0	1,001	79.1	4,423	90.4
Zanata	983	93.2	•	97.1	49	89.8	119	78.2	13	69.2	116	81.0
Starr	4.016	97.7	066	91.0	143	85.3	130	97.7	107	હા	613	اع اع
Hidaleo	52,073	71.7	9.418	84.1	1,040	43.6	3,791	78.2	5,299	82.5	9,274	72.1
Cameron	40.178	69.5	4.730	80.4	103	39.8	4,579	78.4	2,482	73.0	7,647	72.1
		)	, )				,		,			

See footnotes at end of table.

Table E-7.--Employment by industry for 1970

						1 1 1
	Services		Construction	١	Transportation	tion
State and county	Total	Spanish	Total	Spanish	Total	Spanish
		Percent		Percent	•	Percent
California.						
San Diego	136,165	5.5	28.279	14.7	9,465	10.8
Imperial	5,680	25.6	1,229	32.2	. 697	41.0
Arizona:						,
Yuma	5,015	20.6	1,510	22.1	732	26.4
Pima	42,620	17.2	9,206	29.7	3,799	26.0
Santa Cruz	. 967	56.7	302	73.8	197	80.7
Cochise	4,352	22.8	700	33.3	475	30.5
New Mexico:						
Hidalgo	390	53.1	73	56.2	99	66.7
Grant	1,945	43.5	386	32.9	7.1	26.0
Luna	945	31.6	464	42.9	127	4401
Dona Ana	7,776	33.9	1,392	55.5	499	51.5
Texas:						
El Paso	29,250	47.5	976,9	64.8	4,390	54.9
Hudspeth	166	22.3	69 .	હ્ય	52	26.0
Culberson	325	38.5	212	51.4	55	25.5
Jeff Davis	258	56.2	. 29	اع اع	37	70.3
Presidio	364	67.9	134	82.1	67	64.2
Brewster	1,297	35.7	159	43.4	86	32.7
Terrell	169	49.7	23	હા	124	22.6
Val Verde	1,818	50.4	591	9.49	401	53.6
Kinney	162	63.0	40	0.09	20	20.0
Maverick	995	67.9	252	91.3	133	85.0
Webb	5,207	82.9	1,230	90.5	1,297	96.3
Zapata	233	77.3	150	'nΙ	13 ·	က်၊
Starr	1,322	3/	257	94.6	87	હા
Hidalgo	13,513	61.7	3,183	75.6	1,329	84.7
Cameron	11,169	63.5	2,817	73.5	1,415	76.5

1/ Includes Forestry & Fisheries. 2/ Not available. 3/ Census data shows the number of persons of Spanish origin in the industry is greater than the total number employed in that industry.

Source: Bureau of Census, 1970 Census of Population - General Social & Economic Characteristics.

Table E-8.--Employment by industry for 1980

State and	Total industry	lustry	Agriculture 1/	ure 1/	Mining		Manufacturing	ring	Wholesale trade	e trade	Retail tr	trade
county	Total	Spanish	Total	Spanish	Total	Spanish	Total	Spanish	Total	Spanish	Total	Spanish
		Percent		Percent		Percent		Percent		Percent		Percent
California:								i		,		1
San Diego	756,400	13.1	21,089	46.3	957	15.3	123,385	14.7	25,087	14.1	138,889	12./
Imperial	33,778	48.7	7,131	55.0	153	27.5	7,134	12.0	1,560	54.9	7,883	40.6
Arizona:									1	1	•	;
YumaX	31,076	30.3	4,990	64.9	197	35.5	1,798	18.0	1,174	27.5	5,904	26.3
1	220,181	18.0	3,168	24.6	10,841	33.1	22,861	6.5	8,532	17.5	40,226	16.8
Zn.1	7,826	71.0	390	71.5	55	70.9	1,061	48.4	680	75.6	1,648	87.8
Cochise	27,483	24.8	528	88.8	489	32.5	2,404	7.0	604	27.8	4,828	27.1
New Mexico:												
Hidalgo	2,001	40.6	209	24.9	92	71.7	437	2.3	46	21.7	429	47.3
Grant	9,206	43.5	496	22.4	2,776	53.8	389	6.4	141	17.7	1,544	43.1
Luna	4,547	36.2	332	35.5	176	56.2	268	21.3	131	43.5	1,236	36.4
Dona Ana	34,728	47.7	2,315	72.2	214	46.3	2,867	16.9	1,044	46.5	5,603	46.2
Texas:												
El Paso	167,344	59.0	1,899	65.4	658	53.3	31,881	15.4	8,258	59.5	30,040	55.9
Hudspeth	1,003	46.8	368	58.2	42	28.6	18	27.8	14	35.7	. 152	33.6
Culberson	1,239	57.4	146	49.3	143	9.1	<b>.</b>	77	17	77	270	75.6
Jeff Davis	625	40.6	150	32.7	က	100.0	13	23.1	9	50.0	93	54.8
Presidio	1,674	67.7	253	67.0	9/	82.9	46	39.1	39	46.2	350	72.6
Brewster	3,148	39.9	149	26.8	47	17.0	103	9.7	41	24.4	783	51.5
Terrell	662	39.1	104	16.3	44	29.5	œ	/21	7	75	122	54.9
Val Verde	10,464	60.2	583	48.2	131	26.0	964	12.4	304	39.5	2,091	0.99
Kinney	808	48.9	235	48.1	6	55.6	15	46.7	19	36.8	100	7.0
Maverick	9.177	87.3	748	78.3	173	83.2	1,740	14.9	291	0.68	1,662	15.6
Webb	33,043	89.0	700	6.06	1,404	59.8	2,754	9.95	1,793	6.98	7,574	92.7
Zapata	1,704	87.6	168	80.4	266	83.1	16	31.3	12	41.7	281	90.7
Starr	7,568	96.5	1,588	98.0	342	94.2	279	47.0	144	91.0	981	98.2
Hidalgo	96,053	77.71	10,553	87.7	1,706	54.3	10,985	51.8	7,330	9.71	17,011	9.71
Cameron	71,401	72.7	3,989	73.1	609	62.4	11,453	22.8	3,820	68.5	13,520	78.0

See footnotes at end of table.

Table E-8. -- Employment by industry for 1980

California: San Diego 2 Imperial Arizona: Yuma	Total	do i coco	1.0+01		10401	
ia: al:		SPRIISII	TOTAL	Spanisn	IOCRI	Spanish
ia: egoal		Percent		Percent		Percent
al	•					
	248,990	11.3	48,732	14.0	23,812	11.0
	5,963	67.0	2,033	39.1	1,213	49.1
	7,828	19.5	2,325	23.5	1.006	20.7
	77,753	14.3	17,051	25.6	7,502	15.8
Santa Cruz	1,942	63.7	397	90.2	478	73.4
•	7,769	21.4	1,993	30.0	646	15.6
New Mexico:						
•	409	41.1	137	32.8	52	69.2
• • • • • • • • • • • • • • • • • • • •	2,379	48.8	537	23.3	195	39.0
Luna	1,019	32.2	379	32.7	227	19.8
Dona Ana	12,082	38.2	3,026	62.4	970	47.4
						•
El Paso	48,550	53.0	10,318	71.9	7,464	51.0
Hudspeth	130	40.0	75	62.7	33	36.4
Culberson	353	53.3	104	50.0	23	6.09
Jeff Davis	188	38.3	54	57.4	40	32.5
Presidio	410	8.69	121	78.5	62	59.7
Brewster	1,180	34.3	272	60.7	108	24.1
Terrell	124	38.7	21	100.0	160	34.4
Val Verde	2,870	59.8	096	77.3	483	48.2
Kinney	180	43.3	95	58.9	19	57.9
Maverick	2,370	77.3	518	88.6	219	91.8
Webb	9,112	88.9	2,422	92.4	2,439	91.3
Zapata	457	86.0	175	87.4	09	88.3
:	2,559	95.9	471	92.8	112	100.0
Hidalgo	27,938	73.5	6,237	80.4	2,688	77.6
Cameron	20,740	8.99	5,342	73.5	2,773	76.2

 $\overline{1}/$  Includes Agricultural Services, Forestry & Fisheries.  $\overline{2}/$  Not available.

Source: Bureau of the Census, 1980 Census of Population - General Social & Economic Characteristics.

Table E-9.--Market value of agricultural products sold, 1978 and 1982

	1978				1982			
			Crops, includ-				Crops, includ-	
			ing nursery	Livestock,			ing nursery	Livestock,
State and		Average	and greenhouse	poultry and		Average	and greenhouse	poultry and
county	Total	per farm	products	their products	Total	per farm	products	their products
	1,000 dollars	1,000 dollars:	1,000 dollars	1,000 dollars			1,000 dollars	1,000 dollars
California:								
San Diego	274,344	53,052	182,446	91,898	392,674	63,540	263,547	129,127
Imperial	650,671	780,118	273,745	376,926	741,820	930,766	353,458	388,363
Arizona:								
Yuma	268,542	370,915	178,652	068,68	355,361	492,872	276,186	79,175
Pima	50,134	123,483	27,891	22,243	45,141	83,749	24,313	20,828
Santa Cruz	4,306	33,121	256	4,049	4,343	32,121	378	3,965
Cochise	47,097	65,504	23,506	23,591	45,510	57,975	25,190	20,320
New Mexico:								
Hidalgo	12,899	82,156	5,492	7,406	11,476	73,566	009.4	6,876
Grant	6,610	26,334	319	6,290	5,326	21,303	129	5,197
Luna	25,645	120,969	14,688	10,957	23,656	123,852	12,845	10,811
Dona Ana	83,267	98,308	51,748	31,519	110,659	117,348	969,15	52,962
Texas:								
El Paso	51,579	135,735	18,326	33,253	47,877	105,923	23,794	24,083
Hudspeth	17,971	130,222	11,233	6,738	17,791	127,995	10,145	7,647
Culberson	6,582	90,158	2,293	4,288	6,322	90,311	1,761	4,561
Jeff Davis	7,462	109,738	179	7,283	6,959	89,213	7	7,
Presidio	51,579	75,600	3,863	6,343	19,540	142,630	4,539	15,002
Brewster	17,971	78,637	88	8,562	10,976	98,786	1/	7.
Terrell	6,582	86,789	7	6,422	7,698	99,971	\i	7,698
Val Verde	15,582	72,811	<u>6</u> 2	15,519	16,809	66,440	151	16,658
Kinney	11,236	104,036	2,294	8,942	7,595	70,325	71	7.
Maverick	36,382	191,482	2,386	33,996	48,295	274,401	3,078	45,217
Webb	26,378	59,949	4,101	22,276	22,759	53,932	5,544	17,216
Zapata	7,424	4,977	2,485	4,939	23,344	15,901	212	4,765
Starr	29,409	40,012	6,049	20,360	52,567	63,334	19,963	32,604
Hidalgo	208,838	14,267	197,904	10,933	284,780	123,281	269,308	15,472
Cameron	84,738	68,558	67,900	16,838	83,851	71,484	69,972	13,878
								•

1/ Not available.

Source: Bureau of Census, 1982 Census of Agriculture, Geographic Area Series. Bureau of Census, 1978 Census of Agriculture, Geographic Area Series.

Table E-10.--Value added by manufacture, 1977 and 1982

	1977		1982	
State and	Number of	Value ,added .	Number of	Value added
county	establishments	by manufacture	establishments	by manufacture
		Million dollars		Million dollars
California:				
San Diego	2,013	2,173.9	2,522	4,878.7
Imperial	63	46.0	51	48.4
Arizona:			•	
Yuma	62	17.2	60	35.5
Pima	406	332.7	534	1,062.4
Santa Cruz	15	<u>2</u> /	26	12.4
Cochise	47	58.2	43	43.4
New Mexico:				
Hidalgo	3	<u>1</u> /	1	<u>1</u> /
Grant	15	<u>ī</u> /	19	<u>ī</u> /
Luna	11	4.0	12	4.6
Dona Ana	59	56.1	58	81.9
Texas:				
El Paso	407	771.7	471	1,627.7
Hudspeth	<u>2</u> /	<u>2</u> /	<u>2</u> /	<u>2</u> /
Culberson	3	1/		<u>1</u> /
Jeff Davis	2/	$\frac{\overline{2}}{2}$	<u>2</u> /	<u>1</u> / <u>2</u> / <u>1</u> /
Presidio	_2	1/	_2	<u>1</u> /
Brewster	6	1/ 2/ 1/ .2	9	0.7
Terrell	1	<u>2</u> /	1	<u>1</u> /
Val Verde	16	15.7	20	20.8
Kinney	<u>2</u> /	<u>2</u> /	2/	<u>2</u> /
Maverick	14	<u>1</u> /	14	26.9
Webb	60	26.8	56	32.8
Zapata	1	<u>1</u> /	<u>2</u> /	<u>2</u> /
Starr	ī	<u>=</u> / 1/	<u>≅</u> , 4	.5
Hidalgo	169	115.2	171	211.9
Cameron	151	201.3	187	334.5
Cameron	TOT	201.3	10/	334.3

<sup>1/</sup> Withheld to avoid disclosing company proprietary data.

Source: Bureau of the Census, <u>County & City Data Book 1983</u>. Bureau of the Census, <u>1982 Census of Manufactures - Geographic Area Series</u>.

 $<sup>\</sup>frac{2}{2}$ / Not available.

Table E-11. -- Value of nonfuel mineral production, 1977 and 1982

State and county	Total 1977	Total 1982	Leading minerals produced in order of value
	1,000 dollars	1,000 dollars	
California: San Diego Imperial	$\frac{37,439}{1}$	36,366	Sand and gravel, stone, magnesium compounds. Gypsum, sand and gravel, lime.
Yuma Pima	$\frac{1}{629,607}$	$\frac{1}{579,965}$	Sand and gravel, tungsten. Copper, molybdenum, cement. Sand and gravel.
Cochise	24,141	19,856	Copper, lime, stone.
Grant	$241,916$ $\frac{1}{1}$ ,855	119,652 1,004	Copper, zinc, silver. Sand and gravel, clays, and stone. Sand and gravel, pumice, stone.
El Paso  El Paso  Hudspeth  Culberson  Jeff Davis	じょうごうぎょ	기기기기 (10 kg) (17 kg)	Cement, stone, snad and gravel.  Talc, stone, gypsum. Sulfur, talc, stone.  2/ Sand and gravel.
Brewster Terrell Val Verde Kinney	71 72 77 72	ને જો તો જો	Flour Spar, Sanu, and Bravel.  2/ Sand and gravel.
Maverick Webb Zapata	기기 21기	ભાગ જાજા	Sand and gravel. Uranium, sand and gravel, stone. 2/ Sand and gravel.
Hidalgo Cameron	$\frac{107,558}{2}$	ત્રા જા	Stone, sand and gravel. $\frac{2}{}$

1/ Withheld to avoid disclosing company proprietary data. No production reported. 3/ Not available.

Source: U.S. Bureau of Mines, 1977 Minerals Yearbook, Area Reports: Domestic. U.S. Bureau of Mines, 1982 Minerals Yearbook, Area Reports: Domestic.

Table E-12.--Selected service, number of establishments and gross receipts, 1977 and 1982

	1977		1982	
State and	Number of		Number of	ر
county	establishments	Receipts	establishments:	Receipts
		1,000 dollars		1,000 dollars
California:		•		
San Diego	16,449	1,550,019	12,884	4,357,763
Imperial	533	38,357	427	87,931
Arizona:				
Yuma	558	38,327	450	88,810
Pima	4,193	349,995	3,485	958,051
Santa Cruz	139	8,767	103	15,759
Cochise	499	20,174	310	42,218
New Mexico:				
Hidalgo	37	1,908	18	3,987
Grant	159	6,427	109	20,217
Luna	116	5,306	64	8,487
Dona Ana	598	35,488	439	120,033
Texas:				
El Paso	2,532	228,330	2,292	600,182
Hudspeth	14	350	7	315
Culberson	37	2,431	24	3,766
Jeff Davis	9	184	5	1,190
Presidio	38	794	14	758
Brewster	66	3,637	43	8,974
Terrell	11	228	3	188
Val Verde	194	8,610	148	23,370
Kinney	15	1,851	6	1,561
Maverick	97	4,886	81	11,345
Webb	462	36,758	424	107,953
Zapata	43	1,053	15	2,281
Starr	81	1,603	42	4,885
Hidalgo	1,217	83,865	20	2,476
Cameron	1,020	80,634	948	249,054

Source: Bureau of the Census, <u>County & City Data Book 1983</u>. Bureau of the Census, <u>1982 Census of Service Industries - Geographic Area Series</u>.

Table E-13.--Retail establishments and retail sales, 1977 and 1982

	1977		1982	
State and	Number of		Number of	
county	establishments	Sales	establishments	Sales
		1,000 dollars		1,000 dollars
California				•
San Diego	13,064	5,895,121	15,687	9,478,827
Imperial	757	298,941	744	423,866
Arizona:				
Yuma	723	262,034	815	427,658
Pima	3,676	1,657,817	4,500	2,593,915
Santa Cruz	215	87,184	241	132,308
Cochise	727	188,941	779	281,162
New Mexico:				
Hidalgo	87	19,030	73	28,560
Grant	237	67,755	241	94,359
Luna	164	45,850	144	64,216
Dona Ana	660	241,323	740	402,747
Texas:				
El Paso	3,224	1,356,543	3,590	2,120,722
Hudspeth	46	4,105	30	4,819
Culberson	68	12,154	59	26,405
Jeff Davis	18	1,224	17	3,161
Presidio	98	15,174	84	20,868
Brewster	107	25,236	107	35,228
Terrell	24	4,330	29	6,670
Val Verde	311	90,586	367 ·	170,732
Kinney	25	2,583	32	3,350
Maverick	242	70,842	299	142,835
Webb	922	356,179	1,057	701,337
Zapata	55	5,978	70	14,808
Starr	229	41,124	205	73,602
Hidalgo	2,131	694,716	2,363	1,352,119
Cameron	1,610	540,121	1,901	1,025,512

Source: Bureau of Census, <u>County and City Data Book 1983</u>. Bureau of the Census, <u>1982 Census of Retail Trade Geographic Area Series</u>.

Table E-14.--Wholesale trade: Number of establishments and sales in 1977 and 1982

Number of establishments Sales  1,922	T207	
### Sales  ###################################	Number of	
### ##################################	establishments	ments Sales
1,922 3,825.7 2,5  183 442.5  129 222.4  876.9  877.1  1007 377.1  118.9  682 118.8  118.9  682 1,317.5  682 1,317.5  682 2.3  140 2.3  15 12 23.2  17 137.0  18 18 18 18 18  19 17 19 18 18  19 17 19 18 18  19 19 18 18  10 10 10 10 10 10 10 10 10 10 10 10 10 1	llars	Million dollars
1,922 183 442.5 183 107 565 107 51.4 6 6 18.8 18.8 18.8 18.8 18.8 19.0 6 10.0		
129 565 107 565 377.1 69 77.1 69 876.9 77.1 69 876.9 77.1 69 876.9 77.1 18.8 18.8 18.8 18.8 18.8 18.8 18.8	2,529	7,295.8
565 565 565 565 37.1 69 37.1 682 18.8 18.8 18.8 18.8 18.8 18.8 18.8 18.8 18.8 18.8 18.9 6 1.317.5 8 2.3 2.3 2.3 2.3 2.3 37.0 40 40 37.0 40 37.0 40 37.0 40 37.0 40 37.0 40 37.0 40 37.0 40 40 40 40 40 40 40 40 40 4	202	660.7
129 565 565 565 7 7 107 107 107 107 107 118.8  26 118.8 118.9 682 11,317.5 6 10 10 10 10 10 10 10 10 10 10 10 10 10		
682 1,317.5 886.9  7. 107 377.1  10. 10. 18.8  18.8  18.8  18.8  18.8  18.8  18.8  18.9  10. 10. 10. 10. 10. 10. 10. 10. 10. 10.	134	286.7
69 37.1 6 4.6 18.8 18.8 18.8 18.8 18.8 19.8 19.8 19.8 19.9 10.0 10	715	1,433.5
69 51.4  6 4.6  18.8  18.8  18.8  18.8  18.8  18.9  6 82 1,317.5  6 9 70  17 1 18.9  18.3  18.3  19.4  19.4  19.4  19.5  19.4  19.6  19.6  19.7  19.8	126	463.0
6 4.6  18.8  18.8  18.8  18.8  18.8  18.8  18.8  18.8  18.8  18.8  18.8  18.8  18.8  19.0  2.3  2.3  2.3  2.3  2.3  3.0  40  37.0  40  37.0  39.6  760.0	89	92.0
1go       6       4.6         t       30       18.8         26       18.8         Ana       26       18.8         Ana       83       118.9         aso       682       1,317.5       8         erson       10       1//         bavis       0       2.3         idio       8       2.3         idio       15       1//         ester       15       1//         ey       0       37.0         ey       40       37.0         rick       172       183.8         rick       396       760.0         120       170.0         120       170.0         120       170.0         120       170.0         120       170.0         170       170.0         180       180.0         180       180.0         180       180.0         180       180.0         180       180.0         180       180.0         180       180.0         180		,
t	••	5.7
Ana	29	48.1
Ana 83 118.9  aso 682 1,317.5  peth 6  erson 10  bavis 10  idio 8  idio 8  idio 15  idio 2  certick 15  certick 172  ta 172  ta 172  ta 174  ta 175  ta 1760.0	22	35.3
aso 682 1,317.5 8  peth 6  erson 10  bavis 0  idio 8  idio 8  idio 2  idio 2  certair 15  certair 172  ta 172  ta 172  ta 174  ta 175  ta 176	96	195.4
682 1,317.5 8  10 10 1/  15 0 2.3  15 1/  2 2 1/  2 23.2  40 37.0  17 9.4  183.8  2 396 760.0	,	
is	846	2,830.2
is 10	4	1.5
is 0 2.3 8 2.3 15 1/ 2 23.2 6 0 37.0 17 183.8 17 9.4	•	1.5
15 1/ 2 2 1/ 6 0 0 0 0 17 40 37.0 17 9.4 18 396 760.0	2/	/7
15 1/ 2 23.2 6 0 0 0 37.0 172 183.8 17 9.4 17 760.0	9	2.9
2 23.2 6 0 0 0 17 40 37.0 17 17 183.8 17 9.4 18 9.4	17	19.3
23.2 0 0 37.0 172 183.8 3 5 17 9.4	H	)Î
0 0 0 37.0 37.0 17 9.4 17 9.4	34	65.3
3 3.0 172 183.8 3 5.0 17 9.4	15/	/2
172 183.8 3 .5 17 9.4 396 .760.0	4.2	33.6
3 .5 17 9.4 396 .760.0	200	399.1
396 .760.0	rel .	
396	21.	26.3
C C C C C C C C C C C C C C C C C C C	486	1,357.8
519.2	374	829.6

 $\frac{1}{2}$ / Withheld to avoid disclosure.  $\frac{2}{2}$ / Not available.

Source: Bureau of the Census, County & City Data Book 1983. Bureau of the Census, 1982 Census of Wholesale Trade Geographic Area Series.

Table E-15.--Local government and Federal Government expenditures, 1981-82 and fiscal year 1983  $\underline{1}$ /

(In thousands of dollars) Local (a) Federal government government expenditures Fiscal expenditures year 1983 <u>Total</u> D of D 1981-1982 State and county California: San Diego...... 8,381,828 5,187,432 2,873,459 13,327 Imperial..... 283,229 155,716 Arizona: 272,944 87,841 109,849 707,035 1,757,862 781,274 Pima....... 1,769 Santa Cruz...... 27.849 36,862 461,247 1,769 119,066 New Mexico: 8,890 364 Hidalgo...... 11,096 Grant....... 32,721 43,080 1,893 21,545 35,461 1,409 Luna........ 410,575 247,198 Dona Ana..... 134,445 Texas: 460,706 1,165,493 585,161 El Paso..... 4,202 8,067 94 Hudspeth...... 7,651 110 Culberson............. 4,913 Jeff Davis..... 1,251 3,291 164 Presidio...... 3,657 11,056 143 Brewster..... 504 7,960 14,134 1,799 6,306 53 79,404 Val Verde...... 27,486 125,158 6,934 Kinney..... 2,519 706 28,865 Maverick..... 31,610 554 Webb....... 123,598 128,445 3,882 Zapata....... 9,374 10,704 638 31,504 28,310 404 360,570 Hidalgo...... 291,934 53,025 247,218 Cameron...... 266,998 18,324

Source: (a) Bureau of the Census, <u>Census of Governments 1982 - Compendium of Government Finances</u>. (b) Bureau of the Census, <u>Consolidated Federal Funds</u>
Report Fiscal Year 1983.

<sup>1/</sup> Fiscal year is from Oct. 1 to Sept. 30.

Table E-16.--Population by Mexican municipio

Area	1980	Change, 1980 over 1970
	1,00	0,01 1,10
Baja California:		•
Ensendada	175,425	52.0
Tijuana	461,257	16.4
Tecate	30,540	68.8
Mexicali	510,664	49.9
Sonora:		
San Luis Rio Colorado	92,790	46.2
Puerto Penasco	26,755	115.1
Caborca	50,452	74.1
Altar	6,029	55.1
Saric	2,250	-3.1
Nogales	68,076	27.3
Santa Cruz	1,587	-3.1
Cananea	25,327	18.8
Naco	4,441	5.7
Agua Prieta	34,380	47.7
Chihuahua:	.,	
Janos	8,906	26.7
Ascenscion	11,985	28.6
Ciudad Juarez	567,365	33.8
Guadalupe	8,876	<b>-7.5</b>
P.G. Guerrero	7,777	-2.2
Ojinaga	26,421	3.4
Ocampo		47.8
Coahuila:	7,590	47.0
Acuna	41,948	29.1
	8,636	2.3
Jimenez	•	71.9
Piedras Negras	80,290	-12.6
Guerrero	2,316	
Hidalgo	751	21.3
Nuevo Leon (Anahuac)	16,479	23.5
Tamaulipas: Nuevo Laredo	202 204	34.4
	203,286	
Guerrero	4,191	1.4
Mier	6,382 19,600	3.0 7.6
Miguel Aleman	▼	
Camargo	16,014	3.9
Reynosa	211,412	40.2 17.0
Rio Bravo	83,522	
Valle Hermoso	48,343	14.3
Matamoros	238,840	28.3
Total	3,110,903	32.2

Source: James Peach, <u>Demographic and Economic Change in Mexico's Northern</u> Frontier: Evidence from the X Censo General de Poblacion y Vivienda, New Mexico State University, 1984.

Table E-17.--The economically active population of the Mexican border cities, 1980

Area	Economically active population 12 years old and older
Dais Galifornia	
Baja California: Ensendada	60,372
	•
Tijuana	162,064
Tecate	10,168
Mexicali	170,675
Sonora:	00 000
San Luis Rio Colorado	28,202
Puerto Penasco	8,247
Caborca	16,498
Altar	1,996
Saric	703
Nogales	26,060
Santa Cruz	513
Cananea	7,525
Naco	1,351
Agua Prieta	13,124
Chihuahua:	
Janos	2,917
Ascenscion	3,962
Ciudad Juarez	206,868
Guadalupe	2,456
P.G. Guerrero	2,506
Ojinaga	8,247
Ocampo	2,281
Coahuila:	
Acuna	14,599
Jimenez	2,958
Piedras Negras	26,345
Guerrero	732
Hidalgo	290
Nuevo Leon (Anahuac)	5,291
Tamaulipas:	,
Nuevo Laredo	64,892
Guerrero	1,304
Mier	1,895
Miguel Aleman	6,364
Camargo	4,988
Reynosa	68,069
Rio Bravo	26,399
Valle Hermoso	14,953
Matamoros	86,470
Total	1,062,284
	~, ~~, ~~

Source: James Peach, <u>Demographic and Economic Change in Mexico's Northern Frontier: Evidence from the X Censo General de Poblacion y Vivienda</u>, New Mexico State University, 1984.

Table E-18.--Mexican economically active population engaged in griculture and manufacturing, 1980

æ		Percent of total	Manufac-	Percent of total Manufac-
Area	Agriculture	agriculture	turing	turing
Baja California:				
Ensendada	9,149	15.2	6,274	10.4
Tijuana	5,095	3.1	27,075	16.7
Tecate	962	9.5	2,066	20.3
Mexicali	22,974	13.5	19,283	11.3
Sonora:	<b>C2, 7</b> · · ·		,	
San Luis Rio Colorado	5,879	20.8	2,498	8.9
Puerto Penasco	1,885	22.9	690	8.4
Caborca	4,959	30.1	1,043	6.3
Altar	925	46.3	123	6.2
Saric	275	39.1	100	14.2
Nogales	608	2.3	6,527	25.0
Santa Cruz	302	58.9	9	1.8
Cananea	558	7.4	650	8.6
Naco	210	15.5	157	11.6
Agua Prieta	939	7.2	3,682	28.1
Chihuahua:			•	
Janos	1,789	61.3	63	2.2
Ascenscion	1,584	40.0	230	5.8
Ciudad Juarez	6,366	3.1	44,586	21.6
Guadalupe	1,480	60.3	179	7.3
P.G. Guerrero	1,093	43.6	78	3.1
Ojinaga	2,555	31.0	392	4.8
Ocampo	971	42.6	223	9.8
Coahuila:				
Acuna	1,578	10.8	2,669	18.3
Jimenez	1,580	53.4	109	3.7
Piedras Negras	1,180	4.5	4,061	15.4
Guerrero	407	55.6	50	6.8
Hidalgo	169	58.3	11	3.8
Nuevo Leon (Anahuac)	2,324	43.9	234	4.4
Tamaulipas:	2,524	40.7	204	~ • •
Nuevo Laredo	2,403	3.7	8,582	13.2
Guerrero	592	45.4	77	5.9
Mier	349	18.4	152	8.0
Miguel Aleman	1,283	20.2	613	9.6
Camargo	1,717	34.4	450	9.0
Reynosa	4,650	6.8	10,617	15.6
Rio Bravo	6,944	26.3	2,353	8.9
Valle Hermoso	3,975	26.6	982	6.6
	34373	~~.~	, , ,	J. J
Matamoros	9,517	11.0	15,317	17.7

Source: James Peach, <u>Demographic and Economic Change in Mexico's Northern</u>
<u>Frontier: Evidence from the X Censo General de Poblacion y Vivienda</u>, New
<u>Mexico State University</u>, 1984.

Table E-19.--Index of estimates of per capita income for the Mexican border municipalities, 1980

Baja California: Ensendada	Area	Index of per capita income 1/
Ensendada       152.6         Tijuana       150.5         Tecate       207.0         Mexicali       153.2         Sonora:       153.2         Sonora:       124.5         Puerto Penasco       142.9         Caborca       117.9         Altar       117.2         Saric       64.7         Nogales       161.6         Santa Cruz       61.0         Cananea       166.6         Naco       105.8         Agua Prieta       143.0         Chihuahua:       105.8         Janos       51.4         Ascenscion       74.5         Ciudad Juarez       129.0         Guadalupe       66.7         P.G. Guerrero       68.0         Ojinaga       75.4         Ocampo       51.7         Coahuila:       120.2         Jimenez       54.2         Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Muevo Laredo       119.4         Guerrero		
Tijuana 150.5 Tecate 207.0 Mexicali 153.2 Sonora:  San Luis Rio Colorado 124.5 Puerto Penasco 142.9 Caborca 117.9 Altar 117.2 Saric 64.7 Nogales 161.6 Santa Cruz 61.0 Cananea 166.6 Naco 105.8 Agua Prieta 143.0 Chihuahua:  Janos 51.4 Ascenscion 74.5 Ciudad Juarez 129.0 Guadalupe 66.7 P.G. Guerrero 68.0 Ojinaga 75.4 Ocampo 51.7 Coahuila: Acuna 120.2 Jimenez 54.2 Piedras Negras 141.0 Guerrero 55.1 Codeuria 120.2 Jimenez 54.2 Piedras Negras 141.0 Guerrero 65.5 Hidalgo 130.8 Nuevo Leon (Anahuac) 83.4 Tamaulipas: Nuevo Laredo 119.4 Guerrero 121.5 Mier 104.4 Miguel Aleman 117.8 Camargo 85.1 Reynosa 143.7 Rio Bravo 93.2	Baja California:	
Tecate. 207.0 Mexicali 153.2 Sonora:		
Mexicali     153.2       Sonora:     124.5       Puerto Penasco     142.9       Caborca     117.9       Altar     117.2       Saric     64.7       Nogales     161.6       Santa Cruz     61.0       Cananea     166.6       Naco     105.8       Agua Prieta     143.0       Chihuahua:     1       Janos     51.4       Ascenscion     74.5       Ciudad Juarez     129.0       Guadalupe     66.7       P.G. Guerrero     68.0       Ojinaga     75.4       Ocampo     51.7       Coahuila:     120.2       Jimenez     54.2       Piedras Negras     141.0       Guerrero     65.5       Hidalgo     130.8       Nuevo Leon (Anahuac)     83.4       Tamaulipas:     Nuevo Laredo     119.4       Muerrero     121.5       Mier     104.4       Miyuel Aleman     117.8       Camargo     85.1       Reynosa     143.7       Rio Bravo     87.1       Valle Hermoso     93.2	•	
Sonora:       124.5         Puerto Penasco.       142.9         Caborca.       117.9         Altar.       117.2         Saric.       64.7         Nogales.       161.6         Sants Cruz.       61.0         Cananea.       166.6         Naco.       105.8         Agua Prieta.       143.0         Chihuahua:       143.0         Janos.       51.4         Ascenscion.       74.5         Ciudad Juarez.       129.0         Guadalupe       66.7         P.G. Guerrero.       68.0         Ojinaga.       75.4         Ocampo.       51.7         Coahuila:       120.2         Jimenez.       54.2         Piedras Negras.       141.0         Guerrero.       65.5         Hidalgo.       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       19.4         Suerrero.       121.5         Mier.       104.4         Miguel Aleman       117.8         Camargo.       85.1         Reynosa       143.7         Rio Bravo.       87.1		<del>-</del> - · · ·
San Luis Rio Colorado       124.5         Puerto Penasco       142.9         Caborca       117.9         Altar       117.2         Saric       64.7         Nogales       161.6         Santa Cruz       61.0         Cananea       166.6         Naco       105.8         Agua Prieta       143.0         Chihuahua:       143.0         Janos       51.4         Ascenscion       74.5         Ciudad Juarez       129.0         Guadalupe       66.7         P.G. Guerrero       68.0         Ojinaga       75.4         Ocampo       51.7         Coahuila:       120.2         Jimenez       54.2         Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       141.0         Muero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle H	Mexicali	153.2
Puerto Penasco     142.9       Caborca     117.9       Altar     117.2       Saric     64.7       Nogales     161.6       Santa Cruz     61.0       Cananea     166.6       Naco     105.8       Agua Prieta     143.0       Chihuahua     143.0       Janos     51.4       Ascenscion     74.5       Ciudad Juarez     129.0       Guadalupe     66.7       P.G. Guerrero     68.0       Ojinaga     75.4       Ocampo     51.7       Coahuila:     120.2       Jimenez     54.2       Piedras Negras     141.0       Guerrero     65.5       Hidalgo     130.8       Nuevo Leon (Anahuac)     83.4       Tamaulipas:     19.4       Muerrero     121.5       Mier     104.4       Mier     104.4       Miguel Aleman     117.8       Camargo     85.1       Reynosa     143.7       Rio Bravo     87.1       Valle Hermoso     93.2	Sonora:	•
Caborca       117.9         Altar       117.2         Saric       64.7         Nogales       161.6         Santa Cruz       61.0         Cananea       166.6         Naco       105.8         Agua Prieta       143.0         Chihuahua:       143.0         Chihuahua:       51.4         Ascenscion       74.5         Ciudad Juarez       129.0         Guadalupe       66.7         P.G. Guerrero       68.0         Ojinaga       75.4         Ocampo       51.7         Coahuila:       120.2         Acuna       120.2         Jimenez       54.2         Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	<del></del>	
Altar. 117.2 Saric 64.7 Nogales 161.6 Santa Cruz 61.0 Cananea 166.6 Naco 105.8 Agua Prieta 143.0 Chihuahua:  Janos 51.4 Ascenscion 74.5 Ciudad Juarez 129.0 Guadalupe 66.7 P.G. Guerrero 68.0 Ojinaga 75.4 Ocampo 51.7 Coahuila: Acuna 120.2 Jimenez 54.2 Piedras Negras 141.0 Guerrerc 65.5 Hidalgo 130.8 Nuevo Leon (Anahuac) 83.4 Tamaulipas: Nuevo Laredo 119.4 Guerrero 121.5 Mier 104.4 Miguel Aleman 117.8 Camargo 85.1 Reynosa 143.7 Rio Bravo 93.2		<del>-</del>
Saric.       64.7         Nogales.       161.6         Santa Cruz.       61.0         Cananea.       166.6         Naco.       105.8         Agua Prieta.       143.0         Chihushua:       143.0         Janos.       51.4         Ascenscion.       74.5         Ciudad Juarez.       129.0         Guadalupe.       66.7         P.G. Guerrero.       68.0         Ojinaga.       75.4         Ocampo.       51.7         Coahuila:       120.2         Acuna.       120.2         Jimenez.       54.2         Piedras Negras.       141.0         Guerrero.       65.5         Hidalgo.       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       19.4         Muevo Laredo       119.4         Guerrero.       121.5         Mier.       104.4         Miguel Aleman.       117.8         Camargo.       85.1         Reynosa.       143.7         Rio Bravo.       87.1         Valle Hermoso.       93.2	Caborca	
Nogales       161.6         Santa Cruz       61.0         Cananea       166.6         Naco       105.8         Agua Prieta       143.0         Chihuahua:       143.0         Janos       51.4         Ascenscion       74.5         Ciudad Juarez       129.0         Guadalupe       66.7         P.G. Guerrero       68.0         Ojinaga       75.4         Ocampo       51.7         Coahuila:       120.2         Acuna       120.2         Jimenez       54.2         Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       Nuevo Laredo         Nuevo Laredo       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Altar	
Santa Cruz.       61.0         Cananea.       166.6         Naco.       105.8         Agua Prieta.       143.0         Chihuahua:	Saric	
Cananea       166.6         Naco.       105.8         Agua Prieta       143.0         Chihuahua:       143.0         Janos.       51.4         Ascenscion       74.5         Ciudad Juarez       129.0         Guadalupe       66.7         P.G. Guerrero       68.0         Ojinaga       75.4         Ocampo       51.7         Coahuila:       120.2         Acuna       120.2         Jimenez       54.2         Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Muevo Laredo       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Nogales	161.6
Naco       105.8         Agua Prieta       143.0         Chihuahua:       13.0         Janos       51.4         Ascenscion       74.5         Ciudad Juarez       129.0         Guadalupe       66.7         P.G. Guerrero       68.0         Ojinaga       75.4         Ocampo       51.7         Coahuila:       2         Acuna       120.2         Jimenez       54.2         Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       108.4         Nuevo Laredo       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Santa Cruz	
Agua Prieta	Cananea	166.6
Chihuahua:       51.4         Janos.       51.4         Ascenscion.       74.5         Ciudad Juarez.       129.0         Guadalupe.       66.7         P.G. Guerrero.       68.0         Ojinaga.       75.4         Ocampo.       51.7         Coahuila:       120.2         Acuna.       120.2         Jimenez.       54.2         Piedras Negras.       141.0         Guerrero.       65.5         Hidalgo.       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       19.4         Guerrero.       121.5         Mier.       104.4         Miguel Aleman.       117.8         Camargo.       85.1         Reynosa.       143.7         Rio Bravo.       87.1         Valle Hermoso.       93.2	Naco	
Janos       51.4         Ascenscion       74.5         Ciudad Juarez       129.0         Guadalupe       66.7         P.G. Guerrero       68.0         Ojinaga       75.4         Ocampo       51.7         Coahuila:       120.2         Acuna       120.2         Jimenez       54.2         Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Agua Prieta	143.0
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Ciudad Juarez       129.0         Guadalupe       66.7         P.G. Guerrero       68.0         Ojinaga       75.4         Ocampo       51.7         Coahuila:       120.2         Acuna       120.2         Jimenez       54.2         Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Janos	51.4
Guadalupe       66.7         P.G. Guerrero       68.0         Ojinaga       75.4         Ocampo       51.7         Coahuila:       120.2         Acuna       120.2         Jimenez       54.2         Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Ascenscion	74.5
P.G. Guerrero       68.0         Ojinaga       75.4         Ocampo       51.7         Coahuila:       120.2         Acuna       120.2         Jimenez       54.2         Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Ciudad Juarez	129.0
Ojinaga       75.4         Ocampo       51.7         Coahuila:       120.2         Acuna       120.2         Jimenez       54.2         Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Guadalupe	66.7
Ocampo       51.7         Coahuila:       120.2         Acuna       120.2         Jimenez       54.2         Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	P.G. Guerrero	68.0
Coahuila:       120.2         Acuna	Ojinaga	75.4
Acuna.       120.2         Jimenez.       54.2         Piedras Negras.       141.0         Guerrero.       65.5         Hidalgo.       130.8         Nuevo Leon (Anahuac).       83.4         Tamaulipas:       119.4         Guerrero.       121.5         Mier.       104.4         Miguel Aleman.       117.8         Camargo.       85.1         Reynosa.       143.7         Rio Bravo.       87.1         Valle Hermoso.       93.2	Ocampo	51.7
Jimenez.       54.2         Piedras Negras.       141.0         Guerrero.       65.5         Hidalgo.       130.8         Nuevo Leon (Anahuac).       83.4         Tamaulipas:       119.4         Guerrero.       121.5         Mier.       104.4         Miguel Aleman.       117.8         Camargo.       85.1         Reynosa.       143.7         Rio Bravo.       87.1         Valle Hermoso.       93.2	Coahuila:	
Piedras Negras       141.0         Guerrero       65.5         Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Acuna	120.2
Guerrero.       65.5         Hidalgo.       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Guerrero.       121.5         Mier.       104.4         Miguel Aleman.       117.8         Camargo.       85.1         Reynosa.       143.7         Rio Bravo.       87.1         Valle Hermoso.       93.2	Jimenez	54.2
Hidalgo       130.8         Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Piedras Negras	141.0
Nuevo Leon (Anahuac)       83.4         Tamaulipas:       119.4         Suerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Guerrero	65.5
Tamaulipas:       119.4         Guerrero	Hidalgo	130.8
Nuevo Laredo       119.4         Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Nuevo Leon (Anahuac)	83.4
Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Tamaulipas:	
Guerrero       121.5         Mier       104.4         Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2	Nuevo Laredo	119.4
Mier	•	121.5
Miguel Aleman       117.8         Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2		
Camargo       85.1         Reynosa       143.7         Rio Bravo       87.1         Valle Hermoso       93.2		117.8
Reynosa		
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Valle Hermoso 93.2	· · · · · · · · · · · · · · · · · · ·	
• • • • • • • • • • • • • • • • • • • •	•	93.2
MALAMUTUS 130.3	Matamcros	136.3

 $<sup>\</sup>underline{1}$ / The base of the index (100) was for the Mexican national average of per capita income.

Source: James Peach, <u>Demographic and Economic Change in Mexico's Northern Frontier: Evidence from the X Censo General de Poblacion y Vivienda</u>, New Mexico State University, 1984.

Table E-20.--Education for population 12 years old and older for the 10 largest Mexican border cities, 1980

	Population	With some	Percent
	12 years old	secondary	of total
Border city	and older	education	Population
Ensendada	119,050	42,616	35.8
Tijuana	308,721	98,419	31.9
Mexicali	344,146	127,795	37.1
San Luis Rio Colorado	59,777	16,810	28.1
Nogales	45,321	16,093	35.5
Ciudad Juarez	384,015	110,256	28.7
Piedras Negras	53,872	17,224	32.0
Nuevo Laredo	134,806	40,663	30.2
Reynosa	140,122	41,379	29.5
Matamoros	159,793	47,977	30.0

<sup>1/</sup> The percentage of the total national population 12 years old and older with some secondary education was 25.3 percent.

Source: James Peach, <u>Demographic and Economic Change in Mexico's Northern</u>
<u>Frontier: Evidence from the X Censo General de Poblacion y Vivienda</u>, New
<u>Mexico State University</u>, 1984.

## APPENDIX F DEFINITION OF TERMS

Consumption-free zone. In a consumption-free zone, consumers are able to purchase commodities at world prices, i.e., free of tariffs, excise taxes, and quantitative restrictions. Examples of such zones are limited to duty free shops at airports and the "free zones" (zona libre) that have existed at various times in States of northern Mexico.

Production-free zone. In a production-free zone, producers are able to purchase commodities at world prices, i.e., free of tariffs, excise taxes, and quantitative restrictions. For example, producers can import foreign articles duty free into the host country; engage in some processing, manufacturing or storage; and then reexport the product to foreign countries or the host country. Duties are paid on the transformed product only when it enters the customs territory of the importing country. These zones differ in terms of the activity that is allowed within the zone and with respect to their size. Often they are located near ports of entry in a relatively small, enclosed, and isolated area. In developing countries, the zones may be large areas in which the governments have made substantial expenditures on infrastructure and provide generous subsidies. Other names for production-free zone are export-processing zone, free-trade zone, foreign-trade zone (the United States), manufacturing zone, or if it consists only of a warehouse, "bonded" warehouse.

If has often been proposed that a production-free zone be created along the U.S.-Mexico border. Although the concept may not be technically clear to the proponents, most individuals probably have in mind the creation of either a free-trade area (discussed in the next section) or a combination of a production-free zone with a consumption-free zone. In the latter case (which is the more likely meaning), all import and export products regardless of origin would be sold at world prices (duty free) within the zone. Thus, U.S. and Mexican goods produced outside or inside the zone, as well as goods from third countries, would sell duty free anywhere within the zone. However, U.S. goods produced in the zone would be treated as foreign articles if sold in the nonzone region of the United States.

Free-trade area (association). A free-trade area is formed when certain member countries agree to eliminate tariffs and other nontariff trade barriers among themselves, but maintain separate tariff schedules in trade with countries that are outside the free-trade area. Generally, the free-trade area applies to the entire customs territory of each nation. It could, under very extreme circumstances, apply to zones within participant countries. For example, it has been proposed that the United States and Mexico establish a free-trade area limited to the United States-Mexico border. Under such an arrangement, goods produced within the zone in one country would enter duty free into the other country's zone. However, duties or tariffs would be applied to goods produced within the zone if the product were exported into the customs territory of either country. In other words, all zone products would be treated as foreign articles. For instance, goods produced in El Paso (a city within the zone) would be treated as foreign articles if sold in Chicago or Mexico City, two cities outside the zone. Thus, the creation of a free-trade area between two countries has the effect of creating three separate customs territories. In addition, there is some uncertainty as to how certain commodities would be treated under the

limited free-trade area. Specifically, it is not clear how a product produced in the nonzone area of a member country would be treated if sold in the other member's zone. Would an article produced in Chicago pay Mexican duties if imported into the Mexican side of the zone? Also, it is not clear how goods produced by third countries would be treated when entering the zone. In all likelihood, the host country's tariff schedule would apply.

Customs union. A customs union is similar to a free-trade area, except that member countries adopt a common tariff schedule for products imported from nonmember countries. For example, if the United States and Mexico formed a customs union, they would eliminate all tariffs and duties for goods traded among each other and adopt a uniform tariff schedule on goods imported from the rest of the world.

Coproduction zone. H.R. 3199, the United States-Mexico Border Revitalization Act, provides for the establishment of a coproduction zone between the United States and Mexico. In contrast to the concepts described above, this bill would create a free-trade area between the United States and Mexico that is limited to the products of firms that satisfy two restrictions:

- i. firms must be located within an area 200 miles on either side of the United States-Mexico border.
- 11. firms must be U.S.-Mexican joint ventures (at least 35 percent of the firm's equity must be owned by nationals of the host country).

Thus, a U.S. firm that satisfied these restrictions, an "eligible" firm, could sell its final product in Mexico duty free or purchase inputs produced by eligible firms located in Mexico duty free. In addition to trade incentives, the eligible firms would qualify for a number of tax incentives. During the hearings the coproduction zone proposal was often confused with a free-trade area limited to the border area.

Note that the same product produced by another U.S. firm, located within the zone but with less than 35 percent Mexican participation or alternatively located in Chicago, would be assessed a duty when exported to Mexico. Such a firm would also be required to pay a duty when importing the same input from Mexico.

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APPENDIX G

MAQUILADORAS

Three types of information on maquiladoras are provided in this appendix. First, listed are the specific products, which, according to the Instituto Mexicano de Comercio Exterior, the maquiladora plants have a significant comparative advantage. Second, provided is detailed information on maquiladora operations. Third, listed are the maquildoras known to the Commission.

## No. Product description

- 1 Brassieres, manmade fiber, lace net or ornamented
- 2 Men's and boys' cotton knit shirts, not ornamented
- 3 Men's and boys' cotton coats, not knit, over \$4 each, not ornamented
- 4 Men's other cotton knit pajamas, over \$1.50 per suit, not ornamented
- 5 Men's cotton sport shirts, yarn dyed, not knit, not ornamented
- 6 Boys' trousers and slacks, cotton corduroy, not knit, not ornamented
- 7 Men's and boys' manmade fiber dress shirts, yarn dyed, not knit, not ornamented
- 8 Men's and boys' other manmade fiber dress shirts, not knit, not ornamented
- 9 Men's and boys' shorts, outer, man-made fiber, not knit, not ornamented
- 10 Women's cotton blouses, not knit lace, net, or ornamented
- 11 Women's other cotton trousers and slacks, not knit, lace net or ornamented
- 12 Infants' dresses, not knit, manmade fiber, lace net or ornamented
- 13 Women's other cotton blouses, not knit, not ornamented
- Women's other trousers and slacks, including brush denim, not knit, not ornamented.
- 15 Women's cotton trousers, slacks, etc. C-Roy not knit, ornamented
- Women's, girls', and infants' wool suits, not knit, not ornamented, over \$4 per pound
- Woman's other shirts, manmade fiber, not ornamented
- 18 Women's other manmade fiber coats, not knit, not ornamented
- 19 Sewing machines
- 20 Accounting, computing, and other data processing machines
- 21 Data processing machines
- 22 Parts of calculating machines
- 23 Parts of automatic data processing machines
- 24 Parts of office machines
- 25 Radio-tape players, battery-operated
- 26 Radio-phonograph-tape player combination
- 27 Transformers rated at less than 40 kva
- 28 Rectifiers and rectifying apparatus
- 29 Coils and inductors
- 30 Electric flatirons
- 31 Electric hair dryers
- 32 Audiofrequency electric amplifiers

## No. Product description -- Continued 33 Parts for television cameras Television receivers, 12 inches and under, monochrome screen .34 35 Television receivers, 19 inches and over, monochrome screen Television receivers, 10 inches and under, color screen 36 37 Main PC, BD with special comp for color TV's w/o chassis frame 38 Main printed-circuit boards for color TV's 39 Tuners for television receivers 40 Antennas for television receivers 41 Deflection yokes, convergence assemblies, flybacks, focus coils and degaussing coils. 42 Parts and subassemblies of television receivers 43 TV apparatus, converters, preamplifiers, and parts for cable TV 44 Digital clock radios, sol S, FM and AM/FM 45 Radio receivers, solid state, except AM, including clock or time, except digital 46 Radio receivers, solid state broadcast band 47 Broadcast band radios, capable of receiving other bands 48 Radio apparatus and parts 49 Telephone answering machines, office type, except battery-operated 50 Tape recorders, audio, cassette-type, except stereo 51 Parts for tape recorders, dictaphones, recording and transcribing 52 TV combinations, black and white, with 6-inch screen or under 53 Radio-tape recorders, cassette-type 54 Radio-phonograph-tape recorders, portable, cassette-type, stereo 55 Indicator panels, light-emitting diode type 56 Electric-signaling devices 57 Fixed capacitors, ceramic, chips 58 Fixed capacitors, paper or film, less than 2 microfarads 59 Fixed capacitors, mica 60 Relays with contacts, rated at less than 10 amps 61 Switches, certain electrical 62 Other electrical apparatus for making or breaking electrical circuits and parts 63 Fixed resistors, film, w/leads, except resistor networks 64 Resistors, fixed, wirewound 65 Light-emitting diode lamps 66 Electronic receiving tubes 67 Transistors 68 Photosensitive diodes and rectifiers, except solar cells 69 Thyristors 70 Diodes and rectifiers 71 Monolithic integrated circuits, linear 72 Bipolar monolithic integrated circuit memories 73 Emitter Coupled Logic bipolar monolithic integrated circuits, except memories 74 MOS random access memories

- 75 MOS memories, except random access
- 76 Microprocess, mos
- 77 Integrated circuits
- 78 Chips, dice, and wafers, as parts or semiconductors

### Product description -- Continued <u>No</u> . 79 SPF, of electronic crystal components Insulated electrical conductors with fitting 80 81 Electrical articles and electrical parts of articles 82 Ferrite core memories Pleasure boats, internal combustion engine, inboard-powered, valued over 83 \$15,000 84 Pleasure boats, sail-propelled, over 12 feet, valued over \$15,000 85 Footwear, athletic, leather, for men, youths and boys Boots, including hunting boots, with over 90% rubber or plastic exterior 86 87 Footwear, except soft sole, vinyl uppers, for men 88 Billfolds, letter cases and other flat goods made of leather 89 Handbags mand of plastic materials Watches and 7 jewels, metal case, with or without balance wheel and 90 hairspring 91 Clocks and watch movements and cases 92 Still camera parts, except parts with lens 93 Magnetic recording media, computer tape, unrecorded 94 Bicycles, with 11 to 19 inch wheels 95 Dice and chessmen 96 Video games and parts thereof 97 Game machines, and parts of game machines Scale model railroad, stock, equipment, and parts 98 99 Dolls (except stuffed), up to 13 inches, with or without apparel 100 Stuffed dolls, with or without apparel 101 Toy musical instruments 102 Toys of rubber or plastics, noninflatable 103 Toys not having a spring mechanism, except kites

# MADUILADDAR ESTABLISHMENTS

PRODUCT (S)	SENICONDUCTERS	SNDRKLING SUITS	MARINE PETROLEUM FLATFORMS	SUBSYSTEMS OF 10,20,30 ME, w-net	ENVELOPES, FOLDERS	MEN'S, WOMEN'S, E CHILDREN'S CLOTHINE	SUBASSEERBLIES, ELECTRICAL & MECHANICAL PARTS FOR THE AVIATION INDUSTRY	INDUSTRIAL CONTROLS	EERUTY SALCK FURKITUSE	DISPLAY FIXTURES	BRASS FIXTURES FOR LAVATORIES	TABLES, CHAIRS, BANKS, SAKS	
<b>.</b> :	¥		S	0 CA			eg.	CA	3	5	<b>5</b>		5
¥ !!	BALLAS		WALNUT CREEK	SAN DIEGO			CALEXICO	CALEXICO	CALEXICO	CRENCE	CKLENICO		CRESCENT
FREENT	Texas Instruments, Inc.	(100% MEXICAN DRNED)	B.6. DFFSHORE CONSTRUCTORS, INC	DIBITAL Development Corp.	NAGNANU .	(100% MEXICAN Daned)	COMPONENTES DEL Atre	ENERMEX	BELVEDERE COMPANY	FAERICANTES DE EXKIBIDDRES MET	NOREIS Industries, Inc.	(CHCN2HO)	SACRAHENTO VALLEY MOLDING CO.
STATE EMPLOYEY	asuasal Jentes	BAJA Cal iporia Norte	BAJA California Norte	BAJÁ California . Noete	BAJA California Norte	brja Cre ipspria Note	BAJA Celifornia Norte	SATA Califorkia Noste	BAJA Celifornia Norte	FAJA Cal ifornia Noste	BFJA California Koste	BATA Califorata Noste	BRJA California
Y113	ABUASCAL IENTES ASI 20250	ENSEKADA 22600 BA. CAI	ENSENADA 22600 BA. CA NGI	ENSENADA 22800 BA. CA.	ENSENADA 22600 BA CA NO	ENSENALA 22806 BA CK NO	MEXICALI 21600 BA Cr	MEXICALI 2:100 SA CA NG	MEXICALI 21100 BA CA NO	#EXICAL] 21100 F5 CA	MEXICALI 21106 BA CA RO	MENICALI 21100 BA CA NC	PEXICALI 21190 BE
F184	TEXAS INSTRUMENTS DE MEXICO	CAL-MAR	805 FACIFIC	DIGITAL DATA DE Mexico	FABRICA ENSAMBLADJRA De papel	RDFA DE BAJA	COMPONENTES DEL AIRE	EKERNEY	ENSAMBLES DE SILLEPIA MEXICANA	FARRICANTES DE Evhis Iddres Metalicos	INDUSTRIAS NOSRIS	MAGUILA V FARKICACIÓN DE MUEBLES	KOLDURKS LABRADAS
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# MAEUILADGPA ESTABLISHMENTS

				PRINTED CIRCUIT SPECS., P.C. BOARD STUFFING, ELECTROMECHANICAL ASSEMBLY, HARMEISES, CABLES, Testiys	ARTICLES, SOCR LOCKS	6 POTENCIONETERS, HYBRID CIRCUITS	R TAFE			SEMBLY			
(5) 1202026	INSULATION BLANKETS FOR AIRCEAFT	PLASTIC GALLON CONTAINERS		PRINTED CIRCUIT SPECS., P.C. BOARI TESTINS	FGLISHING & ASSEMBLY OF PLUMBING ARTICLES, SOCR LOCKS	PRECISION POTENCIONETERS, TRINNING POTENCIONETERS, HYBRID CIRCUITS	CASSETTES, B IRACK TAPES, CCMPUTER TAPE	3AS TURBINE REPAIR	INTEGRATED CIRCUIT SOARD ASSEMBLY	RECHARGEABLE LEAD ACID BATTERY AGSEMBLY	METAL TRANSFORMATION	SOLOR ENERGY SEMERATOR CASING	TENNIS AADUETS
<b>31.</b>	5	5	24	5		5	3	5	5	5			<b>5</b>
E	CALEXICO	CALEXICO	TUCSON	CALEXICO		CALEXICO	SEVERLY HILLS	SARDENA	CALEXICO	HANTHORRE			CALEXICO
PARENT FIRM	PLACAS ELECTROMICAS	FLASTI-SNVASES DE BAJA CALIFGRAIA	AIRESEARCH Aviation Company	ASSEMBLY OF MEXICO	(UNKNOWN)	dr::::::::::::::::::::::::::::::::::::	CERTRON CORPORATION	CHROMIZINS COMPANY	CINSA ELECTRONICS INC.	EL FOWER Corporation	(UNKNEHN)	(UNKNOWN)	3rafahex Internagional
NUMBER ENCLOSES											•		•
STATE	BAJA California Norte	Baja Cal Ipdenia Norte	9aja California Morte	BAJA Cal Ifornia Norte	BAJA . CALIFORNIA NORTE	BAJA California Norte	Baja California Norie	BAJA California Norte	BAJA California Norte	Baja California Norte	Baja California Morte	3AJA California Norte	BAJA Cal Ifornia Morte
¥113	MEXICALI 21169	MEXICALI 21190	MEXICALI 21190	MEXICALI 21210	MEXICALI 21210	NEXICALE 21210	MEXICALI 21210	MENICALI 21210	MEXICALI 21210	REXIGALI 21210	NEXIGALI 21210	MEXICALI 21210	MEXICALI 21210
200 H	PLACAS ELECTROMICAS	PLASTI-ENVASES DE BAJA CALIFORNIA	(UNKNOWN)	ASSEMBLY OF MEXICO	ARMONEX	310016	CERTRON AUDIO	CHRCHIZING	CIRCUITOS INTERMÉCICNALES DE 9aja califípaia	EL PCAER	EXPORPARTES	FOTO VOLTA DE MEXICO	GRAFAMEX Internacional
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PRODUCT (S)	WINDSHIELDS	ALUMINIUM DOOR & WINGON RUNNERS	GOLF BAGS	PRINTED CIRCUIT BOARDS, HARNESSES	60LF CLUB BA6S	FOLISHING OF METAL PRODUCTS	DISPOSABLE FLASTIC & RUBBER HOSFITAL FRODUCTS		TUNGSTEN CARRIDE TOOLS	PILLOK COVERS FOR ATRELANE CAPINS	AUTOMOETLE CUSTOMIZING	SENTONTUCTOR ASSERBLY	FASFINS MACHINES
ST.	5	<b>5</b> 3	¥	5		5	5	જ	3			5	
VIII I	CALEXICO	CALEXIED .	DELEVAN	CALEXICO		CALEXICO	CALEXICO	CALEXICG	CALEXICO			CALEXICO	
PAGENT FIRM	L 188Y-DWENS-FORD Confany	MANUFACTURAS ELCO	AJAY ENTERPRISES CORPORATION	PRINTRONIX, INC.	(UNEXDONE)	FRADUCTOS Recreptivos	american Pharmaseri	TECNOLOGIA Internacional	VALENITE-HEXICKLI	(CANCAGAN)	(DN:NDKH)	RECKNELL International	(DEGNORIO)
NUMBER Erflöved +			•						,				
51476	Baja California	BAJA California Norte	BAJA California Noste	Baja California Njate	BAJA Cal iforkia NDSTE	6438 Californa Note	Baja California Noste	54.14 California Norte	BATE CALIFORNIE NORTE	baja California Ngaye	Brja California Nopte	Baja Calipornia Nolte	E4.1A Cai terente
YT	NEXICALI 21210	MEXICALI 21210	MEXICALI 21210	MEXICALI 21210	MEXICA:1 21210	MEXICALI 21210	MEXICALI 21210	MEXTONLI 21210	MEXICALI 21210	REXICO:1	NEXICALI	MEXICALI 21250	MEXICALI
F1RN HAME	L-N SAFETY BLASS	MANUFACTURAS ELCD	MILTON, RICHARD	PRINTRONIX DE MEXICO	PRDDUCTOS CONTINENTALES DE 841A CALIFORNIA	PRODUCTOS RECREATIVOS	PRODUCTOS UKOLOGOS DE MEXICO	TECNOLOGIA Internectoral	VALENTE-KEVICALI	REFORMOUTES DE BAIA	AUTO CLASSIC	AUTONETICA	BECERKIL CENTRAL DE CECHIFIAL

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# MACUILADDEA ESTABLISAMENTE

		ELECTADNIC NCISE FILTERS & RELAYS		ASSEKELY OF ELECTRIC & ELECTRONIC ITEMS, DIE CASTINS & RUSRER MOLDINGS		10:5		TURER .		ELECTRONIC CRYSTALS & CORFORENTS, DIRECTTE			INDUCTORS, THANSFORMERS, FILTERS, CHIPS, COILS
PREDUCT (S)	LENSES	ELECTAONIC NOISE	CLOTR146	ASSEMBLY OF ELECT	SPORTS REAS	S:01 \$ 5351C18 7:03:5	CLOTHINS RACKS	CLETHING KANUFACTURER	MEDICKL UNIFORMS	ELECTRONIC DRYSTI			INDUCTORS, TRANS
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<b>ಟ</b> !	Huntinston ca Beach	CALEXIOS CA	NEW YDER NY	CALEXICO CA		CALEVICO CF			CALEXICO CA	31 31	NEW YGAK - NY	CHLEXICO CA	<u></u>
AE !	ENT	SALE	2	CALE		133			נגנ	HP.L15	2 2	נאנז	40L15
PARENT	americal International	CORNELL DUBILIER ELECTRONICS	KAYSER ROTH COEPORETION	MEXICO SALES ASSOCIATES, INC.	(DRINGER)		(UtalA,DRP)	(AN) PERC)	pai tal hai tal tal tal tal tal tal tal tal tal tal	VANGURES ELECTRONIOS LAB.	BASTIAN INDUSTRIES	CENTGS, INC.	VANEUFSD ELECTROWICS LAP.
10101643 10101643													
STATE	Baja California Nerte	BACS CALIFORNIE NORTE	Balh Californa Norie	BAJA CALIFORNIA NONTE	BACH CHLIFORNIA NOSTE	141. (41.150) (61.12	BANA California Norie	BAJA California Noste	BAJA Ch. 1758N14 NJFTE	PACA CALIFORNIA NOSTE	Saja Dalifornia Nofie	EADE CALIFCENIE NORTE	BAJA CALIFORNIA NORTE
γ.113 	KEXICALI	HENTERLT 21250	NEN ICAL I	MEXICALI 21250	MEYICALI (11310	MENICALI 21160	1CAL 1	MEN I CAL!	AENICALI 21016	MENICAL 3	MENICALI	MEYIDALI	MEVICAL I
PIER NAME 	BIONICA Interational	C.D. ELECTRONICA DE MEXICO	CALT DE MEXICO	CONECTORES Intuetrikles	ockfeddires Leportines Viryen	C6.1-R0F4	LEDHADORA DE Mexicali	DANK DE MEXICO	DANTEREX	CAL-MEXICO	פרבננצטיובל עורה	ELECTRONICA CONTOR	ELECTRONICA VANGUAED

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Sage 9 . . 63/23/66 MADUILADORA ESTABLISHMENTS

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PRGDUCT (S)	FACES, MODULAR CIRCUITS, & HUKRID CIRCUITS FOK ELECTRONIC NATCHES	SPORT UNIFERMS	RABUET NANJFACTURE	CLOTHING RANJFACTURER	ETHAUST HEAGERS, PYFFLERS	PC BOARDS, ELECTRONICS	CLOTHINS MANJFACTURER	TGPS & PANTS	KEN'S UNDER SKIRTS	URISER CLGTRING MANUFACTURER	NOOD BOLF CLUB HEAZS	LAMP AZESSORIES, FARTS	ELECTRIC MOTORS & PARTS, CLUTCH & DISC PERTES
<b>15</b>	5				e C	CA		<b>5</b>			₩3		CA
) TIO	CALEXICO				. HARBOR CITY	CALEXICO		CALEXICO · CA			TORSANCE		CALEXICO
PARENT FIR:	HUGHES AIRCRAFT	(UNF.NG.KK)	(UNKNOHN)	(ONENSAN)	AFPL IARDE Industries	RAM-KORE COMPANY	(UNKNOAN)	INDUSTRIAS CORAL	(NEW PROPERTY)	UNINGKIN	KAJNBOR SALES	(DALINGWA)	LIPE ROLLWAY Mexicana
NUMBER EMFLOYED •													
STATE	Brja California Norte	BAJA Califdrnia Norte	BAJA California Norte	Baja Cal Ifornia Noste	BAJA CALIFDRNIA NORTE	Baja Ca <u>l</u> ifornia Norte	BAJA California Norte	raja California Norte	Baja California Norte	BAJA Califdria Norte	EAJA CALIFORNIA NORTE	SAJA CALIFORNIA NORTE	BAJA Cal Ifornia
E	NEXICALI	MEXICAL I	MEXICALI	MEXICALI	MEXICALI 21050	MEXICALI 21005	KEY TOW! I	MENTCALT 21000	NEV 104. 1	NE NICKI	MEXICAL 1 21250	MEXICALI	MEXICALI
FIRM	ENSAKELADDRES ELECTRONICOS DE MEXICO	ESCUBOS CALIFORNIA	EGUIFOS DEPORTIVOS American	FABRICA DE NOFA Jeana	FARRICAIGNES Metalicae mexicanas	FASE LE BAJA California	BEAGE	INDUSTRIAS CORAL	INSEKIAL PACIFICO	INDUSTRIAS DOPA	INTERNACIONAL SOLF	JIAL METAL	LIPE ROLLMAY Meyicana
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KABULLANGER ESTAPLISHMENTS

Product (S)	MEDICAL GARMENTS	ELECTRICAL MARNESSES & RECTIFIERS	FURNTURE MANUFACTURER			WEEK'S UNDER GARRENTS	SEAFDOD PROCESSING	CLOTHING MANUFACTURER	COLONIAL BEDS & LIVING ROOM FURNITURE	#510R RINSS	Expanson Joints	ELECTRICAL COMPONENTS	PRINTED CIRCUIT BEARDS
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ХE					LOS Anseles	VAN NUYS			CALEXICO	HASSOR CITY			TUCSON
PARKYT F F IRM	(UNICHDEN)	(ÚRENGAN)	(UNKNOKK)	(106% MEXICAN. Daned)	RITE AUTOTRONICS CORPANY	CLEA CORPANY, INC.	(DAENOKE)	(UNENENE)	PRODUCTOS REX. DEL Norgeste	afpliance Insustries	(UNIXEGAN)	(UNCROBER)	AIRESEARCH Aviation Company
NUMBER EMPLOYED					٠.								
STATE	Baja California NGRTE	BAJA California Norte	Baja California Norte	BAJA California Rürte	BAJA California NJRTE	BAJA California norte	EAJA CALIFORNIA KIRTE	543A California Norte	eaja California Norte	B434 CALTFORKIA KORTE	BAJA CALIFORNIA NORTE	BAJA California Noste	FAJA Cal ifgenta Norte
¥	REXICALI	MEXICALI	MEXICALI	NEXICALI 21360	MEXICALI	MEXICALI	rexidely	MENICALI	Keneral 21100	REXICAL I 21016	NEXICAL I	NEVICALI	MEXICALT 21250
FIRE	MADUILADDEA DE BAJA California	maduina y Engamblados Electronicos	MAURICID. FRANCISCO Javier	METALES PENINSULARES	RETER MEX	DLBUITA DE MEXICO	98000 PER	Projuctos Continentales de B.C.	PRODUCTOS REX DEL Nordeste	PLY IDOKA DE METALES	SATURADDRA ATLACATL	SERVICIDS INDUSTRIALES DE BAJA CALIFORNIA	SISTEMAS MECANICOS Y ELECTRONICOS
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# MADUILADORA ESTABLISHMENTS

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	CLSTMING MANUFACTURE?	Slothins paufasturer	CLOTHING MARFACTURER	FDSP1TAL PRODUCTS, SURGICAL SOWAS	LPDIES CLOTHES	ASSEMBLY OF ELECTRICAL PARTS		HOSPITAL GARACATS	AIRCRAFT PARTS, ELECTRONIC CCMPONENTS, HYDRAULIC FOLLMPENT, HOISTS, TRAILERS, TRAINING PROGRAMS	ELECTRIC EBUIFMENT, MATERIALS MANDLING EBUIFMENT, INDUSTRIAL MACHINERY, LIFT TRUCKS	BOOR LECKS		ENGLIKEG GEOV	ACOD FURNITORS & FURNITURS REPAIR
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¥113	•	•	٠	NCATE HOLLTWOOD		100 CO		•	CALEXICO CA		•	•		
IN Bed d	(NEUROLE)	(Feangas)	(BEJUSE)	SURBILITE Intermational	(COROGEN)	FINESCENCE AND A STREET	(NEGRANT)	(MEDIZIN)	WESTERN GEAR	CDRFTRATION	(Catalogy)	(BROWFIT)	(8000(80))	(X707,6X3)
10253 E3PLG253		•												
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FROLUCT (S)	HOODEN CCOTRIL & END TRELES			FRECISION TEMPERATURE SENSING PROBE ASSERBLIES PO EGARD ASSERBLY		PARTY PASIE	TRANSFERE		FOTENTIERATIER		ELECTICULE CALLES & CIRCUITE		DREDITE .
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PARENT FIRE	(PATREMI)	(manan)	(UNITROWN)	ELECTFONIC COMPCNENT ASSEMELY, INC.	(CMCNON)	(RECKENT)	(UNICNOME)	ASSEMLE IN MEXICO, INC.	TAKE TERRORS	P. 4mm	VISHAY-JOBLAN	GG. TEBAKOLOBIES, INC.	(UNICEDIAN)
* SAPENES KANEER													·
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£	TECATE 21400	TECATE 23466	TECATE 21400	TECATE 21400	TECATE 21460	TECATE 21470	TEC47E 21400	TLUBANA	11205/4	TI JUENE	1133685	Tibukik	113UANR 22610
を は に で に で	S2 LA MESA CHAIR	92 RAQUILADORA TOLTEC	94 TECATE EKSAMPLABDRA Y maduileddra	95 TECATE TECATE	SE TEK SOMFOVENTES	97 VERTURES TECRTE	98 KAN INDUSTRIAS	99 ADMINIETRACION DE Naquiladoras	OQ BOURNS DE NEVICE	OI FLAMEN	(2 F.F.H. INDUSTRIAL	65 C1MED	OF COMPONENTES INDUSTRIALES HEXICANOS
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Page No. OT/CORE

STREETS	
ESTABL 19	
MAGUILADGRA	

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PRODUCT (S)	TBYS	FLASTIC 12YS	LEADED 31.835 LAMPS	CLOTHINS	ANTENNAS	INTEGRATED AFRAID CIRCUITS	ELECTRONICS	CIRCUITS	ELECTAONICS	ELECTRIC CCANECTOR CARLES, BOBINS, PRINTING HEADS, CIRCUIT DETECTORS, DISFUSHELE HISPITAL LIENI	MAGNETICEADS	DESCRATIVE WALL ARTICLES	CCANECTORS
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<u> </u>	SAN YSTDAD CA	SAN 7515RD CN					154F0RT 8EACH	CHULA		SAN YSTURO CA	SAN YSIDAG CA		CHULA
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ERTL DE MEXICO	TESTOR CCRFCRATION	(EXCREMN)	(Full Work)	ONNOE WAY	CONCROSION	DANA ELECTRONICS, INC.	ELEC-180L, 1NC.	(ENENDAN)	ELECTRONICA Internacional	EIGAPBLES Arbnettods	(PRESCAR)	HUSHES AIRCKAFT
MCHBES SHELCYED											·	:	
STATE	BAJA CALIFCENIA NGRTE	BAJA CALIFORNIA NORTE	96JA CALTGENTA RORTE	BAJA Califorata Ngate	Baja Califoryir Vorte	BAJA California norte	BAJA California Norie	Baja California Norte	BAJA CALTEPANIA NORTE	BAJA California Yorte	Baja California Morte	BAJA CALIFOANIA MCRTE	343A
CITY	energe:	TICORNA	TISURA	· exenci:	<b>11,22219</b> 22510	• where it	TI 1113.NA	TI31AMA 22510	TIJUNA	TIJUANA	TIJURNA 22610	TIBERRE	TIJESAA
FIRM	ERTL DE MEYICO	TESTOR DE MEXICO	VISRIOS DEDORATIVOS LUMIMOSOS	CASA DE HODAS BAJA	CONFORENTES DE VIDRID DE MEXICO	CIRCUITOS DE BAJA CALIFDENIA	Daya de Baja California	ELEC-1901 DE MEXICO	EL ECTSONICA Hemisferica	ELECTRONICA INTERNACIONAL EE BAJA CALIFORNIA	ENSAMBLES MAGNETICOS	INDUSTRIAS MENTORA	INTERCONFOTORES
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PSEDUICT (S)	MAGKETIC KERBS	Regnetic Heads	CIRCUIT BREAKERS	RREAKEP ASSEMBLIES	SKITCHES, CABLES, AND CONTACTS	CAFACITORS .	CLOTHINS	EVERIAES FRAMES.	ELECTROUIL FARTS	AIR CONDITIONINS FILTER SYSTEMS		Haresses	DIODE ASSEMELY
<b>±</b> 1		5		e S									io Ca
āl		NATIONAL CITY		SAN YSIDAD CA									SAK YSIDFO (A
PFEWT FIEE	(Phi.NSAN)	Pacific madretics Cosponstion	RELAY SKITCH	SIGNA INSTRUMENTE, INC.	(HACK)	(SHCHANG)	(CHRINGAR)	(CNEMENE)	(Angress)	(RNEW)ND)	CLUCKONIC	(UNF.NG.24)	INTERNATIONAL Rectifiers
NUMBER EMPLOYED	,								·				
57475	eata Califosnia Ndrie	Baja Califoriia Norte	BAJA Califoenia Norte	BAJA CALIFORNIA NORTE	Baja Califoria Norie	BANG Califdenia Norte	egue Cglifgraid Norte	Baja California Ngrie	BATA Celifoenia Rere	BAJA Cal Iforkia Nokte	baja California Norte	Paja Californa None	BAJA . Califdenia Ndrie
¥0	TI JURKA	11 3 10 10 10 10 10 10 10 10 10 10 10 10 10	TI JUKNA	1130ANA 22006	TI SUANA	TI JUANA	TI JUANA	TI304KA 22116	TI JURNE	71 2U4NA	T1386K.	TI JURK	TJURNA
F18% MAYE	NACILE INCUSTFIAL	FACIFIC MAEMETICS DE Pexico	RELAY SWITCH DE Mexico	SIGNA DE REVICO	SKITCH LUZ	TECHOLOSIA Electromecanica	TRES INDUSTRIAS Unidas	GENERAL DE ENSAMBLES	Industria Mexicana de eksamele electronica	INDUSTRIAS VALIDO	INTERCOMPUSTION	PLACKS V HARNESES	RECTIFICADORES Internactorales
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FPEULT(S)	СГОТИТИ				IKDM NDRKS	TOYS	ELECTRONICS		KEAT DISAFATORS	NOODEN CFFICE FURNITUKE	ORNATE CRYSTAL LAMPS	SWENTERS	ASSEMBLY OF ECLID STATE FOWER RELEVS
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£1		IRVINE		CEMPTON		SAN YSIBED CA	CHULA	CHULA	CHULA	SLENDALE			SAN YSIDED CA
PARENT F19:	(100% MEXICAN Daned)	RUDIO MENETICS Corporation	(UNURDAR)	MERIT ABEASIVE Products, Inc.	(DAICKDAE)	AFI DE MEXICO	ELK, INC.	E625 ROTON	EGIG WAIEFTELD	AKDERSON DESK. INC.	CHRINGEN	CENTRORES)	CRYDDA CONTROLS
ENLOYER •													•
51ATE	BAJA CALIFOENIA NDETE	BAJA CALIFORNIA NDRTE	BAJA CALIFDRNIA NORTE	baja California Norte	Baja California Njete	eaja Califoenia Rorte	PAJA CAL IFDENIA NDSTE	EAJA CALIFORNIA NORTE	peja California Norte	BAJA CAL IFDENTA NDRTE	PAJA CALIFORNIA NORTE	BAJA Cal Ifoenia Norte	PAJA Califopria Ndrte
11	TIJUENS	TIJUANA	Tijuaka	TIJUANA	11 JUAN	11 JUANA	1139AK4	Trunk	113004.	113vere 225¢¢	1130684 22500	11.20ana 22506	11JURKA 22500
한 발  - -	Salmen industrias	AUDIO MASNETICOS	JUEGOS CALIFORNIA	MEXICO	PRODUCTOS DE HIEPEG DE BAJA CALIFORNIA	AF1 DE NEYICO	ENSAMELADDRA LA MESA	ROTOM DE MEXICO	WAYEF JELD	ANE) DE MEXICO	RETESAKIAS BATA	CORPOFACTON LA JOYA:	CRYDOM DE MEXICO
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RECUILADORA ESTABLISMENTS

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FFDECT (S)	COMPUTER PARTS	FUR & LEATHER COATS	DIDGES, ELECTRICAL EXTENSIONS, NEMDTE CONTROL CASLES, ETC.	PISFOSABLE NEDICAL SPECIALTIES	ORWATE LAMPS	• •	HARNESSES, CASLES	SHOES	Leather frocuts		TV COPFEMENTS	PYDRAULIC CYLINGERS	NETAL SEALS
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61	CHULA		SAN YSIBRD CA	CHENCE VISTA			SAN DIEGO CA			Sak. Ysidro Ca	CHULA . VISTA		COLVER
FIRM	EGES WAITRFIELD	St. Ingene	PACIFIC ELECTRICORD COMPANY	THE NEKDALL CCMPANY	(With Date)	(WITKORY)	CRANT DE MENICO	(Wrinder)	(Car roer)	Magulladdra Clamag	MATSUSHITA Industria. Corpany	(DAK KOKH)	PARLER-HANNIFIN Corf Dration
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S141E	BAJA Califoria Norte	Baja California Norte	Baia California Norte	Paja California Norte	Baja Califderia Norte	BAJA CALIFORNIA NSRTE	erja Califdenje Rofte	B4.18 California Noste	Pain Califorate Worte	Sana Califdenia Noste	erja California Kopie	BANA CALIFORNIA NDRTE	BAJA California · Norte
٤I	11398KR 27500	11396KR 22500	TI2UKKA 22509	TIJUANA 22500	11386nr 22500	11.UR4K 22500	TIJVANA 22569	Traudur 22500	Tibler 225:0	MESA DE CTA	11396re 2250	TIZUANA ZIECO	113VARA 22500
FIRE	EGIG WAKEFIEL?	ELEBANCE SE California	ENSAMPLES CE PRECISION DE LAS CALIFORNIAS	ESFECIALITATES NETICAS KEN-1E).	ILUMIKACION Horizgate	INDUSTRIES REDA	KEANZ DE MEKJED	PACAL INTERNECIONAL	rakufartusa Califorair	raculladora Clahed	MATEUSHITA Industrial de Baja Califophia	NEN FORT HYDRAYLICS RE NEVICO	PARKER SEAL TE BAJA CALIFORNIA
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MENTS	FFECULI (S)	refrieeratofs	AUDIO MDOULAR SYSTEMS	EMADYS	ELECTRONIC CEMFOXENTS	. POEINS, MAGNETIC MEADS	BEDROOM & LIVING ROOM FURNITURE	PLINTED CIRCUIT BOARDS & TRANSFORMERS	FIEERBLASS CATPADIGES		NOTE FRAMES & NOLDINSS	CO.FON PROCESSING	FELT DOLLE	ELECTRONICS	
estarl ish	<b>#</b>	3		¥	<b>5</b> 3			5		43					
KACUILADJRA ESTABLISHMENTS	C117	SAN YSTERO CA		DALLAS	C9310 N9S			OCEANS I DE		NEWF DET BEACH					
- ·	PATENT FIRS	S. I.A. ELECTRONICA DE BAJA CALTF.	(UNITIDEA.)	FRITO-LAY, INC.	VISHAV WEST	(UNEMDAT)	(UNICHERY)	ACDS ELECTRORICE	(UNTHOST.)	CAL PACIFICE	(1817/1008.1)	(Unender)	(USE/NGREY)	(unkrown)	
	• 43%07442 433467				·										
	31418	Baja California Norte	BAJA CRLIFOPIJA NORTE	BAJA Califorija Korte	eaja California ' Norte	eata Califosni4 Norte	eaja Califofija Noste	Bkja Califdria Noste	raja Califdenia Norte		eaja Californja norte	Baja California Nopte	eria Califoraia Norte	BAJA CALIFOENIA MAETE	
	¥117	113866 22500	11 JURNA 22506	11398KA 22506	11388th 22555	Tivers	TILLANG	11:080:	TIJUKK		112065.6	Tijuraa	1135644	11,704%	
	FIRM NAME 	5.1.A. ELECTRONICE DE BAJA CALIFORNIA	Schiff	116931	VISHAY DE MEXICO	ELEC TRON	AKES REV DE TISUGNA	ACIESANIAS Electroxicas	ARTESAULAS DE FIERA De vibrio nylé <sup>4</sup>	(UNINORN)	CAMPEDN, KRKCOS E.	CL AS 1F 1CADORE Cotercial	COMPANIA DE ENSAMBLES DE TIJUANA	COPPANTA ELECTRIVITA DE BAJA CALIFORAJA	
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51. PRBDUCT (S)	ELECTADATCS	CA PRECISION CONTROLS AND POTENTIONETERS	Y1DEO COMFONENTES	ELECTRONIC COSPONENTS	AR/FM ARDIOS AND FRECUENCY EQUIPMENT	NUMENS' WEAR	D CA COUPON PROCESSINS	KJODEN FRANES	NOMENS PLANEES & PAESSES	IL CLOTHING	ELECTRONIC TOYS	PASNETIC HERIS & COMPUTER CONNECTORS	
411		CHILA					SAN YEJING CA			PURTY			
PARELI	CURENDER	COMPONENTES DE LA NESA	(DRINGER)	(Day)N(ski)	(SEGNENA)	ON REELS	NEWO dila	(GAZHEAN)	(1348,481)	Gardner Denver Corfany	CHG NELV)	(Pertur (NA))	(Pather)
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E I	TIJUKAA	Tijurke	TIJURKA	TIJBAKA	TLUBER	Tiveks	HNERC 22000	TIZBASA	TIJUARE	1138614	1136664	Tivera	1130686
FIRE	COMPANIA ELECTRONICA Latino americana	COMFONENTES DE LA Mesa	COMPONENTES DE VIDEO De Mexico	COMPONENTES TECNTCOS DE BAJA CALIFORNIA	CONPORES AGUILAS Y SISTEMAS DE COMUNICACIÓN	CONFECCIENES DEL Noreste	CUFPREY	DECORACION COLONIAL	DEL RIO, VICTOR NICOLAS	DENVER DE MEXICO	DEFORTES Exectroricos	DIMERSION Electroxica	ELECTRO ENSARALES
- <del>-</del>	29	171	221	221	£:	27.	37:	π:	176	321	8	18:	162

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HIENTS .	FEBRUTIES			ELECTRONIC RELAYS, BOBINS	INTERFERENCE FILTERS, POEINS	PRINTED CIRCUITS, ELECTRIC CARLES	NOCIEM & METAL FRAMES	AFFAGEL	LEATHER SAVIELS & SFORT FBOTWEAF.	CLOTHINS		BASEFALL CAFS	SIMICOMOUCTORS	LEATHER INDUSTRIAL BLOVES
MACYJIAĐGSA ESTABLISHABNIS	5;   6;	SOUTH EL. CA Monte		CHULA CA VISTÉ				CHATSBORTH CA					FIRTTOWAL CA	
	PAFERT F1SC	ELECTED-MECH COMPONENTS, INC.	(OFFICE AND ARE)	TELEDYNE RELAYS	(DNKKESK)	(CANGNENG)	(BREKBYK)	AVANT GREDE EPDSTS INTERNATIONAL	(Cakada)	(DRENORK)	CN: NOKN)	(INCHORN)	INEC CORPOSENTON	(DACHOKA)
	MUNICEP BEST OF ED													
	STRIE		BAJA California Ndrte	baja Califoria Norte	PAJA CALIFDANIA NDRIE	BAJA Califorkia Notte	eaja Califorkia Norte	BAJA California Noste	egja California Korte	BAJA Califdenia Njete	PAJA Californa Ndrte	EAZA Califeenia Noste	BAJA Caliedenja Rjete	ESJA Califoria . Norte
	¥11		TIJURKA	113UANA 22450	T13848A	ТІЗУБКА	TIJUANA	TIJURNA	Tillera	TIJBER	Tibess	1130ASA	1135KR 22650	1130375
<u>6'1</u>	751 H	(UNINORN)	ELECTRO TEC	ENSAKBLES DE Precision	ENSAMBLES ELECTROINTERNACIONAL ES	ENSAMBLES Y CIRCUITOS INPRESOS	exportadora Continental	FAERICA DE ROFA Aventi	FRERICA Y Naguladora del Caltado	FCA ACAPULCO	E	GUERS DE TIJSANA		Industrial Buantera Del Norte
	e⁺ at 1	83	20	83	8	<b>6</b>	85	85	35	57	35	£.	7.	155

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	(NEGROSO)	Garpner Denver Confany	(CHKTOWN)	(SHEACHE)	INDUSTRIAR LA NESA DE TIDURA	(Chendral)	(NECKERA)	(UNINCHA)	(K-10X-YET)	(UNIVERS)	(BA:N9ED)	SONN MFR. COMPANY OF AMERICA	(EMENDER)
EMPLOYER •				٠.					•				
STATE	BAJA California Noste	BAJS CALIFOEKIA NORTE	raja Californja Ndste	erja Cal ifoenik Korte	baja Califoryja Noete	Baja California Norte	eaja Califdenia Kjeje	Baja Califoria Ndrie	BAJA CALIFERNIA NDKTE	Baja California Roste	BAJA Califgraja Noste	Brja . California Noste	baja Cal iforkjá Norte
Ĕ i	TI JUANA	TLIURNA	TI JUKNA 22300	TI JUANA	113UANA 22450	TI JJENG	TIPUANA	TI JUANA	113UANE. 22000	Tidera	i Juan	11. UAKA	TIJJENA
2	Indystrias California desire	INDUSTRIAS DENVER DE MEXICO	INDUSTRIAS DERAND	Industriks Electrodinamicas	INDUSTRIAS LA MESA DE TIJURMA	Industrais melcal	INDUSTRIAS KDADICO	INDUSTRIAS PECK Kerns	Industriks fur	INDUSTRIAS TIDI	Indvetrias Univerrales unidas De Mevico	INDUSTRIAS YNOS	INTEGRACION DE Productos netalicos
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HENTS.	FF2tu(T(S)	WATER BEDS	PLASTIC & METAL TOYS	DISPOSABLE HJEPITAL GARMENTS	ELECTRONICS	ELECTRIC FAY #2165.5	ELECTRICAL FILTERS FOR COMFUTER	1016		NGOD FRAMES	FUENTURE	INFLICATORE & POTENTIONETERS	COMPLTER NERDEN UNITS	RIN CHAOFINS
KADUILADDEA ESTASLISHMENTS	51. 	san 1812ag Ca	SFN DIESC CA	CHULA CA VISTA			SAN YETTRE CA	se: vsided te				RANCHO CA BERRARDO	CAMPAIDGE MA	
	PRENT FIRE	nojteko Ranufactusino	NEWER PROPERTY	SHERNOOD MEDICAL	(DE NORR)	(US) NORT)	LATINTEL	MASSACTED	(UKE.NCHW:	(UNI.NEKR)	(NACK MA)	DAK IKPUSTRIEE, IKC.	CARBEIDSE Terkionic Corforation	(EMSKIND)
	# 1500 H													
	STATE	Baja California Horte	erja California Rofie	Baja • Cal Ifornia Norte	Baja California Norte	Baja Californie Morte	BAJA Califoria Noste	BAJA California Noste	BAJA Califosyjk Horte	eria California - Rorie	BAJA Californ:A Norte	eaja Califoria Rorie	BAJA California Norte	BAVA CAL IFOSVJA
	A	TLUBNE	11JUARA 22746	TLUGNA	TIJUAKA	TIJUANA 22650	TIJJARA	Плена	TIJUAKA	1130a%	TIJUANA	TJURKE	TIJUAKA	TIJUANA
	FIRE	INTERNAC19:19: Monterey	JUGUETRENES	KELSAR	LAB TEC	LASKO INTERNACIONAL	LATIRTEL	KABARED	PAGNETIC 4 INTERNACIONAL	RACUILA DE RAPCOS LAS PRISAS	MADUILA DE MUERLES Saldaka	REVIFAB	MERTA	REECURY Internactoral
8	6.0	\$3	316	211	212	313	<b>X</b>	<u></u>	917	313	\$12	<u>5</u> ;	9	ន

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PFG9UCT (S)		HYBRIG INTEGFATED CIRCUITS	DUARTZ FRINTED CIRCUIT GENERATORS		FURNITYEE		LAMINATED NOCE MOLULES	PANTS		COUFON PROCESSIN?		TKOPYJES	FIBERSLESS CYCLE NELRETS & CLOTHINS
<b>5</b>	5										ž		
¥110	64RDENA	•								,	BARDEN C113		
PARENT FIRM	HONEVWELL, INC.	(RECEIPED)	(UNKNCWI)	(LINKENK)	(DALMENN)	(UNCHONII)	(UNARDKK)	(DECEMBER)	(thrushy)	(UN) ROKK)	DYFORD PENDAFLEX Corfuration	(UR) NOKK)	(UNENDEN)
MURBEF MURBEF													
STATE	BAJA Cal iforkia Korte	BAJA CALIFORNIA NOFIE	BAJA California Norte	Paja California Morte	Baja California Njrte	BAJA California Noste	BAJA Cal Jedrnja Ndrte	PAJA California Norte -	BANA California Nofie	Baja Califorkia Korte	eaja Califophia Nofte	Paja Ca: Ifornia Norte	BAJA California Noste
	TI JUANA	TI JUANG.	TIJUANA	TIJUANE	113UAKA	TIJUSAA	TI.29ANA 22450	THUGNE	1130414	Tijurk	TIJUGKA	ТІЗИАНА	71 JUAKA
RANGE IN THE STATE OF THE STATE	MEXHDN	MICRO ELĘCTRA	NINI ELECTRA	KICRO FUSION	MDEEL INDUSTRIAS	NODAS NAKIA	MODULOS Habitacionales del Norte	HAPA-FINA	OPTINEX	CREANTACTON DE CLIFONES	OXFORD PENDAFLEX	PFLUEGER TAXIDERNIA De Mexico	PLASTICOS DE LA JOYA
1.81 5	233	223	234	225	72	23	228	228	230	Ë	232	213	គ

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MARVILADDRA ESTARLISHNENTS

·				IEMS COMFOUENTS			RECTIFIERS, SEMICONDUCTORS, & VOLTAGE RESULATORS						
FRODUCT (S)	EDJEATIONAL TOYS	METS	MAGNETICS TAPES	COMFUTER MEMORIES & SYSTEMS COMFOURNTS	COMPUTER MEMORIES	FORER SUFFLIES	RECTIFIERS, SENICONDUCTO	SFORTS ARTICLES	METAL TRASH BOXES	CLOTHING	FURNITURE PARTS		FAINTED CIFCUITS
F.					SAN DIEED CA	SAN YSIERO CA	SAN DIEGO CA						
<b>H</b>					SAR DI	SAN VS	SAN DI						
PAKENT FIRM	(UNICHDER)	(IMEMORIA)	(UNI NDKK)	(CACH HONG)	PULSE ENSINEEFING. INC.	SIERRACIN/POWER Systems	SPLITRON DEVICES, INC.	(UNKKOFK)	(DMF/KDK/K)	(UNKHÖKK)	(DNK-KDHN)	(CMENDAN)	(UNENDRIE)
RESER Enfluence			·										
STATE	Paja California Norte	BAZA Californìa Norte	Baja California Ndrte	BAJA California Norte	BAJA California Norte	BAJA California Ndrte	baja Califorkia Rūkie	BAJA California Norte	BAJA Cal Ifornia Ndrie	BAJA California Norte	brja California Norte	FAJA Califorija Norte	BAJA California: Norte
£ !	11JURNE 22340	TIJURNA	TIJURNA	TIJUANA	113ваня 22606	TIJUANA	TISUANA	T13Uche	112URKA	TIJURKA	TIJUANA	11.3UR%A	1130848
22 E	PLASTICOS MEATON	PRODUCTOS AEREOS	PRODUCTOS DEL NORTE	PULAU DE MEXICO	PULSE DE MEXICO	SIEKRACIK	SOLITROR	യ ഡ ം ഗ	SYMIC INTERHACIONAL De mexico	Taller Purbos, Ganzalo Eurbos Pargias	TALLER DIAZ	TECNDLOSIA Internacional	trans-pex Internectonal
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•	Frotest (S)		ELECTROKIC INDICATORS	WATER BEDE	ELECTRONIC ASSERBLY	DELAY LINES & PULSE TRANSFORMERS			IKDUSTKIAL BELT SANS	SUECORTRACTIKG	RESNETIC DISCS	ELECTRICAL WIRING HARNEESES	KIRE MARNESSES	C.R.P.AC.ITORS		DISFOSABLE HOSFITAL PRODUCTS	
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	C113	İ	BLUFFTON			SAK DIEGO		EL FASO	FITCHBUKE	EL FASO	EL PKSO	EL PASO	MEDANE	EL FASO	EL FASO	EL PASO	EL PASO
PARENT	¥1.10.		TRIPLETT CORPORATION	(UNKKOWK)	(UNIXIONN)	VALOR ELECTRORICS, INC.	(DRENDAN)	eripo berrugez	SIRJNDS CUTTING TOOLS	AMERICAN Industriee, Inc.	ZENITH ELECTRONICS CORF. OF TEXAS	GENERAL MOTORS Corporation	NCR CORFDEATION	AVX CORFDERTION	ZENITH ELECTRORICS CCFF. OF TEXAS	AMERICAN HOSFITAL SUPPLY	GENERAL ELECTRIC COMPANY
KIPBES	EMETONED .					٠.		•				·					
	STATE		Baia California Nurte	BAJA California Noste	BAJA Californa Norte	BAJA CALIFORNIA NOSTE	CHINGHUA	CHIMMARIK	Chimbrie	CHIMMANIA	CHINDWHILE	CHIRDARIA	CHIRURADA	Chinuarua	Ситивния	CHIHUAMBA	CHINYAHUA
	CITY		TIJUAKA	TI JURKA	TIJUANA	TIJUANA 22580	ASCENS10N	CD. CAMMIGD 33704	CHINDARDA	Ситичания 31109	Ситнейный 31199	CHTHUARUA 31206	Chihuahua 31200	CH1H5AH5A 31200	<b>С</b> нтизануа 31200	<b>Chimuanua</b> 31200	CH IHUAHUA 31260
FIRE	NAKE		TRIPLETT DE REXICO	TRONCOSO S., LIC. Franco Javier	VAFETROM	VAL FÀN AM	HJERZA	SFECKATION BUILDING	NOUSEHOLD DE MEITCO	INDUSTRIAS DE America	PRODUCTOS KAGNETICOS De chihuan;k	ALANBRADOS Y CIRCUITOS ELECTRICOS	ALFABET DE MEXICO	AVIO EXCELENTE	CARLE PRODUCTOS DE CHINSARIA	CIRREX DE CHINDARDA	ELECTRO COMPONENTES DE MEXICO
			346	<b>6</b> 7	220	52	82	253	· <b>2</b> 7	82	. 98	237	150	ñ	697	197	362

	RMERS														HOKES
PROFUET (S)	BATTERY CHARBERS & TRANSFORMERS	MIRE HARNESSES		TRIMMING	SUBCONTRACTING	ELECTRICAL CORPONENTS	TV CORFONERTS	SNOKE ALARMS		ELECTRONIC COMPONENTS		COUPON PROCESSING	COUPON PROCESSING	COUFON FEOCESSING	KITCHEN CAPINETS & MOBILE HOMES
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¥113	COLOREDO Springs	EL FASO	EL FASO	TRON	EL PASO	LAUREL	EL PASD	DOKNERS ERONE	S1. PETERSBURG	EL FASO	LEXINSTON	EL FASO	EL F450	51. F850	PH0E1:17
FARENT FIPS	ELECTEO KECH COMFANY	UNITED Technolosies Autokotive inc	HDNEYWELL, INC.	ALLEN INDUSTRIES, INC.	AMERICAN INDUSTRIES, INC.	Allebheny Interhational, Int.	ZENITH ELECTFONICS CORP. OF TEXAS	SEATT CORFORATION	SILOR OFTICAL OF FLORIDA, INC.	MESTINGHPUSE Electric Cororatioa	UNITROSE ,	A.C. NIELSEN CLEAPING HJUSING	A.C. WIELSEN CLEARING HOUSING	A.C. NIELSEN CLEAFINE HGISE	DOEKFLER ENTERFRISES, INC.
RIMBER EMPLOYED 4	÷														
SIGIE	СНІНІВАЧІА	CHIHJANDA	CHINDARDA	Сетникай	СНІНЗАНІА	Cathuarua	CELMUCHUA	CHINDWIN	Cathuanua	CHINDANUS	CETHURNOR	CHINUANDA	СИЗИВАКЪ	СНЈККИВА	СИТИСАНУА
Y113	CH1HUAHUK 31260	<b>CHTHURMYA</b> 31266	Сијичания 31266	CH1HUAHUA 31200	CH1HUANGA 31200	. CHTHUMHUR 31206	CH1HUAR-K 31266	<b>СИТИСАНИЯ</b> 31220	CH1HUK5UA 21200	<b>31200</b>	CHTRUANUA 31200	CHINEARDA	CHINDAMA	CHINDARUA	CH1HUAKUA 31110
1 K	ELECTRO NEY NAGUILAS	ESSET DE CMIHUAHUA	HOIEVWELL	INDUSTRIAS ALLEN DE CHINUANUA, MEXICO	INDUSTRIAS DE . America	NECO DE PENICO	PARTES DE TELEVISION DE REYNDSA	SEATT DE MEXICO	SILOR DE KEXICO	SISTEMAS ELECTRONICOS NEXICANOS	UNITRODE	A.C. NIELSER COMPANY DE NEXICO	A.C. NICLSEN COMFANY De Hexico	A.C. NIELSEN COMPANY DE HEXICO	DOERMEY
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PRODUCT (S)		FISH LURES		SHIRTS & BLOUSES	1105					Chenical S		<b></b>	WIRE HARKESSES		COUFON PROCESSINS	ATRE HARNESSES	
PROP	PANTS	FISH		SHIS	CERANICS		PAKTS					AF AREL	WIRE		COUF	186	
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FAPENT F1R:	(NDNE)	(NDME)	(NONE)	(NDNE)	INTERCERANIC, INC.	CUNENDEN	(NDXE)	(UN: NO:BE)	(NOVE)	(NDME)	GRUFO BERHUDE?	(ANCH)	GENERAL KOTORS CORFORATION	ERUPO RERNIDEZ	NJELSEN CLEARING HDUSE	BENEFAL MOTOFS Certoration	GRUFO BEANIDEZ
N.P. BER																·	
STATE	Ситниянуя	Chihurhur	CHINDANDA	CHIHUAHUA	Снінцания	CHINDANDA	СИТНІВАНЦЯ	CHINDANUE	Ситичения	CHINCANGA	CHIMDANAG	CHIHDARDA	CHIRDANGA	Ситнейнуя	PHINKERS	CHIMURNUR	СН1 ЧОАНИ
á i	Ситичения	CHINCKNUK	CHIHUKHJA	Ситичания	CHINDARDE	Сніновнив	CHINUARUA	Снтникайя	CHIMDANIK	CHTHU443A 31660	CH1HUARUR 31306	СИТИЧЕНЫЯ 310ес	CD. CUAUNTENDE 31500	CD. CURSHTENSC 3150c	CD. DELICIAS	CD. DELICIAS	CD, PELICIAS 33000
1915 1915 1915	FABRICA DE ROPA EL DIANANTE	edk <i>t</i> alez. Jaime Ferhandez	INDUSTRIAL DISTA	INDUSTRIAS DE Djinaga	INTERCERANICA	NADUILADDAR DE NADESA	MADUILADDRA DEL REAL DE CHIHUAHUA	RABULLEDORA PINS	FANTAFIND DE MEXCIG	FRODUCTOS BUIMIEOS De Chihuamua	SPECULATION BUILDING	TOUCHE INPUSTRIAL	CONDUCTORES Y Componentes Electricos	SPECULATION EULDINS	A.C. NIELSEN Comfanta ee mextco	CCNEUCTORES Y COMPONEÑTES ELECTRÍCOS	SPECTULATION Building
153 6	238	279	<u>82</u>	281	282	283	264	292	286	287	288	284	236	53	292	293	294

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MENTS	FRECUET (S)	FIXED & VARIANLE RESISTORS	ELECTRICAL RELAYS	VACUUK CLEANER COMPONENTS, MICRD WAVE DVEN COMFONENTS	HOUSE SLIPPERS	NOMEN'S & MEN'S BLAZERS & COATS	ASSENELY OF PLASTIC SPRAY COMPORENTS	CAFACITORS	CERANIC PISC NONDLITHIC CAFACITORS	ELECTRICAL SKITCHES	CABLE TV AMPLIFIEKS & DISTRIBUTION EBUIFMENT	NIKE HAKIIESSES		DISPOSAELE MEDICAL GARMEKTS	ANTENKAS, ISC MOTOFS, ELECTRICAL CORPOVENTS	DIESEL ENGINE REBUILDING	CONFUTER KEYEDARDS
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MACUILARDRA ESTABLISHIENTS	C11	EL PASO	PEINCETON	EL PASO	EL FASO	EL PASO	EL PAS9	EL PASO	EL PASO	EL PASO	EL PASO	EL FASO	JERSEY CITY	EL FASO	EL FASO	EL PASG	EL PASG
	FARENT FIRM	ALLEM-BRADAEY Resistive Products	AKF, INC.	TNE EUSELA Confany	K.S. BARP!	FASHIO. Enterfrises	CONTINENTAL Speavers, Inc.	BENERAL ELECTRIC Comfany	CENTRALAB, INC.	CROUSE-HINDS CONFAI:1	Teksca", Inc.	BENERAL MOTORS Corporation	SUZ-ETTE FASHICKS. INC.	AMERICAN HOSITAL Suffly	GENERAL NOTORS Corporation	DIESEL RECOM COMFANY	CHLOFIDE OF EL PRSO
	EPSECTOR &																
	STATE	CHINDANER	СНІНВАНВА	CHINDARJA	CHIHUARUA	CHIMDANDA	CHIHUKALK	CHIRDAHJE.	CHIHUARUE	СНІНІЯНІЯ	CHIRCALIE	Сизнуанся	CMINDANDA	Снтваения	CHINDARGE	CHINDANIK	CHIMMRJE
	7:10	CD. JURRE?	CD. JUAREZ	CD. JURREZ	CD. JUAREZ	CD. JUAREZ 31470	CD. JUARET	CD. JURAEZ	Co. Jurkez	CD. JUAREZ	CD. JUANEZ	CD. JUAREZ	CO. JUARET	CS. JUARE?	CD. JUAREZ	CD. JUAREZ	CD. JURREZ
	FIER HANE	ALLEN BRASLEY ELECTPONICA	ANF PRODUCTOS Electricos	APPLIANCE CORPONENTS	BARRY JUAREZ	CARISAS DE JUAREZ	CANYON DE REXICO	CAPACITORES COMPOMENTES DE NEXICO	CENTRALAB REXICO	COMPONENTES E Interruptores	CONUNICACIONES BANDA GRANDE	CONDUCTORES Y COMFONENTES ELECTRICES	CCKGEN	CORVERTORS DE MEXICO.	DELNEX DE JUASEZ	DIESEL RECON DE Rexico	ELECTRO CIRCUITOS DE NEXICO
95	ITEMT.	295	296	247	298	344	300	192	302	202	304	305	308	101	308	309	310

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	PRODUCT (E)	TRANSFORMERS & ELECTRICAL RELAYS	NOUND RESISTORS, INDUCTORS & RÉSISTORS ON MICROCIRCUTS	PHARMACEUTICALS	CAPACITORS	MULTIPLIERS, RECTIFIERS, VOYES, & TURNERS, KEYBGAARS		INDICATOR LIGHTS	ASSERBLY OF PRESSURE GUAGES & THEMOMETERS		DUTPCARD HOTER CORPORENTS	HOSPITAL PROGUETS		UNSDFDRTED LATEX BLOVES	OUTBOARD MOTGES & ELECTRICAL ACCESSORIES	TV COMFONENTS	LAKH & GARDEN EDUIFMENT	CAFACITOES & FOTEWIEWETERS
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	<u> </u>	EL PASO	EL PASO	EL PASO	EL PASO	EL PASD	EL PASO	EL PASO	STOTE	EL PASS	13 13	EL FASD	EL PASO	COSHECTON	EL FASO	Et. F450	EL FASO	PICKINS
•	FARENT	NIDANI REES	DALE ELECTRONICS, TWC.	EL PASS MAGUILA SALES LTD.	EVOX, INC.	GENERAL Instrument Corporation	STACKPOLE Comporents Corpani	JENCO	Karsh instrument Company	STITCHES, INC.	ONC-EL FASO	akeritan Pharmeseal	SEARLESS HOSPITAL Products	EDHONT COMPANY	MERCURY MARINE OUTBOALD MOTORS	RCA JUGGET	RDME-MEN	SANGAY) CAPASITOR DIVISION
	NYREEP ERFLORED +																	
	STATE	СНЗИВАНВА	CHIHURHUR	CHIMPANA	CHIRURHIA	СИТИЛАКЗА	СНІНИРНИК	CHINDERJE	CHIHUARUE	CHTHUANDA	CHIRDANDA	CHIMDARDE	СКІНВАНВА	· CHINDANDA	CHINDARDA	CHIMDANDE	CHIHDARUE	CHIMDANDA
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	전 보호 1	ELECTRO-RECH	ELECTRONICA DALE DE MEXITO	ELANET	EVDY DE MEXICO	GENERAL INSTRUMENT De juarez	INTERFUPTORES Y CONFORENTES DE MEXICO	JENCO DE NEXICO	NARSH INSTRUMENT DE JUAKET	NANUFACTURAS Diversificadas	DUTECARD MARINE DE MEXICO	PHASKASERL DE MEXICO	PRODUCTOE DE Atencion de salud de Hevico	PREDUCTOS EDMONT DE JUARET	FRODUCTOS MARINE DE MEXICO	RCA CORFOMENTES	ROWE-MEX	SANGAND ELECTRICA
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MADUILABORA ESTAPLISHKENTS

PRODUCT (S)	INTERFUPTER SNITCHES	ENGINE CONTEOLS, SOLENDIDS & TURI SIGNALS	HIGH INTENSITY LAR? COMPONENTS	FERRITE MAGNETS	PHONE INDUCTORS, TRANSFORMERS & CAFACITORS	TIE BACKS, TASSELS	COATS ASSEMBLED, MEN'S & WOMEN'S BLAZEKS	LEATHER NSR. ELOYES		AIR CENVITIONINE EVSTEN PRODUCTS	TV CAPINETS		ELECTRIC CONE	EERT EELIS	EFEREE GUNS	KIRE HARVESSES
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PASENT	STANGAR! GRIBSE!, INC.	GEWERAL MOTORS Corferation	GTE SYLVANIA LIGHTINS FRODUCTS	TDK CGROGATION OF AREFICA	ETE LEMIUFT	FASHION ENTERPEISES	FASHION ENTERFRISES	NELLS LAPORT COMFARY	WESTON INSTRUMENTS, INC.	RANDFACTURAS V REZILLAS MEXICÓ	ZENITH Electronics Corportion	GRUFO BERLIET	advance Transforkea Compan	PMERICAN SAFETY ECUIPMENT CORF.	K-P INQUETRIES	AMERICAN YATAN'I FASTE, INC.
NUMBER EMPLOYED *																
57. 1	CHTHUGHUK	CHIHAMIN	Снінлянов	CKIHDANUE	CHIHUAHUA.	CHINDANDA	CHIMPHOL .	Ситичния	Chirumaur	CRIPUSHIJA	CHINGHAG	CHINIBARA	Ситновния	aly sure leads	CETHUASUA	Силичения
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MARUTLADDRA ESTAPLISHMENTS

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PARENT FISH		CHEYSLER CORFORATION	MOHANI, DATA SCIENCE CORPOGATION	NORTH AMERICAN PRILIPS . CORPORATION	TYCOS DE JURREZ	CORCOM, INC.	PATED TECHNOLOGIES, INC.	UNITED TECHNOLOGIEE, INC.	UNITER Technolobies, Inc.	NABNECRAFT ELECTRIC CORPANY	NAZMECKAFT ELECTRIC COMFAIN	BENERAL ELECTRIC CORFANI	SWITCHES, INC.	BENERAL ELECTFIC CONFANY	FAVESA	ELECTRO-NIRE Products
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STATE		CHIHOKADA	CHINDRHER	CHINGHUE	Сытновния	CHINDALIA	CRINGARIA	CHIMBRIC	CMIRUPhor	CHINGHES	Crimeria	CETENSHIP	CHINCENCE	CHIMBABA	CHILLERIA	CHIHURHIA
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STATE	СЯТЕБЭРОВ	Calsusana	PARSELLA	CHINDAND	CHINGSHIP	ALHOHEID	СИТИСАНИЯ	CHINCARCA	сятипаная	Снінранза	CHINVANUA	CORMUILA	COAHUILA	CGAHUTLA	CORNUILA	СЭНИТА	CSARUILA
Y113	CD. PURREZ	CD. JUNAEZ	CO. 3356EZ	5D. JUAREZ 30320	CO. JUAREZ 3255	SD. JUAREZ 3200	GEN. R. M. DUEVEDD	GEN. R. M. Duevedo	NUEVO CASAS GRANDES	MLEVO CASAS GRANDES	NUEVO CASES Srandes	ALLENDE 28090	CD. ACUMA 25200	CD. ACUMA 26220	CD. ACUNA	CD. ACUNA 25200	CD. ACUNA
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FEDFUCT(S)	ELECTROXIC SUBASSERPLY, COMFUTER CABLES	SHOEE, HOUSE SHOES	FISHING LIKES	COUPON PRECESSING	NOY-KUVEN EUREICAL DISPOSABLE FKODULIS	AUTOMOTIVE FULLEYS	ELECTRONIC SKITCHES	REWEDVINS & STORE DISFLANS	DIESEL SYLINDER HEADS	GENEFAL ASSENBLY	COUFOH PROCESSING	DISPOSABLE NGBLITAL GARACKIS	DISFOSAELE DIFFERS, CONFON SGPTING	TOOTH BRUSHES	VEHICLE TESTING	HERRETIC MOTORS
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FARENT	Thin Plant Interactional, Inc.	BAKKY OF GEL PIC	POMETR BAIT COMPANY	CAROLINA COUFON CLEKINS, INC.	THE KENDALL COMPANY	(UNIVENE)	ED-BETH ENTERPRISES, INC.	FORMAS N MANIBUES De Acuma	JL? CASTING, INC.	IPTOSTABORA V Magullabora de Mea.	INDIANA PRIA FROCESSINO CONFRAY	ANAGO. Cosporation	BOEDER Oppgaturity Savere syetens	(983A3A2)	DEL KJO TEST Center	A.O. SNITH Affled Elect. Prod.
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č	CD. ACUA:	CG. ACUNA	CD. ASUNS	CD. AGUNA	. CO. ACURE	CD. ACURE	CD. ACUME	CD. ACUMA	CD. ACLINE	CD. ACURA 28200	CD. 4014.	CD. FOUR	G. K.C.	CD. ACU:A	CD. ACUNA	CD. ACIWA 26230
2.2	ASTABI	BAERY DE ACUNA	BOMBER ACUNA	CAROLINA PROCESSINS De Meaico	CINA DE ACUMA	EVIET	ensarblapoka de Acipik	FEFFIES Y MANIDUES DE Acuma	FUNDICION DE ACUMA	IMPONTABORA V Maculletora de Medico	INCIANA BATA Fedeessing de Azuma	LK AFS	MAGUILADORA DE Corhulla	FARTES DE PLASTICO De Mexico	PISTEAS DE PRUEBAS Aristas	PEDDUCTOS ELECTRICOS Aflicados
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MADVILEDERA ESTABLISHMENTS

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(S) L00753:		FANIS	SHUES	TV TUNESS, CONVERTERS	WIRING HARNESSES, POWER CORDS, GEOPHYSICAL CAR.ES, CARLE ASSEMSLIES	CLASSIFICATION OF COMMERCIAL COUPONS	MEN, WOHEK, CHILDFENS FANTS	JEANS	PDI VESTER FANTS	LADIES HANDEASS	TRIPE PROCESSINS & SAUSACE CASING MANUFACTURING	SECHS SEIGHT	CERANIC PECGFATOR PRODUCTS	SAUSAGE CASINES	OVERALLS & PATVETS	EDJEKTIDARI MATERIAL	ELECTRONIES, RUTO PARTS. RLARKE
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STATE	•	СОКИЕТСА	CPARTICA	CORMUTLA	CORNITLA	COAHUILA	CEGHITLA	CCAHULLA	COFFUILA	COAHUILA	CGRAVILA	CDAHUILA	116490	СОМНИТСА	CCAHUILA	COMMILA	COKAUILE
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FIRM NAME .	<b>!</b>	KGPEKTO INCUSTRIES	S.A.S. DE ACUNA	STAADAED CONFONENTS 36 MEXICO	STL ELECTRONICS DE MEXICO	UNITED COUFON DE MEXICO	MADUILADORR MUZGUIZ	CAFELZO Makuf Acturins Conpraia	GIPMIT INGUSTRIES	TERN-NET	AMER CASINE	CALTADO MERCER	CERANICA CREATIVA	TENTED INTERRACTORAL	FICKIES DE FIEDEAS Negras	ESTRUCTURAS ERAFICAS DE RIO B.	LITTLEFUSE
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£ i	MEXICO, B.F.	1RAFUATO 36500	Tea-uato	EL SALTO 45654	EL SAL 10	EL SALTO 45680	Guadal ripre 44546	Guadria: 664 44030	6UKBAL RUKSA 44400	Gendalajaba 4474:	EUKDALAJAFA 45050	Guadhi Atrea 44490	Burdalayara 45020	ZAFOFAN 45606	LA PEZ	NATEHUALA
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Firm	i	MADUILAGGA GE EKSAMBLSS Y COMPOMENTES	MILLER, C.E., Ccrporation Ge Mexico	09883 MAESTGAS	RASSINI RHEEM	RIO GRANDE SERVAS	Rigjas, serbio Radriguez	Super Lanthados	TECHOLOGIA DIGITA AVANZADA	TORENCO	GENERAL ĢE TELECOMUNICACIONES	TECNOLOGIA DISITAL Avanzada	PRODUCTOS ELECTRONICOS DE LA LABUMA	TECNOLOSIA DIBITAL AVANZADA	FABRICA DE ROPA EL VENADO	LONG HOFN JEANS	VIKINGO JERNS
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FARENT	ENS: 5k Corporation	OTFORB INECETEIES	DYFORD INCUSTRIES	CLASSIC COIL	DOUGLAS FCV, INC.	(100% MENICAN DANED)	(106% MEXICAS OWNED)	EMDICOTI	GATEWAY Industries	FABRACA DE MARCOS DE ABUA PRIETA:	RADIO/TV PRODUCTS CORPORATICN	KARLIN, INC.	MARS WATTE PRIGHT INCUSTRICS	FRITTI Kanufaciueine Coredratica	INTERNEX	NACROMEN
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PARENT FIRM	(CHO NOW)	(DALNEAR)	(166% MEXICAN Daned)	NORTH VERNOR Forse, Inc.	EDGERS Corporation	S.I. DE MEXICO	SAUSE BECTAERS	KONE	ZENITH ELETTROXICE COSF. OF AZ.	Stande) Corperation	· Uniteda Corferation	veleks u.s.a., Inc.	CINCINCATI Electrorics Corporation	KDB SYSTEMS, INC.	FACHO-INTERSIONES	MOLEY, INC.
KUREER Enflügen				٠.												
STATE	SONDEA	SONDEA	SONDRA	SOHOKA .	SONDEA	SONDEA	Soncer	SONGRA	SONGEE	SONDEA	SONOKA	SONDEA	SDNOKA	SONORA	SONER	SCHOKA
£!	AGUA PRIETA B4260	AGUA PRIETA 84200	ABUA PRIETA 84200	AGUA PRIETA B4200	AGUA PRIETA Sondra	ASUA PRIETA 84206	ASUA PRIETA B4200	AGUA PRIETA 84200	AGUA FRIETA 84200	ASUA PRIETA 84200	AGUA FRIETA 84200	AGUA PRIETA 84200	HERROSILLO	HERNOSILLO B3190	NERNOSILLO B3000	MAGDELENA
	MACUTLADDRA Fronteriza	MADUILADDRA INGUSTRIAL ELLAMSA	HE ISAT	NORTH VERNON FORGE MELICANA	RDSERS MEXICANA	S.1. DE METICO	SONIDOS SELECTOS DE SONDRA	SUKRAY	TELSON DE NEVICG	UNDERNOOD ELECTRIC Division	UNITRODE MEXICANA	VELCRO-MEX	C.E. SPNDRA	ELECTRO FIGITAL	Fromd-inversiones	HOLEX
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FROULT (S)		BATTERY CPARGERS		BKASSIEKEE		AUTOMOTIVE KIRING		•				ELETTROPECHANICAL ASSERPLI, CASLEE, FC BOARD ASSERBLY	NIRE HENESSES	CONNECTORS & SWITCHES	MAGNETIC RECORDING HEADS		EARKSE FOUR DFENERS	ELECTRIC COMPONENTS
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FAEN" F1F*	KENCREY COFFGEFTON	APPLIED FOWER,	EAGGER METER, INC.	Bali Ceptray. Inc.	COINETT, INC.	COLEPAN FROZUCTS CORPAN	DELMED, INC.	THE DESERET CORPAY	III CANSA & III Poker	FOSTER BARNT CONFOSATION	HAFILTON-STANDARD	LOWREY ELECTRONICS	MEKOSED. Corforation	MOLED, INC.	NORTHENIES EDMMPANY, INC.	0P11#17E	CHARESTAIN Consumer Products PIV.	BENEFAL ELECTRIC
RATER ENDORE +																		
STATE	SONDER	SONDEA	SPNOFA	SONORA	Souck	SONERA	50,564	SDNDKA	SCNORE	SONDRA	SONORE	SONDER	SONSE	SONGFA	SCH05.4	SCHOFF	SONDER	SPRDEA
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F15M NAME	Menåkel Nasdaleka	APNO .	BADGER METER DE Mexico	BAL-NET	C.A. METICAMA	CIRCUITOS NEXICANOS De nobales	PELMED	JESEKET	פר כוני	FOSTER BRAKT REVICANA	HASTA-KE)	LONREY DE MEXICO	KEN-NEX	KOLEX	KOETFONICS	DF11h17A	- 444-445 - 445-445 - 445-45 - 445-	FROBUCTOS DE CONTROL.
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MACUILARGEA ESTABLISAMENTS

	FF.56.1C1 (S)	ELECTIGNIC COMPONENTS	LUGGARE	COMFUTER COMPENENTS		COMPUTER GASSETTES	CAFFURETORS FOR SKALL ENSINES	DISFOSARLE HORFITAL ITEMS	DISPOSABLE HOSTITAL FROUNTS		CISTOSABLE MOSFITAL BARMENTS	ELECTEORIES		•			FC BGARD STUFFINS, MARNESSES, MACKETICS, ETC.	
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N.W.PEF.	ENELDIES .																	•
	STATE	SONDEA	SONGKA	SONORA	SONOKA	SOKOFA	SCHOKA	SONDEA	Sonera	SONDRA	Sonder	SONOFA	SORORA	SOLDRA	SENDEA	EDNOKA	SGROKE	SONDRA
	<u> </u>	KOSALES 84000	NOBALES 64006	NOGALES 64006	NGBALES 64600.	ND6ALES 64000	NOSALES 84686	NGSALES	NOEALES 84030 ·	1954LES 8466	NOBALES BACCO	NOGRLES 84000	NGGSTEE B4000	NJEKLES B4000	HJBALES 840(-)	NOSALES 84000	NOSALES 84000	NEGALES 84006
FIRE	Kek	ROCKWELL COLLINS DE NGGALES	SAMSON	SHUGART DE NOSKLES	SISTEMAS Y CONEXIONES INTEGRADAS	VERBATIM	WALPED DE MEXICO	ALMEF4	AMED DE MEXICO	AUTOKOTRIZ ELECTRICA GE NGGLES	KVENT	BOURNS NACHETICS ELECTRONICA	CAMBION MEXICANA	COLLECTRON CORPORATION	D.D.C. METIÇANF	D.P.I. DE MENICS	ENSAMEL ADORA Internacional	FAE-BRAZE Cokpobation
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MASULANDER ESTABLISHMENTS

PPGDN(T15)			ELECTRONICS	ELECTFOXICS			AFFAILL		NUSICAL INSTRIMENTS	CCRFUTER FEFTFHERES	NUSICAL INSTRUMENTS	PC BCRRD STUFFINS	SHELTER PLAN OPERATION	ELECTRONIC COMFONENTS	CAPACITORS, ELECTROXIC COMPONENTS		Gi BSG 1 AKFS
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PARENT	GENERAL Instrument Cor Gration	GUILLMAN, CHARLES F.	INSENIEKIA AKLICADA	JEFFERSON ELECTEONICS	HYTRORICS WEST Corforation	MASNETIC METALS CORFORATION	MEST COAST INDUSTRIES, INC.	METRO INTERNATIONAL MFG. CORF.	THE HOUSE OF FRESTINI	THESYS RENGEY Products Corporation	COIN ART & ARTLEY	SITILER DE REXICO	SOFIC KIRE Corderier	DIAELG SYSTEM, INC.	TUSOMIY, INC.	(DRINGER)	. נעוב פו עלכ
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FTEM NAME	VEST CAP AKITOKA DE Kexico	NILSON, JONES Sonitronies	CREACIONES SKRITA	MANEKSA	FAUL-SON NEXICANA	PROHOTOSA CONCOSEDIA	VIRSAN	KIO CONTRATOS DE Costura	COMFONENTES MECANICOS DE MATAMOROS	DELTROPICES DE Katandfos	61.ASSME'A	KLH DE MENICO	FAFRICACION NETALICA DE KATANDROS	INDUSTEIAS DE PRODUCTO DE PERLITA	INFOR	MAGULLADDEA KEXICANA De hetales
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FF.DEWCT (S)	ELECTRONICS & ELECTRO-MECHANICAL ASSEKRLIES	SHEIM? FROCESSINS	ELECTRICAL DATA TRNASFER SYSTEMS	TRANSFORMERS	SIUFFED TUYS, FLACTIC TOYS	INDUSTEIA. FACKESING EGUIFNENT & AUTONATED SEKING NACHINES		DEVEIKINS & FREETING OF SHAIMP	RIFFERS	ALTOKOTIVE WIRE HASNESSES	COPFENENTS FOR DASHEDARDS	TANTALUM & MONDLITHIC CERANIC CAFAEITORS		FRACTIONAL MJESEFONER MOTORS	IR & RF COILS & IKANSFORMERS
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8년 보	ELECTRO-SEMBLIES DE ' Kexico	ENFAUE V Conselecton Fronterizos de Natandeo	ENSAMBLES DE MEXICO	ENSAMBLES ELECTRONICOS DE MATAMOROS	FISHER-FRICE DE Mexico	IDEAL EDUIPNENT DE Nexico	ISC DE MATANDROS	INDUSTRIAS DEL MAR DE TANAULIRAS	INDUSTRIAS FRONTERIZAS RE MATAMOKOS	INDUSTRIA THOMSBOX De Mexico	INDUSTRIKS WREK	KEMET DE MEXICO	KENET DE MEXICO	LEECE NEVILLE DE KEXICO	LEFCO
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FIRE	<b>!</b> ·	NACIILADDKA "GRLPO KDV&"	Kextensarbles Electroxicos	NECO DE MENICO	KANCO DE MEXICO	RECUPERACION DE METALES INDUSTRIALES	KINIR DE NATANOROS	SINGER FRECISIONES GENERALES	VAREL DE MATREDROS	VKC DE MATAPORGE	WINEGARD DE MEXICO	(MKNOKP)	A.C. NIELSEY COMPANIA GE KEXICO	AERO REFARACIENES	AILSANTES DE KUEVO LAREBO	BARRY DE MEYICO	EKONCES Y LUCES DE
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VT13	REYNDSA BB506	REYNDSA BBS50	Revigsa 88500	REYNCSA BB509	REYNOSA BBS00	RENNOSA BEE(0)	REYNDSA 88500	REVNOSA EBSOC	RIO BSAVG	KIO BRAVG	TLAXCALA	MEKIDA 57268	Zacktecas 96000	TI JUENE.		CD. JUAREZ
FIRM	LAKEDA Sehi Conductores	PAKTES DE TELEVISION De Reynosa	SOCIEDAD DE KOTOKES Domesticos	AMEN KIEBON DE MENICO	EMPASADORA CALNO	FRUTICO	REPARACIONES Y VALVULAS DE TAMBULIPAS	REY-NET BER	NAZUILAS INGUSTRIALES DE LA FRONTERA	P.E.A. INDUSTRIAL	MADUILADOSA DE TLAXCALA	ОЕНЕЯ	SINGER ELECTRONICO DE TACKTECAS	MAGUILA Internacional	(UN).NOKN)	MUESLERIA DE DURANGO
HEM.	<b>8</b> 27	33	740	348	742	143	77.	¥.	#	17.	748	5 <del>4</del> 5	P.	<del>;</del> ;	75	<u> </u>

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25.	Speculation building	NIEVO CASAS Grandes	CH: HUAHI:P		GRUPD CHEEKA	EL FASS	•	<u> </u>	
87	Combuctores y Componentee Electricos	VILLA AHURDA 32800	CETHERAUS		BENERAL MOTOTS CORFORATION	E. FASC		33353458K 3818	
756	FAERICACION METALICA DE MATAMORDS	H. Metambrids B7366	Tarabi IPAS		MITEUBIENI	0.850 0.850	<b>u</b> n	٠	٠.
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Table G-1.--Certain production statistics for Maquiladoras in Mexico: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico, by selected industry sectors, 1984

	0 + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Average annual	Average manhours worked by laborers per	s Wages, salaries, and benefits	Imported inputs and investment	Value added in Mexico
Tillunati Y/ Sector	Number	Number	Number		-1,000 dollars 1/	
Assembly of garments and other ready made clothing from textiles and other	٠.					
materials	101	19,885	3,393,843	43,924	261,127	71,526
packaging and canning of food	10	1,753	283,333	4,246	33,139	12,087
Manufacture of shoes and leather goods	35	3,933	643,680	699'6	41,048	17,796
accessories and other products of wood and metal	70	6,201	907,247	16,037	49,650	46,951
transportation equipment and accessories	10	29,378	4,414,111	. 86,941	869,328	210,314
Assembly and repair or machine tools and parts (non-electrical)Assembly of electrical	16	2,154	341,277	7,582	34,835	18,035
and electronic machinery, equipment, and articles	73	47,572	7,124,654	131,287	927,529	227,958
materials and accessories	171	60,948	9,439,318	171,678	887,021	295,445
Assembly of toys and sports equipment	26 4	6,172	982,705. 23,935	18,029 1,132	101,781 8,047	37,545 8,312
Other industrial manufacturing	87 28	10,854 10,562	1,703,213	27,544 25,734	166,216	66,875
Total	672	199,684	31,101,424	543,803	3,398,148	1,051,664

1/ bollars are converted on the basis of the average dollar/peso exchange rate in 1984.

Source: Translated from data compiled by Direccion General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-2.--Certain production statistics for Maquiladoras in the border regions of Mexico in 1984: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

			Average manhours	S.		
Industry/Sector	Establishments	Average annual employment	laborers per month	Wages, salaries, and benefits	Imported inputs and investment	Value added in Mexico
	Number	Number	Number		1,000 dollars 1/	
Selection, preparation						
packaging, canning of food	10	1,753	283,333	4,246	33,139	12,087
Assembly of garments and						
other ready-made clothing from textiles and other						
materials	79	15,161	2,689,097	34,989	216,890	55,295
Manufacture of shoes and						
leather goods	32	3,648	592,955	660.6	39,893	14,842
Assembly of furniture, its						
accessories and other products of wood and						
metal	70	6,201	970,247	16,037	.059.64	46,951
Construction, reconstruc-						
tion, and assembley of						
transportation equipment		•	,			
and accessories	46	28,040	4,197,891	84,150	859,742	202,353
Assembly and repair of	•					
machine tools and parts						
(non-electric)	16	2,154	341,277	7,582	34,835	18,035
electronic machinery,						
equipment, and articles	64	41,691	6,181,775	117,639	825,951	202,651
materials and						
accessories	155 ·	53,316	8,371,847	151,022	750,396	240,012
Assembly of toys and				1	1	
sports equipment	26	6,172	982,705	18,029	101,781	37,545
Other industrial		1				
manufacturing	73	9,655	1,581,893	291,62	161,369	47,591
Services	24	9,118	1,538,088	0/9,22	16,418	36,061
Subtotal border		176 909	27,731,108	490.625	3.092.064	909,983
regions	767	,,,,,,,	2224			

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1984.

Source: Translated from data compiled by Direccion General de Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-3.--Certain production statistics for Maquiladoras in regions other than the border in Mexico in 1984: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

			Average manhours	s		
			worked by	•	•	4 - 4 4 - 1 - 1 - 14 - 14
and to an of the target of target	Retablishments	Average annual	laborers per month	Wages, salaries, and benefits	Imported inputs and investment	value added in Mexico
Tildusti Y/Section	Number	Number	Number		1,000 dollars 1/	
Assembly of garments and and other ready-made						
clothing from textiles and other materials	22	4,724	704,746	8,935	44,237	16,231
Manufacture of shoes and	en	285	50,725	570	1,155	2,954
Chemical products		272	23,935	1,132	8,047	8,312
Construction, reconstruction, and assembly of						
transportation equipment and accessories	2	1,338	216,220	2,791	. 985*6	7,961
electronic machinery,						
apparatus	6	5,881	942,879	13,648	101,578	25,307
materials and accessories	16	7,632	1,067,471	20,656	136,625	55,433
Other industrial manufacturing	14 4	1,199	121,320 243,020	2,382 3,064	4,847	19,284
Subtotal non-border regions	. 11	22,775	3,370,316	53,178	306,084	141,681

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1984.

Table G-4.--Certain production statistics for Maquiladoras in Mexico in 1983: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

			Average manhours			
		Average annual	worked by laborers	Wages, salaries,	Imported inputs and investment	Value added in Mexico
Industry/sector	Number	Number	Number		1,000 dollars 1/	# # # # # # # # # # # # # # # # # # #
Selection, preparation, packaging, and canning of food	Ф	1,898	320,876	3,801	25,772	10,216
textiles and other materials	94	16,212	2,733,159	28,667	214,344	50,165
Manufacture of shoes and leather goods Assembly of furniture,	27	2,779	454,741	5,098	24,108	9,686
its accessories, and other products made of wood and metal Construction, reconstruc-	09	4,752	836,141	9,297	30,973	28,378
transportation equipment and accessories	47	19,594	3,121,043	45,007	507,477	139,460
of machine tools and parts (non-electrical) Assembly of electrical and	13	1,514	247,756	3,767	19,002	10,555
electronic equipment apparatus and articles Electrical and electronic	63	36,770	5,528,089	78,138	735,924	141,391
materials and accessories	161	45,920	7,247,311	97,393	572,138	189,962
sports equipment	23	3,477	526,914	068.9	50,046	15,126
Other Industrial manufacturing	77	8,540	1,334,107	16,871 17,31 <u>2</u>	107,104 7,166	40,088
Total	009	150,867	23,925,165	312,241	2,294,054	662,177

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1983.

Source: Translated from data compiled by Direccion General Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-5.--Certain production statistics for Maquiladoras in the border regions of Mexico in 1983: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

	,		Average manhours			
		Average annual	laborers	Wages, salaries,	Imported inputs	Value added
Industry/sector	Establishments	employment	per month	and benefits	and investment	in Mexico
	Number	Number	Number		1,000 dollars 1/	
Selection, preparation,						
packaging, and canning						,
of foodbool jo	•	1,898	320,876	3,801	25,772	10,216
Assembly of garments and						į
other ready-made clothes						
textiles and other		1				,,,
materials	74	12,885	2,247,975	24,195	185,371	40,366
Manufacture of shoes and	#	,		4		707.0
leather goods	27	2,779	454,741	860.5	24,108	9,000
Assembly of furniture,						
its accessories, and						
other products made of					•	,
wood and metal	09	4,752	836,141	9,297	30,973	28,378
Construction, reconstruc-						
tion, and assembly of			٠			
transportation equipment		•				
and accessories	43	18,814	2,987,164	43,431	497,620	136,518
Assembly and preparation					-	
of machine tools and						
parts (non-electrical)	13	1,514	247,756	3,767	19,002	10,555
Assembly of electrical						
and electronic equipment						
apparatus and articles	55	33,255	4,993,129	71,999	659,265	126,638
Electrical and electronic	•					
materials and						
accessories	146	40,002	6,367,905	84,440	485,761	147,179
Assembly of toys and						
sports equipment	23	3,477	. 526,914	068'9	50,046	15,126
Other industrial						
manufacturing	61	7,451	1,194,596	14,922	101,543	29,319
Services	22	8,088	1,370,043	15,045	7,162	22,169
Total	533	134,915	21,547,240	282,885	2,086,623	576,750

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1983.

Source: Translated from data compiled by Direccion General Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-6.--Certain production statistics for Maquiladoras in the regions other than border regions in Mexico in 1983: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

Industry/sector	Establishments	Average annual employment	Average manhours worked by laborers per month	Wages, salaries, and benefits	Imported inputs and investment	Value added in Mexico
	Number	Number	Number		<u>1,000 dollars</u> <u>1</u> /	
Assembly of garments and other ready-made clothes textiles and					;	
other materials	20	3,327	485,184	4.472	28,973	4,149
transportation						
accessoriesAssembly of electrical	<b>4</b>	780	133,879	1,576	9,857	2,942
and electronic						
and articles	80	3,515	534,960	6,139	76,659	14,753
Electrical and electronic materials and						
accessories	15	5,918	879,406	12,953	86,377	42,783
Other industrial			113 001	070		10 769
manufacturing	16 +	1,089	204 985	2,267	4	4,981
Services	67	15,952	2,377,925	29,356	207,431	85,427

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1983.

Source: Translated from data compiled by Direccion General Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-7.--Certain production statistics for Maquiladoras in Mexico in 1982: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

			Average	•		
		forman comment	manhours worked	Wares, salaries	Imported inputs	Value added
Industry/sector	Establishments	employment	per month	- 1	and investment	in Mexico
	Number	Number	Number		1,000 dollars 1/	
Selection, preparation,						
packaging, and canning					103 10	0.00
of food	6	1,618	244,112	764.4	34,384	10,979
Assembly of garments and						
other ready-made						
clothes textiles and			1			763.37
other materials	107	, 15,002	2,457,393	42,031	190,993	0/0,00
Manufacture of shoes and	,			1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
leather goods	.21	2,043	339,362	800°/	18,0/5	14,22/
Assembly of furniture,						
its accessories, and						
other products made of						. 7 6 3 6
wood and metal	52	3,077	522,057	89/16	23,044	196,62
Construction, reconstruc-						
tion, and assembly of						
transportation equipment				4		000
and accessories	44	12,288	1,855,788	47,19/	250,144	138,222
Assembly and preparation						
of machine tools and			1	,	•	036 61
parts (non-electrical)	13	1,327	213,039	190.5	21,2/3	12,309
Assembly of electrical						
and electronic equipment						377 001
apparatus and articles	64	33,137	5,012,151	660,111	1/9,100	C0* '00T
Electrical and electronic		,				
materials and			,	0.0	906 607	763 404
accessories	159	40,979	6,536,/12	144,6/0	607.709	FCF , 202
Assembly of toys and					, , , , , , , , , , , , , , , , , , ,	710 01
sports equipment	22	2,565	385,822	8,604	38,820	10,210
Other industrial						
manufacturing	69	7,622	1,243,398	25,399	93,292	52,534
Services	25	7,390	1,237,383	23,369	//ς'ς	34,408
Total	585	127,048	20,047,217	428,854	1,905,168	814,825

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1982.

Source: Translated from data compiled by Direccion General Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-8 .--Certain production statistics for Maquiladoras in the border regions of Mexico in 1982: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

			Average			
		Average annual	manhours worked by laborers	Wages, salaries,	Imported inputs	Value added
Industry/sector	Establishments	employment	per month	and benefits	and investment	in Mexico
	Number	Number	Number		1,000 dollars 1/	
Selection, preparation, packaging, and canning of food	Ф	1,618	244,112	4,492	34,584	10,979
Assembly of garments and other ready-made clothes textiles and other materials		11,891	1,985,715	35,737	166,876	53,423
Manufacture of shoes and leather goods	21	2,043	339,362	7,008	18,075	14,227
Assembly of furniture, its accessories, and other products made of	•					
wood and metalConstruction, reconstruction, the tion, and assembly of	64	3,032	513,646	9,678	22,925	25,129
transportation equipment and accessories	40	11,537	1,748,993	44,072	248,692	129,241
of machine tools and parts (non-electrical) Assembly of electrical and	13	1,327	213,039	5,061	21,273	12,369
electronic equipment apparatus and articles Electrical and electronic	56	30,787	4,696,713	103,809	578,914	165,178
accessories	142	35,641	5,742,640	126,025	526,655	210,535
Assembly of toys and sports equipment	22	2,565	385,822	8,604	38,626	18,210
manufacturing	58 19	6,948 5,838	1,148,893 993,284	23,476 19,097	91,279 5,113	40,523
Total	514	113,227	18,012,219	387,059	1,753,012	706,258

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1982.

Source: Translated from data compiled by Direccion General Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-9.--Certain production statistics for Maquiladoras in regions other than the border regions of Mexico in 1982: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

		Average annual	Average manhours worked by laborers	Wages, salaries,	Imported inputs	Value added
Industry/sector	Establishments Number	employment Number	per month Number	and benefits	and investment1,000 dollars 1/	ın Mexico
Assembly of garments and other ready-made clothes textiles and other		·				
materials		3,111	471,678	6,294	24,117	12,153
other products made of						
wood and metal	E	45	8,411	06	66	212
Construction, reconstruc-	•					
tion, and assembly of transportation equipment						
and accessories	4	751	106,795	3,125	1,452	8,981
Assembly of electrical and electronic equipment						
apparatus and articles	<b>60</b>	2,350	315,438	7,246	42,957	15,287
Electrical and electronic materials and						
accessories	17	5,338	794,072	18,845	81,054	51,959
Other industrial	1		1			ונט כנ
manufacturing		6/4	94,505	1,923	2,013 444	7 964
Services	9	1,552	244,099	4,212	404	F061/
Total	11	13,821	2,034,998	41,795	152,156	108,567

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1982.

Source: Translated from data compiled by Direccion General Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-10.--Certain production statistics for Maquiladoras in Mexico in 1981: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

			Average manhours worked			
Industry/sector	Establishments	Average annual employment	by laborers	Wages, salaries, and benefits	Imported inputs and investment	Value added in Mexico
100000	Number	Number	Number		1,000 dollars	
Selection, preparation,						
packaging and canning					,	007 61
of foodAssembly of garments and	o	1,572	242,670	6,181	36,731	12,680
other ready-made clothing						
from textiles and other						
materials	117	18,054	3,081,653	68,704	244,695	100,195
Manufacture of shoes and	Ç		900 000	. 50 0	20.458	15, 722
Leather goods	61	1,041	060,663	100.6		
accessories and other						
products of wood and						
metal	54	3,319	549,222	16,270	30,669	35,246
Chemical products	•	143	21,591	636	426	2,070
Construction, reconstruc-						
tion, and assembly of						
transportation equipment						,
and accessories	44	10,999	1,680,075	55,413	256,753	127,096
Assembly and repair of						
machine tools and parts				1 1		
(non-electrical)	15	1,402	240,767	311,1	33,099	16,750
Assembly of electrical					,	
and electronic						
machinery, equipment,	,	****	170 171 3	700 031	175 821	PF FCC .
and articles	/9	33,396	7,101,004	133,624	179,611	1011011
Electronic and electrical						
materials and	671	42 701	7 024 169	197 588	127.351	318.818
accessories	103	16/17	691,420,1	0001161	100	
Assembly of Loys and	c	337 6	413 347	11 522	37, 291	16.949
sports equipment	53	999.7	70.01	1		-
Other industrial	,	,	000	011	212 211	63 863
manufacturing	62	8,023	1,309,389	40,40%	2/2011	0.00
Services	26	6,787	1,104,925	29,955	10,9/3	43,730
Total	605	130,973	21,128,770	597,378	2,230,539	9/7,1/6

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1981.

Source: Translated from data compiled by Direccion General Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-11.--Certain production statistics for Maquiladoras in the border region of Mexico in 1981: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

			Average menhours sorked	٠		
Industry/sector	Pstablishments	Average annual employment	by laborers	Wages, salaries, and benefits	Imported inputs and investment	Value added in Mexico
102224	Number	Number	Number		1,000 dollars	
Selection, preparation, packaging and canning of food	<b>.</b>	1,572	242,670	6,181	36,731	12,680
Assembly of garments and other ready-made clothing from textiles and other materials	86	14,273	2,472,113	57,186	210,574	17,571
Manufacture of shoes and leather goods	. 61	1,821	299,098	9,051	20,458	15,722
Assembly of lurniture, its accessories and other						
metal	51	3,236	533,938	15,933	30,345	34,216
Chemical products	4	80	13,203	291	313.	465
Construction, reconstruc- tion, and assembly of						
transportation equipment	14	10.108	1,559,744	50,831	248,462	112,911
Assembly and preparation	!					
parts (non-electrical)	15	1,402	240,767	211,175	33,099	16,750
Assembly of electrical and electronic machinery.					٠	
equipment apparatus and	9	10012	4 055 650	146.659	694.188	212,554
Electronic and electrical	3	100			•	
materials and	145	36.935	6,032,951	170,710	612,076	256,316
Assembly of toys and sports	ļ		•		,	
equipment	23	2,666	413,347	11,522	37,291	16,949
Other industrial	4.8	7 451	1 229 455	38.313	115.554	57,379
Springer Court Ling.	20	5,105	837,500	22,424	10,611	32,323
Total	533	116,450	18,830,445	536,876	2,049,702	845,836

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1981.

Source: Translated from data compiled by Direccion General Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-12.--Certain production statistics for Maquiladoras in regions other than the border region of Mexico in 1981: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

			Average manhours worked			
		Average annual	by laborers	Wages, salaries,	Imported inputs	Value added
Industry/sector	<b>Establishments</b>	employment	per month	and benefits	and investment	in Mexico
	Number	Number	Number		<u>1,000 dollars</u>	
Assembly of garments and						•
other ready-made clothing from textiles and other						
materials	25	3,781	609,540	11,518	34,121	22,624
Assembly of furniture, its accessories and other						
products of wood and						
metal	E	83	15,284	337	324	1,030
Chemical products	2	63	8,388	345	113	1,605
Construction, reconstruc-						
tion, and assembly of				•		
transportation equipment			!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	• • • • • • • • • • • • • • • • • • • •	
and accessories	m	891	120,331	4,582	8,291	14,185
Assembly of electrical						
and electronic equipment		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		1		300
apparatus and articles	^	1,595	206,205	7,165	21,633	11,385
Electronic and electrical						
materials and						
accessories	18	5,856	991,218	26,878	115,275	62,502
Other industrial						
manufacturing	∞	572	79,934	2,146	718	0,484
Services	9	1,682	267,425	7,531	362	11,627
Total	72	14,523	2,298,325	60,502	180,837	131,442

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1981.

Source: Translated from data compiled by Direccion General Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-13.--Certain production statistics for Maquiladoras in Mexico in 1980: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

			Average manhours worked			
Industry/sector	Establishments	Average annual employment	by laborers	Wages, salaries, and benefits	Imported inputs and investment	Value added in Mexico
	Number	Number	Number		1,000 dollars 1/	
Selection, preparation, packaging and canning						ð
of food	12	1,393	219,095	4,774	28,718	11,979
from textiles and other materials		17,570	3,048,942	57,521	202,720	89,460
leather goods	18	1,531	248,736	6,315	16,869	12,254
Assembly of furniture, its accessories and other products of wood and	٠,					
metal	59	3,230	544,932	13,740	31,266	29,119
Chemical products	•	129	19,916	460	1,139	1,216
Construction, reconstruction, and assembly of			·			,
transportation equipment and accessories	53	7,500	1,144,922	30,968	153,819	62,764
Assembly and repair of machine tools and parts						
(non-electrical)	16	1,834	308,317	7,064	32,751	12,792
and electronic machinery, equipment, and articles.	99	29,774	4,502,940	115,678	593,471	171,927
Electronic and electrical materials and						
accessories	157	39,627	6,483,179	155,205	548,633	266,847
equipment	21	2,803	426,406	10,258	28,006	14,709
manufacturing	61	7,852	1,275,702	32,490	102,601	64,200
Services	40	6,303	1,024,516	22,943	7,095	35, 230
Total	620	119,546	19,247,603	457,416	1,/4/,088	112,491

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1980.

Source: Translated from data compiled by Direccion General Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-14.--Certain production statistics for Maquiladoras in the border region of Mexico in 1980: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

			Average			
		Lesinge Capacity	manhours worked	Wares salaries.	Imported inputs	Value added
Tradict ru/nertor	Establishments	employment	per month	and benefits		in Mexico
100000	Number	Number	Number		1,000 dollars 1/	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Selection, preparation,						
packaging and camining of food	12	1,393	219,095	4,774	28,718	11,979
Assembly of garments and						
other ready-made clothing from textiles and other				,		
materials	94	14,256	2,491,654	49,145	171,225	67,933
Manufacture of shoes and	9	1 531	24R 736	6.315	16.869	12,254
leather goods	07	1000			•	
accessories and other			~			
products of wood and						000
metal	56	3,163	532,834	13,474	30,889	670'97
Chemical products	4	83	13,464	290	561	408
Construction, reconstruc-						
tion, and assembly of						
transportation equipment	(	•	1 0.8 013	A10 05	148 331	61.093
and accessories	50	7,100	1,068,973	4T6'67	140,331	
Assembly and repair of						
machine tools and parts	,	100 1	308 317	7.064	32,751	12,792
(non-electrical)	16	1,834	710,000			•
Assembly of electrical	•					
and electronic machinery,	67	90	4 345 R21	111.291	579.962	164,857
equipment, and articles	20	000,00			•	
materials and			•	•		
accessories	137	33,530	5,469,692	133,225	441,728	210,88/
Assembly of toys and sports	7	0000	424 404	10.258	28.006	14,709
equipment	17					
manufacturing	53	7,483	1,222,644	30,977	101,185	52,189
Services	27	4,820	169,167	17,833	6,329	25,417
Subtotal border	551	106,576	17,139,327	414,560	1,592,554	662,597
			-			

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1980.

Source: Translated from data compiled by Direccion General Estadistica Instituto Nacional de Estadistica, Geografia e Informatica.

Table G-15.--Certain production statistics for Maquiladoras in regions other than the Border region of Mexico in 1980: Number of establishments; average annual employment; man-hours worked by laborers; wages, salaries, and benefits; imported inputs and investment; and value added in Mexico by selected industry sectors

			Average manhours worked			
Industry/sector	Establishments	Average annual employment	by laborers	Wages, salaries, and benefits	Imported inputs and investment	Value added in Mexico
	Number	Number	Number		1,000 dollars 1/	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Assembly of garments and						
from textiles and other			-			
materials	23	3,314	557,288	8,376	31,495	21,527
Assembly of furniture, its	٠		,			
products of wood and						
metal	٣	67	12,098	799	377	1,090
Chemical products	8	46	6,452	170	578	758
Construction, reconstruc-						
tion, and assembly of						
transportation equipment					•	
and accessories	m	400	75,949	1,054	5,488	1,671
Electrical and electronic						
machinery, equipment						
apparatus, and articles	m	1,194	157,119	4,387	13,509	7,070
Electronic and electrical						
materials and						
accessories	20	6,097	1,013,487	21,980	100,905	25,960
Other industrial						,
manufacturing	<b>6</b> 0	369	. 53,058	1,513	1,416	12,011
Services	7	1,483	232,825	5,110	766	9,813
Subtotal non-border	69	12,970	2,108,276	42,856	154,534	109,900
		4				

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1980.

Table G-16.--Certain production statistics for Maquiladoras in Mexico in 1979: Number of establishments; average annual employment; wages, salaries, and benefits; imported inputs; and value added in Mexico by selected industry sectors

Industry/sector         Establishments         Average annual employment         Adges, salaries, Imported inputs         Imported inputs         Value addeding           Food         Number         Number         Number         In Hexico           Food         13         1,543         4,824         37,250         12,730           Shoes and garments         137         19,074         55,575         181,905         86,226           Furniture and parts of wood and machinery         33         2,823         9,997         23,863         25,911           Transportation machinery         An of consolidation and electronic machinery, apparatus, and electronic machinery, apparatus, accessories and articles         4,660         16,607         57,561         39,512           Articles         319         69,862         238,726         1,164,486         395,387           Other industrial         98         8,211         29,006         87,061         53,756           Total         20         5,192         20         51,853         24,178           Total         11,365         371,268         24,700         33,770						
Number   N	Industry/sector	Retablichmante	Average annual	Wages, salaries,		Value added
13       1,543       4,824       37,250          137       19,074       55,575       181,905          33       2,823       9,997       23,863          40       4,660       16,607       57,561          199       69,862       238,726       1,164,486       36          98       8,211       29,006       87,061       21,855       21,855       22,192       23,192       16,533       21,855       21,855       22,165       23,102       21,855       21,855       22,165       22,165       23,165       21,855       22,165<		Number	Number		1,000 dollars 1/	THE DESTRO
137 19,074 55,575 181,905 33 2,823 9,997 23,863 40	Food	. 13	1,543	4,824	37,250	12.730
33 2,823 9,997 23,863 40 4,660 16,607 57,561 199 69,862 238,726 1,164,486 3 98 8,211 29,006 87,061 98 8,211 29,006 87,061 540 5,192 16,533 21,855 540 111,365 371,268 1,573,981 6	Shoes and garments	137	19,074	55,575	181,905	86,226
40 . 4,660 16,607 57,561 199 69,862 238,726 1,164,486 3 98 8,211 29,006 87,061 98 8,211 29,006 87,061 5,192 16,533 21,855 540 111,365 371,268 1,573,981 6	wood and metalTransportation machinery materials & equipment	33	2,823	9,997	23,863	25,911
199     69,862     238,726     1,164,486       98     8,211     29,006     87,061       20     5,192     16,533     21,855       540     111,365     371,268     1,573,981	(non-electric) Electrical and electronic machinery, apparatus, accessories and	, 04	4,660	16,607	57,561	39,512
98     8,211     29,006     87,061       20     5,192     16,533     21,855       540     111,365     371,268     1,573,981	articles	199	69,862	238,726	1,164,486	395,387
540 111,365 371,268 1,573,981	manufacturing	98	8,211	29,006 16,533	87,061 21.855	53,756
	Total	540	111,365	371,268	1,573,981	637,700

 $\overline{1}'$  Dollars are converted on the basis of the average dollar/peso exchange rate in 1980.

Table G-17.--Certain production statistics for Maquiladoras in the border region of Mexico in 1979: Number of establishments; average annual employment; wages, salaries, and benefits; imported inputs; and value added in Mexico by selected industry sectors

Industry/sector	Establishments	Average annual employment	Wages, salaries, and benefits	Imported inputs and investment	Value added in Mexico
	Number	Number		1,000 dollars 1/	
Food	12	1,480	4,559	34,782	9,421
Shoes and garments	119	16,596	49,987	167,495	73,270
wood and metalTransportation machinery	31	2,806	9,935	23,702	24,037
materials & equipment (non-electric)	37	4,256	15,080	55,867	26,554
machinery, apparatus, accessories and					;
articles	182	63,613	219,887	1,079,018	339,969
manufacturing	81	7,602	26,300	81,146	47,273
Services	18	4,184	13,716	20,680	19,052
Total	480	100,537	339,464	1,462,690	539,576

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1979.

Table G-18.—-Certain production statistics for Maquiladoras in regions other than the border region in Mexico in 1979: Number of establishments; average annual employment; wages, salaries, and benefits; imported inputs; and value added in Mexico by selected industry sectors

Industry/sector	Establishments	Average annual employment	Wages, salaries, and benefits	Imported inputs and investment	Value added in Mexico
	Number	Number		1,000 dollars 1/	
Food	1	63	265	2,468	3,309
Shoes and garments	18	2,478	5,588	14,410	12,956
Furniture and parts of		;	;	•	1101
Wood and metal	7	<b>.</b>	70	101	F / 0 · 1
materials & equipment					
(non-electric)	e	404	1,527	1,694	12,958
Electrical and electronic					
accessories and					
articles	11	6,249	18,839	85,468	55,418
Other industrial					
manufacturing	17	609	2,706	5,915	6,483
Services	2	1,008	2,817	1,175	5,126
Total	09	10,828	31,804	111,291	98,124

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1979.

Table G-19.--Certain production statistics for Maquiladoras in Mexico in 1978: Number of establishments; average annual employment; wages, salaries, and benefits; imported inputs; and value added in Mexico by selected industry sectors

		Average annual	Wages, salaries,	Imported inputs	Value added
Industry/sector	Establishments	employment	and benefits	and investment	iń Mexico
	Number	Number		1,000 dollars 1/	
Food	. 01	1,208	3,483	24,921	11,563
Shoes and garments	121	17,493	44,282	163,135	68,746
<pre>rutniture and parts or wood and metal Transportation machinery</pre>	23	1,945	5,705	14,401	14,021
materials & equipment (non-electric)	88 7	3,503	11,568	41,556	22,115
machinery, apparatus, accessories and articles	174	56,209	167,541	785,557	269,903
Other industrial manufacturing	91	6,746	20,515	67,391	39,323
Total	457	90,704	262,956	1,097,891	439,230

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1978.

Table G-20.--Certain production statistics for Maquiladoras in the border region of Mexico in 1978: Number of establishments; average annual employment; wages, salaries, and benefits; imported inputs; and value added in Mexico by selected industry sectors

Industry/sector	Establishments	Average annual employment	Wages, salaries, and benefits	Imported inputs and investment	Value added in Mexico
	Number	Number		<u>1,000 dollars 1</u> /	
poog	o	1,156	3,227	23,267	8,351
Shoes and garments	112	15,556	40,816	149,946	61,079
<pre>Furniture and parts of wood and metal Transportation machinery</pre>	22	1,941	5,700	14,398	14,006
materials & equipment (non-electric)	27	3,265	10,731	40,437	17,596
machinery, apparatus, accessories and articles	160	51,183	154,176	725,469	238,956
Dener industrial manufacturingServices	81	6,418 2,868	19,386 8,170	65,009 918	36,092 11,039
Total	420	82,387	242,206	1,019,444	387,119

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1978.

Table G-21.--Certain production statistics for Maquiladoras in regions other than the border region in Mexico; Number of establishments, average annual employment; wages, salaries, and benefits; imported inputs; and value added in Mexico, by selected industry sectors, 1978

		Average annual	Wages, salaries,	Imported inputs	Value added
Industry/sector	Establishments	employment	and benefits	and investment	in Mexico
	Number	Number		1,000 dollars 1/	
	1	52	256	1,654	3,212
Shoes and garments	6	1,937	3,466	13,189	7,667
Furniture and parts of wood and metal	1	₹	s	m	15
materials & equipment (non-electric)		238	837	1,119	4,519
machinery, apparatus, accessories and articles.	14	. 97075	13,365	880.09	30,947
Other industrial manufacturing	10 1	328 732	1,129 1,692	2,382 12	3,231
Total	37	8,317	20,750	78,447	52,111

1/ Dollars are converted on the basis of the average dollar/peso exchange rate in 1978.

## APPENDIX H METHODOLOGY FOR ESTIMATING TWIN CITY MULTIPLIER

The economic interdependence of communities along the United States-Mexico border is underscored by the importance of intraregional factor and commodity flows. This economic interdependence implies that a change in the level of economic activity on either side of the border affects income and employment on both sides. Professor Ladman of Arizona State University has developed a model to estimate the effect of an autonomous change in economic activity in one border community on the level of total income in both communities. 1/ An autonomous change, such as an increase in the demand from outside the region for the output of a plant inside the region, causes a multiple expansion of production, employment, and income. This multiple expansion affects both sides of the border.

The increase in sales by the plant raises the incomes of the owners of the plant and its employees. Some of that additional income is spent on goods and services produced locally in the U.S. border city and in the contiguous Mexican city. This, in turn, raises incomes and generates another round of local spending. The end result is a multiple expansion of the initial increase in income in the region that is called the "multiplier effect," or the "ripple effect." Here, the multiple expansion that is being described is regional and affects communities on both sides of the border.

To measure the effect of an exogenous \$1 increase in regional income on a twin city's level of income, Professor Ladman introduces a set of parameters called the "twin city multipliers." By taking into account injections and withdrawals into and out of the income stream, the multiplier provides an estimate of the total change in the twin city's income resulting from a \$1 increase in demand. The size of a twin city multiplier varies directly with the percentage of income spent locally and inversely with the percentage of income withdrawn from the twin city's income stream. Withdrawals include savings, expenditures on goods produced outside the region, and expenditures on products produced in the contiguous twin city. The latter does not have the same effect as a total withdrawal from the twin city's income stream since a percentage of these expenditures are later reinjected into the city's income stream as residents of the contiguous twin city spend part of their increase in income on the U.S. border community's products.

<sup>1/</sup> The following discussion on the twin city multiplier is based on two articles by Jerry Ladman: Jerry Ladman and Michael K. Duffy, "Economic Exchange in the United States Mexican Border Area: Trade, Commerce, and Tourism," Paper presented at an International Conference on Border Relations, 1980, and Jerry Ladman, "The Economic Interdependence of Contiguous Border Cities: The Twin City Multiplier," Annals of Regional Science, March 1979.

As developed by Professor Ladman, a simple flow-of-products/income model provides the framework for examining the flow of goods and services (and labor) in U.S. border communities. The border economy is divided into two sectors (households and firms) and two markets (factor and product markets). Households supply productive services to firms in the factor market and demand goods and services in the product market. Conversely, firms demand labor in the factor market and supply goods and services in the product market.

An estimate of the twin city multiplier is provided below to indicate the effect of Mexican maquiladora investment on the level of economic activity in U.S. twin cities. 1/ Maquiladora investment raises the income of residents of the border community and increases their demand for goods and services. However, residents not only increase their demand for locally produced goods and services, but also for goods and services produced or sold by U.S. border communities. The latter, the increased demand for U.S. goods and services, translates into an increase in income for U.S. residents.

There are two types of multipliers for each city, a direct and a cross multiplier. The direct multiplier indicates the multiplicative effect that a dollar increase in its own income has on the city's income level. The cross multiplier indicates the multiplicative effect that a dollar increase in income in the other (contiguous) twin city has on the city's income level.

Because the cost of obtaining the appropriate data is prohibitive, the multipliers that are calculated were not directly estimated. Instead, the estimates were constructed indirectly using a variety of secondary sources.

The reduced form equations that form the basis of Professor Ladman's model are listed below. (The subscript and superscript "a" represents a U.S. twin city and the subscript and superscript "b" represents a Mexican twin city.) According to Professor Ladman, a community's equilibrium level of income (Y) can be solved for in terms of two expenditure terms that are scaled by respective multiplier terms. The expenditure terms, S and S, are

defined, respectively, as the sum of autonomous spending in the U.S. border community and in the Mexican twin city. The respective multipliers are a direct and a cross multiplier. The direct multiplier, D (i - a,b),

transforms changes in autonomous spending in twin city i into a change in twin city i's income. The cross multiplier, R , measures the effect of changes i

in autonomous spending in twin city j on twin city i's income.

In the equations below, total income in a border community (Y) is composed of consumption (C), investment (I), government expenditures (G), and

exports (X). 2/ The parameters s, m, and m represent, respectively, the marginal propensity to save, the marginal propensity to import from the neighboring border community, and the marginal propensity to import from the rest of the world or outside the region. (Autonomous expenditures are denoted by a "bar" over the variable.)

<sup>1/</sup> The payrolls of maquiladoras are treated as net increases, or injections of income, into the economy of the Mexican border community. The analysis attempts to determine the impact on the equilibrium level of income in the U.S. border community of this injection into the income stream.

 $<sup>\</sup>underline{2}/$  Exports by country i are destined to the rest of the world (X ) and to the ineighboring twin city (X ).

The multiplier is derived from the following reduced form equations: 1/2

$$Y_a = (D_a S_a) + (R_a S_b)$$
  
 $Y_b = (D_b S_b) + (R_b S_a)$ 

where

$$S_{a} = \overline{C}_{a} + \overline{I}_{a} + \overline{G}_{a} + (\overline{m}_{b}^{a} + \overline{X}_{a}^{r}) - (\overline{m}_{a}^{b} + \overline{m}_{a}^{r})$$

$$+ [(m_{a}^{b} + m_{a}^{r}) - c_{a}] \overline{T}_{a} - (m_{b}^{a} \overline{T}_{b})$$

$$S_{b} = \overline{C}_{b} + \overline{I}_{b} + \overline{G}_{b} + (\overline{m}_{a}^{b} + \overline{X}_{b}^{r}) - (\overline{m}_{b}^{a} + \overline{m}_{b}^{r})$$

$$+ [(m_{b}^{a} + m_{b}^{a}) - c_{b}] \overline{T}_{b} - (m_{a}^{b} \overline{T}_{a})$$

<sup>&</sup>lt;u>1</u>/ Use was made of the fact that exports by country i to country j  $(X_j^i)$  must be equal imports by country j from country i  $(M_j^i)$ . The latter are determined by an exogenous component  $(\overline{m}_j^i)$  and disposable income in country j  $(Y_j^i - \overline{T}_j^i)$ .

Estimates of the twin city multipliers are used to provide an indication of the effect of Mexican maquiladora investment on the level of economic activity in U.S. twin cities.  $\underline{1}/$  The payrolls of maquiladoras are treated as net increases or injections of income into the economy of the Mexican border community. The analysis attempts to determine the impact on the level of income in the U.S. border community of this injection into the income stream. The data used for the parameter values are listed below.

Mexican Data.--The change in autonomous spending is measured by the sum of the maquiladora payrolls in each Mexican border community in 1984. The data are presented in Table H-1.

Mexico's marginal propensity to save for the years 1950-67, is estimated by United Nations statistics to be .16. There is not any evidence to suggest that border communities propensity to save deviates from the Nation's propensity to save. The marginal propensity to import from the rest of the world is the sum of the border communities' propensity to import from the rest of the world plus the propensity to import from other regions within Mexico. It is difficult to obtain regional U.S. or Mexican import and export

statistics. Therefore, it is assumed for all the border communities that m is equal to the propensity to import from other countries. It is also assumed that this parameter is the same for all Mexican border communities. Another parameter, the marginal propensity to import from neighboring border communities, has been estimated in the economic literature and by Government officials. Table H-2 presents the range of estimates that exist in the literature. In all likelihood, the 1982 peso devaluation has led to a decline in this parameter, but it is unknown by what degree. Therefore, estimates prior to 1982 are more likely to overestimate Mexican expenditures in U.S. border communities. This study will use a range of the most recent estimates: 20 to 40 percent.

<u>U.S. Data.--</u>The change in autonomous spending in U.S. border communities is a function of the maquiladoras' payrolls in the border communities and the Mexican's marginal propensity to import from U.S. border communities. There exist estimates of the marginal propensity to save in the U.S. economy. These estimates are used to approximate the border communities' propensity to save. 2/ As in the Mexican case, there is no evidence to suggest that the border communities' savings rate differs from the Nations' saving rate. The marginal propensity to import is derived from estimates of the income elasticity of imports for the United States. 3/

<sup>1/</sup> Javier Salas, "Estimation of the Structure and Elasticities of Mexican Imports in the Period, 1961 -1979", Journal of Development Economics, vol. 10, 1982. Mexican total imports in 1983 were \$11.3 billion and gross domestic product in 1983 was \$170 billion. Import data is provided by the Banco de Mexico and GDP data was reported by the U.S. Embassy in Mexico City.

<sup>2/</sup> David H. Howard, "Personal Savings Behavior and the Inflation Rate,"
Review of Economics and Statistics, vol. LX, November 1978. The marginal propensity to save is based on real per capita permanent disposable income. The MPS, .19, is calculated using data through 1976.

<sup>3/</sup> Dennis Warner and Mordechai E. Kreinin, "Determinants of International Flows" Review of Economics and Statistics, Vol. LXV, February 1983.

Table H-1.--Maquiladora payroll 1/ in Mexican border communities in 1984

Border communities	Value
Mexicali, Baja California	\$ 27,338,082
Tijuana, Baja California	66,419,063
Cuidad Acuna, Coahuila	11,844,251
Piedras Negras, Coahuila	8,192,830
Ciudad Juarez, Chihuahua	201,824,925
Ciudad Chihuahua y Ojinaga Chihuahua	22,347,818
Nogales, Sonora	45,701,949
Agua Prieta, Sonora	14,058,831
Nuevo Laredo, Tamaulipas	9,859,220
Reynosa, Tamaulipas	35,609,681
Matamoros, Tamaulipas	63,013,521

<sup>1/</sup> Total wages were derived using the average exchange rate in 1984, 185.18 pesos to the dollar.

Source: Direccion General de Estadistica, Instituto Nacional de Estadistica, Geografia e Informatica.

Table H-2.--Estimates of Mexicans' border communities propensity to import from U.S. border communities

Mexican border community	Marginal propensity to import	Source of the estimate
MEXICAL DOLGET COMMUNITEY	CO IMPOLC	ESCIMACE
Matamoros	52 percent of Mexican's in Brownsville.	Nathan Associates (1968).
Agua Prieta	52 percent of Earnings in Douglas.	Jerry Ladman (1972).
Mexican border communities	75 percent of Maquiladora earnings spent in border communities.	Loehr and Bulson (1972).
Mexican border communities	40 percent of the revenue spent in Maquiladoras returns to the United States.	Texas profile 85 (1985).
Reynosa	20 to 30 percent of Mexican earnings are spent in the United States.	McAllen City officials (January 1986).
Ciudad Juarez	30 percent of Maquiladora's earnings.	William Mitchell (April 1986).

There is little information concerning estimates of the U.S. border residents' propensity to import from Mexico's border region. The estimate of the marginal propensity to import is based on the average propensity to import from Mexico, approximated by the ratio of total U.S imports from Mexico to U.S personal disposable income.  $\underline{1}/$ 

Table H-3 summarizes the parameter estimates used for the Mexican and U.S. border communities.

Marginal propensity Marginal propensity to import from the Marginal propensity to import from the neighboring border rest of the world community Item to save United States 0.07 border community... 0.19 0.24 Mexico border 0.20 - .40.03 community..... .16

Table H-3.--U.S. and Mexican parameters  $\underline{1}$ /

Multiplier estimates.--Estimates of the multiplier based on alternative assumptions and data are presented in table H-4. For each city, there is a direct and a cross multiplier. The direct multiplier indicates the multiplicative effect that a \$1 increase in its own income has on the city's income level. The cross multiplier indicates the multiplicative effect that a \$1 increase in income in the other (contiguous) twin city has on the city's income level. Since we are estimating the effect of an increase in Mexican income upon U.S. border communities, we estimate the cross multiplier for each U.S. border community, i.e., the U.S. communities' cross multiplier. 2/

<sup>1/</sup> It should be noted that these parameters vary by border community. However, because of the lack of city data, it is impossible to estimate the parameters by border community.

<sup>1/</sup> Real GNP, imports, and personal disposable income were obtained from the National Data Book and Guide to Sources, Statistical Abstract of the United States, 1985. U.S. imports from Mexico were obtained from the Department of Commerce.

 $<sup>\</sup>underline{2}$ / Because of the lack of data, it is assumed that each border community has the same cross multiplier.

The cross multiplier for U.S. border communities ranges from 1.10 to 1.48. 1/ (See table H-4). This implies that a \$1 change in a Mexican twin city's income changes the U.S. border communities' income by betweent \$1.10, and \$1.48. The U.S. communities' cross multiplier is smaller than the Mexican border communities cross multiplier. This is not surprising since citizens in U.S. border communities are less likely to engage in cross-border shopping.

Estimated effect on level of income.--Table H-5 illustrates how each U.S. border community's level of total income is affected by an increase in income in the Mexican border community that is equal to total maquiladora wages. The estimated increases in total income range from a low of \$9 million in Eagle Pass to a high of \$298 million in El Paso. The table also contrasts the estimated increase in county income to total county income in 1983. In most of the counties, the percentage is between 5 and 10 percent. The percentage varies directly with the number of maquiladoras in the neighboring community and indirectly with the size of the U.S. border community's economy.

Table H-4.--Examples of the multiplier effect

Item	Case I 1/	Case II	Case III	
U.S. direct multiplier	2.15	2.23	2.19	
U.S. cross multiplier	1.10	1.34	1.48	
Mexico direct multiplier	2.76	2.27	1.85	
Mexico cross multiplier	.39	.32	.26	
I/ ratameters used to construct the multip	liers are tr	ie iollowing	ζ:	
1/ Parameters used to construct the multip	Case I	Case I		III
United States border community Marginal propensity to save	<u>Case I</u>	Case I	<u>Case</u>	.19
United States border community	<u>Case I</u>	Case I	Case	

.16 :

.16 :

.16

Marginal propensity to save.....

<sup>1/</sup> These estimates must be used with care since they are sensitive to the assumptions used to construct them. For instance, the size of the cross multiplier is very sensitive to the size of the marginal propensity to spend in U.S. border communities.

Table H-5.--Income effect in U.S. border communities

	Range of possible	
City and State	income effects	counties income 1/
Douglas, AZ	\$15,464,714 - \$20,807,069	2 - 3
Nogales, AZ 2/	50,272,148 - 67,638,884	31 - 42
Calexico, CA		4 - 5
San Diego, Chulavista, and		
National City, CA	73,060,969 - 98,300,213	.34
Brownsville, TX		5 - 7
Del Rio, TX		5 - 7
Eagle Pass, TX		7 - 10
El Paso, TX		6 - 8
Hidalgo and McAllen, TX		2 - 3
Laredo, TX		2
Presidio, TX <u>3</u> /	• •	55 - 75

<sup>1/</sup> Income data for U.S. border communities is obtained from County and City Data Book, 1983.

 $<sup>\</sup>underline{2}$ / The income effects may be biased upwards, since the maquiladora wage payments included maquiladora wages in Aqua Prieta and Magdalene de Kino, Sonora.

<sup>3</sup>/ The income effect may be overstated since the maquiladora wage payments included wages in Ciudad Chihuahua as well as Ojinaga, Chihuahua.

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## APPENDIX I

MODEL UNDERLYING ANALYSIS OF PROPOSALS
TO ALTER THE ALLOCATION RESOURCES TO THE BORDER AREA

This appendix describes the underlying model used to analyze the effects of the various proposals to develop the border. The model divides the United States and Mexico into three regions. The first region is the border area of Mexico, the second is the border area of the United States, and the third is the nonborder region of the United States. Within the three regions, there is a demand for physical capital, which is a relationship between the cost per unit of capital (the rental or interest rate) and the number of units of physical capital demanded at the various interest rates. There is also a supply of capital for each region. The factors that determine the level and changes in the demand for and supply of capital are outlined below.

The level of demand, as well as changes in that level, are determined by a number of factors that can be grouped into three categories. The first category is the Price of Final Goods. Since the demand for capital is derived from the demand for commodities, an increase in the price of a good raises the profitability of producing that good and induces producers to increase their production of the commodity. In order to do so, producers increase their demand for capital. Similarly, a decrease in the price of the good, reduces the demand for capital. Included in this category are also the effects of government policies that alter producer prices, i.e., tariffs, quotas, etc. For instance, the implementation of a tariff generally raises the price of a good in the domestic market and serves to increase the demand for capital. Note that the only government instruments included in this category are those related to the sale or production of a unit of the commodity. A wage subsidy also affects the demand for capital, but it is related to the use of an input, not to the price of the good.

The second category is the Price of Other Inputs. The production of a commodity also requires the use of factors of production other than capital: unskilled labor, skilled labor, and land. When the cost of an input falls, two effects occur. That input is substituted for capital and the demand for capital declines. At the same time, however, the decline in the cost of the input reduces production costs and stimulates production of the final good. Since an increase in production requires more of both inputs, the demand for capital rises. Generally, this scale effect dominates the substitution effect if the products are complements in production. 1/ Thus, a decline in the cost of labor increases the demand for capital. Government policies that alter the cost of using inputs fall within this category. Therefore, the wage subsidy mentioned above lowers the cost of inputs and raises the demand for capital.

The third category is the State of Technology. Technological progress, both exogenous and endogenous, increases the productivity of a nation's resources. Exogenous technological progress may occur randomly through time or it may be transferred from abroad, and endogenous technological progress may be induced (through research and development expenditures) or occur spontaneously (through "learning by doing" or the accumulation of experience). The level (as measured by an index) has an influence on the

<sup>1/</sup> Complementarity is defined as follows: "factor 1 is a complement for factor 2 if the quantity of factor 1 employed increases when the price of factor 2 decreases." See Eugene Silberberg, The Structure of Economics, New York, McGraw-Hill Book Co., 1978, p. 117.

productivity of an economy and is reflected in the demand for capital. All other things the same, the demand for capital is higher in a country relative to that in another country if a relatively greater rate of technological progress has resulted in a larger stock of usable knowledge and technical expertise.

Now consider the supply of capital. Supply is one of three elements that links the capital markets of each region, particularly in the United States. Whenever a region increases the demand for capital, it increases the total U.S. demand for capital. This in turn causes an increase in the rate of interest in the United States. The increase in the cost of capital reduces the quantity demanded of capital in the other region, as well as the one in which the increase in demand occurred. Although investment in the region whose demand for capital has increased will rise, whether net investment in the United States increases depends on the responsiveness of the supply of capital. Generally, net investment in the region will also rise.

The other two elements that link the capital markets of both regions are, the Government's budget constraint and the effect of industry expansion on the price of the final product. First, through its expenditure and taxation policies the Government can alter the distribution of investment between regions. For example, the Government could attempt to promote investment in a region by providing an investment tax credit. Since the investment tax credit is similar to a reduction in the cost of capital, the supply of capital facing the region would increase. Firms would then respond by increasing their quantity demanded for capital and investment in the region would thereby expand. In the unlikely case that the rate of interest in the United States was unaffected by this increase in the quantity demanded for capital, then there would be no impact on firms in the other region. However, a realistic model of the Government must also take into account that the Government has a budget constraint. When it reduces taxes, it must also reduce expenditures or raise taxes elsewhere. If it intends to maintain expenditures, then taxes must rise in the nonborder region of the United States. In doing so, the increased taxes would cause the supply of capital to decline in the nonborder region and investment would decline. Thus, because of its budget constraint, the Government's policies can have implications for all regions.

Second, as indicated earlier, changes in the prices of final goods alter the demand for capital in each region. If the lowering of taxes in a particular region causes net investment to rise in an industry, then the associated expansion of industry supply can have a depressing effect on the price of the final product. The change in product price in turn causes investment in both regions to fall by lowering the demand for capital since investments become less profitable. Although the effect on price may be insignificant, what is relevant is the accumulation of effects over all firms in the nonborder area. Over time, the decline in the demand for capital in a region will cause all firms to relocate by reducing their capital stock through depreciation.

Finally consider the supply of capital to the Mexican border region. This is supplied is at a higher supply price than that for the other regions. In addition to being a capital-poor nation relative to the United States, political risk, the risk of default, and the restrictions on foreign direct investment serve to limit the supply of capital to Mexico. As a consequence, the cost of capital that Mexico faces is higher than the world rate.



# APPENDIX J

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Summary of Known Research Activities on the University of Houston-University Park Campus on the Texas-Mexico Border Economy

### Researcher (s):

Mark Ginsburg, Educational Leadership & Cultural Studies 749-7281 Robert Randall, Anthropology
Margarita Melville, Anthropology (now at UC-Berkeley)
Jane Hagland, graduate student in Anthropology.

Event: Gathered preliminary data to support a proposal for investigation of the social and cultural impact of the economic crisis in the border region. Proposal was not funded.

#### Researcher:

Barton Smith, Economics/Center for Public Policy 749-7141.

Event: Co-authored article. Smith, Barton and Newman, Robert J. "Depressed Wages Along the U.S.-Mexico Border: An Empirical Analysis." Economic Inquiry, January 1977, vol. 15, pp. 51-66.

#### Researcher:

Stephen Zamora, Law 749-4312 (on development leave)

Event: Has published on the subject of transfer of funds across the Texas-Mexico border.

Source of information: Michael Olivas, 749-2557

#### articles include:

Zamora, Stephen. "Exchange Control in Mexico: A Case Study in the Application of IMF Rules," <u>Houston Journal of International Law</u>, Autumn 1984, vol. 7, pp. 103-135.

Zamora, Stephen. "Peso-Dollar Economics and the Imposition of Foreign Exchange Controls in Mexico," <u>American Journal of Comparative Law</u>, winter 1984, pp. 99-154.

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