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United States - Mexican Joint Ventures

A Case History Approach

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Executive Summary

Because the Mexican government under its current President, Carlos Salinas de Gortari, has encouraged investment in Mexico by increasing the percentage of ownership of a Mexican business that a U.S. company can hold, joint ventures are more attractive now than they had been in the past.

This study, conducted by Pacific Northwest Laboratory[a] at the request of the Office of Technical and Financial Assistance of the U.S. Department of Energy, provides preliminary information for U.S. renewable energy companies who are interested in forming a joint venture with a Mexican company. This report is not intended to be a complete reference but does identify a number of important factors that should be observed when forming a Mexican joint venture:

- Successful joint ventures achieve the goals of each partner. This results from complementary contributions from each partner, creating synergistic benefits. The nondomestic partner generally contributes manufacturing technology, a specific product knowledge, and technical knowledge. The host-country partner generally contributes capital, knowledge of the indigenous market, contacts within the government, knowledge of local suppliers, and a relationship with local labor.

- It is essential that all parties agree to the allocation of responsibilities. It doesn't matter which party agrees to be responsible for financing, marketing, or research and development, as much as it matters that both parties agree to the arrangement.

- Put everything in writing. During the negotiation process, lay out all the terms and conditions of the venture in black and white terms to which both parties agree.

- Research in depth the country or countries in which you are considering doing business. Become as familiar as possible with their culture, history, current events, language, etc., all of which will smooth your relationship and interaction with your potential partner and foreign business contacts. Time spent in this research will pay off well in the long run.

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- Select a partner familiar with U.S. ways and expectations of doing business; conversely, allow your Mexican partner to introduce you to and lead you through the Mexican business and cultural environment.

- Establish and maintain open communications with your partner from the outset. Do not allow language or culture to become communication barriers.

- In most cases, the Mexican partner best knows how to conduct business in Mexico, as well as the characteristics of the Mexican market. Therefore, allow them to operate the venture. The role of the U.S. firm should, in many cases, be that of upper level policymaking and oversight.

Information contained in this report includes a listing of U.S. companies who are conducting business in Mexico, a listing of those companies who have formed strategic alliances with Mexican companies, case histories of the experiences of several of these companies, and a brief guide to forming a joint venture in Mexico.

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Contents

Tables

1.0 Introduction

Strategic alliances are increasingly used by companies around the world to gain entry into nondomestic markets. For many companies considering doing business abroad, a wholly owned foreign subsidiary would be the most attractive alternative because this arrangement allows absolute managerial control as well as total control over production and marketing operations. Often, however, as a result of governmental regulations restricting foreign ownership, this type of arrangement is not always possible. Although often costly and difficult to establish, a joint venture in such cases represents an attractive alternative. A joint venture offers a number of incentives: 1) it may enable a company to make use of the specialized skills of a foreign partner, 2) it can allow access to the foreign partner's distribution system, 3) it allows companies that lack the capital or personnel capabilities to expand internationally, 4) it allows entry to markets where wholly owned activities are prohibited, and 5) it reduces a firm's economic and political risks by the amount of the partner's contributions to the venture (Cateora 1987).

Strategic alliances can take several forms: technical support contract, licensing, franchising, vertical joint venture, and horizontal joint venture. Each of these forms is increasingly interactive, with horizontal joint ventures requiring a fully integrated company and each partner having full access to the other partner's technology and information. With either vertical or horizontal joint ventures, each partner shares the risk of start up, invests their own unique technical skills, and provides joint financing.

A number of countries are currently attractive as host sites for U.S. joint ventures. One of these, and certainly one of the most convenient from a geographic perspective, is Mexico. Mexico is the 14th largest country in the world and the 12th largest in population, making its size and proximity (sharing a 2,000-mile border with the U.S.) an excellent test bed for the Latin American market.

Mexico is both a market where joint ventures are frequently used by U.S. firms and an excellent market for the production and sale of renewable energy technologies. Under Programa Nacional de Solidaridad (PRONASOL), the Mexican government has electrified a number of rural communities using renewable energy systems. This effort is anticipated to expand greatly through the efforts of the Mexico-U.S. Renewable Energy Cooperation Program (PROCER), whose goals include assisting in the development of the Mexican renewable energy industry. Because the Mexican government retains exclusive control over the electric power generation industry and governmental and parastatal companies are encouraged to "buy Mexican" whenever possible, one way in which U.S. firms can participate in the market is for Mexican and U.S. renewable energy companies to collaborate through joint ventures.

For many U.S. companies without any international experience, the prospect of forming a joint venture is, in many cases, confusing at best if not totally daunting. To encourage and instruct U.S. companies to partake in this opportunity, the U.S. Department of Energy (DOE) Office of Technical and Financial Assistance (OTFA) commissioned Pacific Northwest Laboratory (PNL)[a] to develop a guide to forming joint ventures in Mexico. The mission of the OTFA is to support the objectives of the National Energy Strategy by focusing DOE and Federal activities on helping U.S. renewable energy technologies and industries to compete effectively in domestic and international markets. To accomplish this mission, OTFA has set a goal to enhance the market position of U.S. industry by identifying opportunities and improving information to industry that will increase the sales of renewable energy products and services. The growth of the world market share of and the participation in joint ventures on the part of U.S. renewable energy companies are two indicators of the success of this goal.

This study provides preliminary information for U.S. renewable energy firms who are interested in forming a joint venture with a Mexican firm and is not intended to be an all-inclusive treatise. In fact, a section on what other sources of information a firm should consult before making such a decision is included; that list, in itself, is also not exhaustive.

This study is limited in scope to address joint ventures only. This should not imply that this is the only form of strategic alliance with a foreign firm. Many other forms of successful cooperation among U.S./Mexican companies, as well as a variety of other ways to conduct business in Mexico, exist. However, because the government of Mexico, under its President, Carlos Salinas de Gortari, has encouraged investment in Mexico by increasing the percentage of a Mexican business that a U.S. firm can own, joint ventures may be more attractive now than in the past.

The purpose of this study is to provide the U.S. renewable energy industry with information to facilitate joint venture planning for Mexico. To this end, the following are presented:

- identification of U.S. companies who are conducting business in Mexico and identification of those companies who have formed strategic alliances with Mexican companies (Section 2.0)

- case histories of the experiences of several of those companies (Section 3.0)

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- a brief guide to forming a joint venture in Mexico (Section 4.0)

- sources of information and references used in this report to consult before making any joint venture decision (Sections 5.0 and 6.0).

The case histories will serve as the basis for a planned Phase II seminar to be conducted for renewable energy manufacturers.

2.0 Methodology

From the thousands of companies contained in the *North-South Database* (University of Miami 1992), *American Companies Operating in Mexico* (American Chamber of Commerce of Mexico 1991), *American Firms in Mexico* (World Trade Academy Press 1991), and those found in a literature review, a master list of 200 was compiled (Table 2.1). Eliminated from this list were Mexican companies with a non-U.S. partner; companies operating in Mexico that were clearly indicated as being wholly owned subsidiaries, solely distributors, solely sales agents, or merely warehouses for U.S. parent companies; and companies not engaged in manufacturing. What remained were manufacturers operating in Mexico with U.S. partners and that were possibly a U.S.-Mexican joint venture.

Companies on this master list that appeared to be the possible joint venture candidates were contacted. From these contacts, a number of joint venture operations, as well as a number of nonjoint venture relations, were found.

The remaining companies on the master list were then contacted in alphabetical order. Again, it was uncertain whether these operated joint ventures in Mexico: their Mexican relation could have been a subsidiary or any other type of operation. At this point, only those companies with Mexican operations that were *clearly* not joint ventures were eliminated.

An additional screening criterion, based on PNL's initial contacts, was developed because it was discovered that Mexican operations with the same name as that of the U.S. company were rarely joint ventures. After applying this additional filter, the success rate in locating a joint venture increased. When contacted, each company was additionally queried as to whether they knew of any other U.S. companies that had Mexican joint ventures.

Last, individuals at U.S. companies with whom PNL had established prior contact were called. Although there was no prior indication that these companies might have had Mexican joint ventures, this approach was useful, in that it circumvented the often time-consuming process of reaching a cooperative individual.

When a candidate company was contacted, the individual was queried as to whether the company, in fact, operated a manufacturing joint venture in Mexico or whether the operation was a subsidiary or other type of business. The responses to these questions appear in the columns JV, Subsidiary, or Other. If the individual helped further (such as providing the names of other companies that may have had joint ventures in Mexico or providing information relating to his company's Mexican joint ventures), a "Yes" is indicated under Assistance. If it appeared that the company had a joint venture in Mexico, a letter or FAX was sent to them

Table 2.1. Master List of Source Companies

Company	JV?	Subsidiary?	Other	Assistance?	Sent Letter?	Reply?	Case Study?
3M CO	NO	?	MAQUILLADORA	NO	NO	NO	NO
A.O. SMITH CORPORATION	YES	?	?	NO	YES	NO	NO
A.W. CHESTERTON COMPANY	YES	?	?	NO	YES	NO	NO
ABEX CORPORATION	NO	?	?	NO	NO	NO	NO
AC-ROCHESTER	YES	?	?	NO	NO	NO	NO
ACME-CLEVELAND CORPORATION	NO	?	?	NO	NO	NO	NO
AEROQUIP CORP.	YES	?	?	YES	YES	YES	YES
AHLAND OIL, INC.	NO	?	?	NO	NO	NO	NO
AIR PRODUCTS AND CHEMICALS, INC.	YES	?	?	NO	YES	NO	NO
AIR-SHIELDS VICKERS	NO	?	?	NO	NO	NO	NO
ALADDIN INDUSTRIES, INC.	NO	?	?	NO	NO	NO	NO
ALBANY INTERNATIONAL CORPORATION, INC.	YES	?	?	NO	YES	NO	NO
ALCO PACIFIC, INC.	NO	?	?	NO	NO	NO	NO
ALLEN BRADLEY COMPANY	YES	?	?	YES	YES	YES	NO
ALLERGAN PHARMACEUTICALS, INC.	?	?	?	NO	NO	NO	NO
ALLIED AFTERMARKET DIV	NO	?	?	NO	NO	NO	NO
ALLIED-SIGNAL INC.	YES	?	?	NO	YES	NOT YET	NO
ALLIS-CHALMERS CORP	NO	?	?	NO	NO	NO	NO
ALUMINUM COMPANY OF AMERICA	NO	?	?	NO	NO	NO	NO
ALVEY CONVEYOR INC.	NO	?	?	NO	NO	NO	NO
AMATEX CORP	NO	?	?	NO	NO	NO	NO
AMERICAN AIR FILTER	NO	?	?	NO	NO	NO	NO
AMERICAN ANCHOR	NO	?	?	NO	NO	NO	NO
AMERICAN CAN	NO	?	?	NO	NO	NO	NO
AMERICAN CITADEL INC.	NO	?	?	NO	NO	NO	NO
AMERICAN CYANAMID COMPANY	NO	YES	?	NO	NO	NO	NO
AMERICAN MAGOTTEAUX CORPORATION	?	?	?	NO	NO	NO	NO
AMERICAN OLEAN TILE COMPANY, INC.	YES	?	?	YES	YES	YES	NO
AMERICAN STANDARD, INC.	NO	YES	?	NO	NO	NO	NO
AMERON INC.	YES	?	?	NO	YES	NO	NO
AMOCO CHEMICALS COMPANY	NO	?	?	NO	NO	NO	NO
AMP INC.	NO	?	?	NO	NO	NO	NO
AMPCO-PITTSBURGH CORPORATION	NO	YES	?	NO	NO	NO	NO
AP PARTS CORP	NO	?	?	NO	NO	NO	NO
APPLIED POWER, INC.	NO	?	?	NO	NO	NO	NO
ARGUS CHEMICAL CORP	NO	YES	?	NO	NO	NO	NO
ARMCO INC.	NO	?	?	NO	NO	NO	NO
ARMCO INTL INC.	NO	?	?	NO	NO	NO	NO
ARVIN INDUSTRIES, INCL	YES	YES	?	NO	NO	NO	NO
ARVINAIR/ADOBE AIR	?	?	?	NO	NO	NO	NO
ASEA BROWN BOVERI, INC.	NO	?	?	NO	NO	NO	NO
ASHLAND CHEMICAL COMPANY	?	?	?	NO	NO	NO	NO
ASKO INC.	?	?	?	NO	NO	NO	NO
ATOCHEM, INC.	?	?	CANADIAN	NO	NO	NO	NO
AUTOMATIC SWITCH CO.	NO	YES	?	NO	NO	NO	NO
AXIA, INC.	YES	?	?	NO	NO	NO	NO
BAILEY CONTROLS COMPANY	YES	?	?	YES	YES	NO	NO
BAKER HUGHES INCORPORATED	NO	?	?	NO	NO	NO	NO
BARDAHL MFG CORP	NO	?	?	NO	NO	NO	NO
BASSICK CASTORS	YES	?	?	NO	NO	NO	NO
BAUSCH & LOMB INC	NO	?	?	NO	NO	NO	NO
BAUSCH & LOMB, INC., INTERNATIONAL DIV.	YES	?	?	NO	YES	NO	NO
BECHTEL GROUP INC.	YES	?	?	NO	YES	NO	NO
BELOIT CORP	NO	?	?	YES	YES	NO	NO

Table 2.1. (contd)

Company	JV?	Subsidiary?	Other	Assistance?	Sent Letter?	Reply?	Case Study?
BEMIS COMPANY, INC.	?	?	?	NO	NO	NO	NO
BENTLY NEVADA CORP	YES	?	?	NO	YES	YES	NO
BORG WARNER AUTOMOTIVE	NO	?	?	NO	NO	NO	NO
DETROIT DIESEL ALLISON	YES	?	?	NO	YES	NO	NO
E F HOUGHTON & CO	?	?	LICENSE	NO	NO	NO	NO
EASTMAN KODAK CO	NO	?	?	NO	NO	NO	NO
EATON CORPORATION	NO	YES	?	NO	NO	NO	NO
ECLIPSE, INC.	YES	?	?	NO	YES	YES	NO
ECOLAB, INC.	NO	?	?	NO	NO	NO	NO
EMERSON ELECTRIC CO.	?	?	?	NO	NO	NO	NO
ESCO CORPORATION	NO	?	?	NO	NO	NO	NO
FISCHER & PORTER CO	NO	YES	?	NO	NO	NO	NO
FMALI, INC.	NO	?	?	NO	NO	NO	NO
FMC CORPORATION (PHILADELPHIA)	YES	?	?	NO	YES	YES	?
GENERAL ELECTRIC DE MEXICO	YES	?	?	YES	YES	YES	YES
GTE SYLVANNIA INTERNATIONAL	YES	?	?	NO	YES	NO	NO
HEAT AND CONTROL, INC.	NO	YES	NO	NO	NO	NO	NO
HYSOL, A DEXTER COMPANY	?	?	?	NO	NO	NO	NO
INSTEEL CONSTRUCTION SYSTEMS	YES	?	?	YES	YES	NO	NO
INTERNATIONAL BUSINESS MACHINES CORPORAT	NO	?	?	NO	NO	NO	NO
KEYSTONE CONSOLIDATED INDUSTRIES, INC.	NO	YES	?	NO	NO	NO	NO
LORD CORP	NO	YES	?	NO	NO	NO	NO
MACK TRUCKS	YES	?	?	NO	NO	NO	NO
MAXON CORPORATION	YES	?	?	NO	YES	YES	YES
MIXING EQUIPMENT CO INC.	NO	?	LICENSEE	NO	NO	NO	NO
MOORE PRODUCTS CO	NO	YES	?	NO	NO	NO	NO
MOTOROLA, INC.	NO	YES	?	NO	NO	NO	NO
OLIVER RUBBER COMPANY	?	?	?	NO	NO	NO	NO
PACCAR, INC.	YES	?	?	NO	YES	NO	NO
PANCOM INTL. CO.	?	?	?	NO	NO	NO	NO
PARKER HANNIFIN CORP. MEXICO	YES	?	?	YES	YES	YES	YES
PENOLES METAL AND CHEMICAL, INC.	?	?	MEXICAN CO.	NO	NO	NO	NO
PHELPS DODGE CORP	?	?	MINE	NO	YES	NO	NO
PITNEY BOWES, INC.	?	?	DEALERSHIP	NO	NO	NO	NO
PLIBRICO CO	?	?	FORMER JV	NO	NO	NO	NO
PLYMOUTH TUBE COMPANY	YES	?	?	NO	NO	NO	NO
POTTERS INDUSTRIES INC	?	?	?	NO	NO	NO	NO
PPG INDUSTRIES, INC.	?	?	?	NO	NO	NO	NO
PREMIX INC	?	?	?	NO	NO	NO	NO
PULSE ENGINEERING, INC.	?	?	OFFICE	NO	NO	NO	NO
RAMSEY TECHNOLOGY, INC.	NO	YES		NO	NO	NO	NO
RAYTHEON COMPANY	YES	?	?	NO	YES	NO	NO
S & C ELECTRIC COMPANY	YES	?	?	NO	YES	NO	NO
SCHRAEDER AUTO INC.	YES	?	?	NO	YES	NO	NO
SNAP-ON TOOLS CORPORATION	?	?	?	NO	NO	NO	NO
SOLAR TURBINES	YES	?	?	YES	YES	YES	NO
SONOCO PRODUCTS COMPANY	?	?	?	NO	NO	NO	NO
SPS TECHNOLOGIES	NO	?	?	NO	NO	NO	NO
SPX CORPORATION	NO	?	?	NO	NO	NO	NO
STEWART-WARNER CORP	?	?	MAQUILLADORA	NO	NO	NO	NO
STONE CONTAINER CORP	NO	?	?	NO	NO	NO	NO
TAYLOR INSTRUMENT CO	?	YES	MAQUILLADORA	NO	NO	NO	NO
TDK TEXAS CORPORATION	?	?	?	NO	NO	NO	NO
TEKTRONIX INC	NO	?	?	NO	NO	NO	NO
TELEDYNE LANDIS MACHINE	YES	YES	?	NO	YES	NO	NO

Table 2.1. (contd)

Company	JV?	Subsidiary?	Other	Assistance?	Sent Letter?	Reply?	Case Study?
TEXAS INSTRUMENTS, INC.	NO	?	?	NO	NO	NO	NO
TEXAS NUCLEAR CORPORATION	?	?	?	NO	NO	NO	NO
TEXAS OPTOELECTRONICS	NO	YES	?	NO	NO	NO	NO
TEXAS REFINERY CORP	NO	?	?	NO	NO	NO	NO
THERMO ELECTRON CORP	NO	?	?	NO	NO	NO	NO
THERMON MANUFACTURING COMPANY	NO	?	?	NO	NO	NO	NO
THOMAS & BETTS CORP	NO	YES	?	NO	NO	NO	NO
THOR POWER TOOL CO	NO	YES	?	NO	NO	NO	NO
TIMKEN COMPANY	NO	YES	?	NO	NO	NO	NO
TOLEDO SCALE CORPORATION	NO	YES	?	NO	NO	NO	NO
TORK, INC	NO	YES	?	NO	NO	NO	NO
TORRINGTON/FAFNIR	YES	?	?	YES	YES	YES	NO
TRACOR, INC.	NO	?	?	NO	NO	NO	NO
TRANE CO	NO	?	?	NO	NO	NO	NO
TRICO PRODUCTS COMPANY	NO	YES	?	NO	NO	NO	NO
TRICO TECHNOLOGIES COMPANY	NO	NO	MAQILLADORA	NO	NO	NO	NO
TRINITY EXPORT	NO	?	?	NO	NO	NO	NO
TRW INC.	?	?	?	NO	NO	NO	NO
UIS, INC.	?	?	?	NO	NO	NO	NO
UNION CARBIDE CORPORATION	?	?	?	NO	NO	NO	NO
UNIROYAL INC	YES	?	?	NO	YES	YES	NO
UNISYS CORPORATION	?	?	?	NO	NO	NO	NO
UNITED CATALYSTS INC	YES	?	?	YES	YES	NO	NO
UNITED TECHNOLOGIES CORPORATION	YES	?	?	YES	YES	YES	NO
USG CORPORATION	NO	YES	?	NO	NO	NO	NO
VAREL MANUFACTURING COMPANY	NO	YES	?	NO	NO	NO	NO
VARIAN ASSOCIATES INC	NO	YES	?	NO	NO	NO	NO
VERTEK INTERNATIONAL, INC.	?	?	?	NO	YES	NO	NO
VISHAY INTERTECHNOLOGY, INC.	?	?	?	NO	NO	NO	NO
WALBRO CORPORATION	NO	?	?	NO	NO	NO	NO
WALWORTH COMPANY	?	?	?	NO	NO	NO	NO
WANG LABORATORIES, INC.	?	?	?	NO	NO	NO	NO
WAXMAN INDUSTRIES, INC.	NO	YES	?	NO	NO	NO	NO
WEATHERFORD INTERNATIONAL, INC.	NO	YES	?	NO	NO	NO	NO
WEST COMPANY, INC.	NO	?	?	NO	NO	NO	NO
WHITAKER CABLE CORP	NO	NO	NO	NO	NO	NO	NO
WITCO CORPORATION	NO	YES	?	NO	NO	NO	NO
WOODHEAD INDUSTRIES, INC.	NO	YES	?	NO	NO	NO	NO
XEBEC	?	?	?	NO	NO	NO	NO
XEROX CORPORATION	YES	YES	?	YES	YES	NO	NO
YALE SECURITY PRODUCTS	NO	YES	?	NO	NO	NO	NO
YORK HOLDINGS CORPORATION	NO	YES	?	NO	NO	NO	NO
ZENITH ELECTRONICS CORPORATION	NO	YES	MAQUILLADORA	NO	NO	NO	NO

explaining the project and the types of issues to be addressed in the case histories (indicated by a "Yes" under Letter). If the individual replied (usually either by stating that the company has no Mexican joint ventures after all or that they do but do not wish to participate), a "Yes" is indicated under Reply. If the company committed to assisting in the development of a case history, a "Yes" was indicated under Case History.

2.1 U.S. Companies Who Have Formed Joint Ventures With Mexican Companies

As described in the previous section, the contacted companies were screened to determine those who participated in a joint venture in Mexico. This list is presented in Table 2.2.

2.2 U.S. Companies for Which Case Histories Were Developed

The selection process described above was followed to determine companies that would be eligible to be the subjects of case histories. In determining which companies would actually be selected, they had to be willing to participate in a conference of renewable energy manufacturers to share their corporate experience in an open forum workshop. In addition to this, the following additional screening criteria required that the company be

- a U.S. company
- preferably medium to small size
- preferably vertical than horizontal joint venture
- preferably manufacturing than service venture
- willingness to share experience
- willingness to attend proposed workshop
- not in the renewables business.

PNL did not eliminate companies solely because of the format of the ownership of the joint venture itself (e.g., owned 50/50, separate company, etc.).

Table 2.2. U.S. Manufacturing Companies With Known Joint Ventures in Mexico

A.O. Smith Corporation
A.W. Chesterton Company
AC-Rochester
Air Products and Chemicals, Inc.
Albany International Corporation, Inc.
Allen Bradley Company
Allied-Signal Inc.
American Olean Tile Company, Inc.
Ameron Inc.
Apple Computer
Axia, Inc.
Bailey Controls Company
Bassick Castors
Bausch & Lomb, Inc., International Div.
Bechtel-Group Inc.
Caterpillar Inc./Solar Turbines Inc.
Detroit Diesel Allison
Eclipse, Inc.
FMC Corporation (Philadelphia)
General Electric de Mexico
GTE Sylvania International
Mack Trucks
Maxon Corporation
Paccar, Inc.
Parker Hannifin Corp. Mexico
Plymouth Tube Company
Raytheon Company
S & C Electric company
Schraeder Auto Inc./Arvin Industries, Inc.
Teledyne Landis Machine
Torrington/Fafnir
Trinova Corporation/Aeroquip Corp.
Uniroyal Inc.
United Catalysts Inc.
United Technologies Corporation
XEROX Corporation

This process yielded case histories of the four companies appearing in Table 2.3. The findings of these case histories are presented in Section 3.0.

Table 2.3. Companies Selected for Case Histories

General Electric de Mexico
Maxon Corporation
Parker Hannifin Corp. Mexico
Trinova Corporation/Aeroquip Corp.

3.0 Case Histories

3.1 Format of the Case Histories

Although the format in which the four case histories is presented differs, the following topics are generally covered in each:

- background
- description of venture's products
- motivation for the joint venture
- role of each participant
- length of negotiations
- ownership arrangements
- financial arrangements
- legal arrangements
- political arrangements
- overall experience.

A brief description of the above topics follows.

3.1.1 Background

In this section of the case history, general background information on each company is presented. Specifically, information on who the U.S. and Mexican companies are; where they are from; what industry or industries they operate within; and what companies, if any, they themselves are subsidiaries of is included.

3.1.2 Description of Venture's Products

This section is a short description of the joint venture itself. It covers the Standard Industrial Classification of the joint venture, a brief description of plant size, its distribution area, its intended markets, and estimated business volume. Answers are provided to such questions as: What is the market for the technology? Has the company considered a similar application in another industry? What technology currently satisfies the market? Are there many competitors and how financially strong are those competitors? What distribution method is used?

3.1.3 Motivation for the Joint Venture

Three categories are used for motivation for joint ventures: internal, competitive, and strategic. This section describes the major reasons why a company chose the joint venture strategy. Under the internal category, reasons such as uncertainty, limited resources, economies of scale in production, technical exchange, and superior or more appropriate management practices may be detailed. However, in the competitive category, reasons such as reduction of competition, rapid access to the market, vertical integration, mitigation of trade barriers, and distribution system access may be most important. Last, a company may seek to fulfill its corporate strategy of global expansion by creating joint ventures giving them leveraged buy-ins to difficult markets.

3.1.4 Role of Each Participant

This section covers the participation level of each company. Primarily, the staffing strategy of the joint venture is analyzed. Does the host country supply both management and production workers? Does the U.S. company supply managerial and technical workers? Does the company follow the strategic plan of the U.S. company or does it have its own strategic plan? Is that plan coordinated and/or approved by the U.S. company? Does the joint venture plant in Mexico manufacture the entire product in the host country?

3.1.5 Length of Negotiations

This section covers the negotiation period before the joint venture came to fruition. Traditionally, joint ventures take 1 to 2 years to mature. Additionally, the underlying aspect of cultural differences must be taken into account (e.g., Mexico is considered a high-context society--communication is highly dependent on nonverbal context). Consideration is also given for personal contact and the development of a close working relationship.

3.1.6 Ownership Arrangements

Ownership may be 50/50 equity or it may be predominantly owned by the host-country investors or nonhost-country investors. In these cases, even if the joint venture manufactures a single product, output may or may not be shared. Indeed, there may be two outputs, one for each partner. One partner may maintain a solely owned company, which manufactures a similar or identical product for their "domestic" market. Whatever the nuances of ownership, they are explained in this section.

3.1.7 Financial and Legal Arrangements

This section covers the investment that each company made to form the joint venture and also the distribution of profits. The banking arrangements (in general terms) will also be detailed, as well as any U.S. government and Mexican government incentives.

3.1.8 Overall Experience

Some of the key factors in the success or failure of a joint venture are the initial negotiations, the start-up and learning curve, and perceptions of benefits/costs. The joint venture must achieve each partner's goals, the agreements must be flexible but fair, and the seemingly minor agreements such as licensing, management contracts, and conflict resolution must be detailed. This section of the case history presents the company's overall evaluation of its joint venture experience.

3.2 Case Histories

This section contains the case histories for the following four companies (see Table 3.2):

- Aeroquip Mexicana, S.A. de C.V.
- General Electric - MABE
- Maxon Corporation
- Parker Hannifin.

Aeroquip Mexicana, S.A. de C.V.

Background

Aeroquip Mexicana S.A. de C.V (AMSA) is licensed by Aeroquip Corporation. Aeroquip is a wholly owned subsidiary of Trinova Corporation. Based in the U.S., Aeroquip operates worldwide, in four principal operating divisions: automotive, aerospace, industrial, and international. All operations in foreign countries (including AMSA in Mexico) are overseen by the International Division. Trinova has no active role (other than an occasional financial one) in AMSA.

AMSA was created as a new joint venture company by Aeroquip and Grupo Kneeland of Mexico. Prior to the joint venture, Grupo Kneeland had owned a small distribution and manufacturing subsidiary in Mexico. This subsidiary formed the core around which AMSA was later built.

Description of the Products of Venture

AMSA manufactures, sells, and distributes high-pressure hydraulic hoses, hose fittings, and hose assemblies to industrial markets in Mexico. The principal markets for these products include off-highway equipment, trucks and buses, machine tools, and other markets requiring high-pressure hydraulic applications. These products are sold both to original equipment manufacturers and aftermarket.

AMSA has many U.S.-based competitors who have established well-funded operations in Mexico. Along with AMSA, these competitors pursue sales both directly to original equipment manufacturers and indirectly through aftermarket distribution.

Motivation for the Joint Venture

AMSA was formed for competitive and strategic reasons. First, forming AMSA provided rapid access to the Mexican market. At the time the joint venture was established, Grupo Kneeland had built an aftermarket distribution system into the industrial markets that Aeroquip wished to target. Second, forming AMSA provided a manufacturing presence to expand Aeroquip's sales into Mexico. AMSA was established by Aeroquip and Grupo Kneeland 28 years ago, when Mexican government regulations severely restricted foreign ownership of Mexican operations.

Role of Each Participant

Both management and production workers at AMSA are Mexican citizens. Aeroquip furnishes technical support on the design and manufacture of products by AMSA and ensures that products manufactured by AMSA conform to Aeroquip's quality standards. However, no Aeroquip employees are based in Mexico.

AMSA drafts and proposes its own strategic plan, based on guidelines furnished by Aeroquip. This plan is approved by Aeroquip. To ensure coordination with other Aeroquip operations, AMSA is part of Aeroquip's International Group (IG). AMSA management regularly participates in IG-focused teams and in staff meetings in which manufacturing-, technology-, sales-, or marketing-related issues are discussed.

While AMSA is capable of manufacturing Aeroquip's industrial fluid products, local Mexican production of these fluids is supplemented by the import of Aeroquip's products from other foreign countries. This allows AMSA to concentrate on the production of high-demand items for the Mexican market.

Length of Negotiations

The AMSA joint venture was formed after a relatively short, 3-month negotiation period. The apparent speed of these negotiations, however, is in part explained by the fact that a subsidiary of Grupo Kneeland had been a distributor of Aeroquip's products for a number of years. Considering this prior relationship, it is apparent that the courtship period between Aeroquip and AMSA actually occurred over a longer period.

Another factor to consider in evaluating the negotiation process is that the principal owners of Grupo Kneeland only relatively recently emigrated to Mexico. In fact, the Kneeland family patriarch emigrated from the U.S. to Mexico in 1910. His son served in the U.S. armed forces during World War II, and it was not until 1948 that the family became Mexican citizens. The result of this unique background is that the Kneeland's approach to business activities is more from a U.S. rather than a Mexican viewpoint. This factor expedited the negotiation process by which AMSA was formed.

Ownership Arrangements

As mentioned above, AMSA was established 28 years ago. Aeroquip maintains a 49% equity ownership position, which was the limit to foreign ownership imposed at the time of AMSA's founding. Aeroquip representatives serve on AMSA's Board of Directors. As major policy and action items require two-thirds board approval, Aeroquip effectively has a veto on these items. The President of AMSA is granted a power of attorney by the shareholders as to what action he may take without necessary board approval.

AMSA was established as an independent company. Consequently, its production is not shared by either Grupo Kneeland or Aeroquip. Products manufactured by AMSA may be bought by either Grupo Kneeland or by Aeroquip from time to time. In fact, Grupo Kneeland still runs a distribution operation independent of AMSA and is one of AMSA's largest customers for fluid products.

Financial Arrangements

Aeroquip contributed capital when the venture was formed, while Grupo Kneeland contributed the assets of its subsidiary. Since then, AMSA has been self-financing. Bank loans and other financing arrangements have been guaranteed by the parent companies (Aeroquip and Grupo Kneeland).

A dividend is declared out of annual profits and is shared by Grupo Kneeland and Aeroquip. A percentage of earnings is always put back into AMSA for reinvestment or expansion. In addition, Aeroquip earns royalties from technologies licensed to AMSA.

Political Arrangements

None.

Overall Experience

Historically, the venture has been a success. Aeroquip has gained access to a difficult market and enjoys a dominant position. However, the greatest challenges await the venture. As the world and Mexico undergo rapid and dramatic changes, AMSA needs to upgrade its manufacturing and distribution continually to achieve world-class status and maintain its market position.

With the North American Free Trade Agreement (NAFTA), the U.S.-Mexican border is dissolving economically. Because AMSA was formed to serve a distinct geographic market, the future of AMSA will require greater cooperation and coordination with Aeroquip as this market becomes less and less distinct.

General Electric - MABE

Background

General Electric (GE) is one of the largest manufacturers of major appliances in the world, selling to consumers (via dealers and distributors), builders, hotels, original equipment manufacturers, exporters, etc. Products are sold under the GE, Monogram, RCA, and Hotpoint brands, as well as under private labels. Production facilities in Louisville, Kentucky and at nine satellite plants are highly automated and serve as a model of cost-efficient manufacturing.

Description of Products of Venture

GE has been doing business in Mexico for almost 100 years. GE operations in Mexico amount to $1.3 billion in sales and product flows, with 23 plants and over 21,000 employees, including direct operations, joint ventures, and the Maquilladora operations. The appliance business, the GE-MABE partnership, represents almost half of the total GE operation in Mexico.

Separately, MABE is a company established approximately 47 years ago by two individuals: Messrs. Mabardi and Berrondo (the name of the company comes from the combination of these names). MABE has a great tradition in Mexico and is still managed and led by the Berrondo family. Currently, 13 plants, located in the center and another parts of Mexico, provide jobs for approximately 12,000 employees. The plants manufacture many appliances, including gas ranges, refrigerators, washing machines, motors, and compressors. They also have vertically integrated operations to manufacture some of their metal and plastic requirements.

From a strategic viewpoint, GE was interested in the gas range technology developed over the years by MABE to supply the U.S. market. Similarly, MABE was looking at GE as a technology supplier for refrigerators, as well as for its manufacturing and financial strengths.

Motivation for the Joint Venture

Prior to 1981, GE was competing in the appliance market in Mexico with a 100%-owned operation. During those years, Mexico's economic policy was highly protective, with the state playing a very active role through the control of hundreds of companies and industrial sectors. These policies contributed toward the creation of what GE felt was an unfavorable operating environment. GE was a strong competitor in Mexico in the refrigerator segment, but it was not participating in the key gas range market or was it considered the market leader, a position held by Grupo Industrial Saltillo (GIS) and MABE.

This situation, coupled with a new GE worldwide strategy of being the number 1 or 2 competitor in any market segment, forced GE to try to reach a partnership with the Mexican market leaders. In 1983, GE signed a joint venture agreement with the washing machine market leader GIS, a highly diversified group, in which GE would have a minority position, as required by the law. However, the Mexican group was not competing in the refrigerator market, which was led by MABE, another Mexican company. GE agreed with GIS to look for a partner in the refrigerator market by 1986.

The relationship between GE and GIS was always very strained. Because of the diversity of the group, conflict-of-interest situations were common and were typically resolved in a manner that tended to strain the partnership. GE did not succeed at placing any of its own executives within the operating structure of the venture.

Role of Each Participant

GE then contacted and agreed to allow MABE to operate the venture, based on MABE's successful experience. All of the venture's top management, as well as middle managers, are currently MABE executives. In addition, there is continuous exchange of resources between GE and MABE, especially in the manufacturing area. Furthermore, the commercial operation for the Mexican market is controlled by MABE and the influence of GE in this area is intentionally limited.

Ownership Arrangements

By 1987, an agreement was reached, with MABE holding a 52% ownership and GE 48%, complying with the Mexican Foreign Investment Law.

Length of Negotiations

During 1986, GE tried unsuccessfully to reach an agreement with GIS to partner with MABE to develop the refrigerator business. During that year, GE terminated its relationship with GIS and initiated conversations with MABE to agree on a potential joint venture structure.

Negotiations between GE and MABE were very cordial from the beginning. Both parties understood that what was good for the venture would be good for each partner. The people who operated and owned MABE served as the joint venture's representatives, which made decisions easier and faster to reach. The communications channels were always open and the chemistry between the executives from both companies worked very well.

Financial Arrangements

Start-up costs and profit sharing are all distributed in line with ownership participation. GE feels that this type of arrangement must be agreed on early in the negotiation process, especially start-up costs. Should the negotiations be cancelled or terminated for some reason, preoperative expenses may become an issue, if there were not preliminary arrangements about expense sharing.

Political Arrangements

In the mid-1980s, GE, as well as other multinational corporations operating in Mexico, faced a strong stance from the Mexican government. However, since that time, the Mexican government's position has changed radically, and now they strongly pursue and support foreign investment. GE's situation changed once it became a partner in a joint venture. The Mexican executives were responsible for maintaining a direct contact with the authorities.

GE believes that establishing a positive relationship with the Mexican government requires time and patience. GE is very impressed by the quality of the top government officials and their willingness to help promote GE's efforts within the country. GE's top management maintains a close contact with the key Mexican authorities, who basically follow an open-door policy.

In net, the Mexican government is working very successfully with foreign companies that are considering the possibility of joint ventures. This is a result of the implementation of their new economic policy.

Overall Experience

Since 1987, sales in this business have grown by 30% annually. A new gas range plant was built in San Luis Potosi, with a production capacity of 700,000 units per year using state-of-the-art technology. Recently, the MABE organization was selected by the National Association of Importers and Exporters of Mexico as the recipient of the Annual International Award. This award was delivered by Mexico's President, Carlos Salinas de Gortari. The GE-MABE alliance is the undisputed number 1 manufacturer in Mexico, with a market share above 50% in each of the key segments: refrigerators, washing machines, and gas ranges. This is truly a success story.

Overall, the experience with the Mexican partner, MABE, to manufacture and commercialize appliances in Mexico for both the domestic as well as international markets has been a major success for both parties. GE uses this partnership experience within their organization as an example of how to approach, execute, and maintain a healthy and profitable joint venture strategy.

With respect to this case history in particular, a few of the important components of the joint venture between GE and MABE can be summarized as follows:

- Past history of the company says a lot about its style and motivations--transparency is key.
- Honesty/integrity reputations are easy to check.
- Closed communication channels during negotiations are red flags that should be addressed early.
- Mexican companies know their markets better than foreign partners; therefore, they should be allowed to operate the joint ventures unless there are clear indications to the contrary.
- Both parties should benefit from the relationship--look for a win-win situation.
- A relationship built on trust is more powerful than majority control; majority does not guarantee the success of the venture
- Should the negotiations be cancelled or terminated for some reason, preoperative expenses may become an issue if there was not a preliminary arrangement regarding sharing expenses.

Maxon Corporation

Background

Maxon Corporation is a privately held company that manufactures industrial gas and oil burners, along with special valves and related control systems.

Maxon's primary manufacturing facilities are in Muncie, Indiana and Brussels, Belgium. Maxon has four European subsidiaries and one joint venture in Mexico. Total corporate employment is at 430. Maxon has global sales in excess of $10 million.

Description of Products of Venture

As stated above, Maxon manufactures industrial gas and oil burners with special valves, the Standard Industrial Classification codes of which are 3433 and 3494. Maxon's market is primarily worldwide industrial companies, approximately 40% of which are outside the U.S.

Motivation for the Joint Venture

In the early part of the 1980s, Maxon had a representative for its products in Mexico, Combustion Industrial y Control, S.A. de C.V. (CICSA). CICSA is a manufacturer and distributor of combustion systems. In 1986, because of legal changes in Mexico that would have limited the shipment of Maxon's products into Mexico, Maxon initiated a joint venture with its Mexican representative. Maxon's primary reason to establish a joint venture in Mexico was to enable it to compete effectively with other Mexican companies in the same business, which it could not do without the resources of its Mexican partner. The products that Maxon sells in Mexico are the same as those it sells in the U.S.

Role of Each Participant

The joint venture, consisting of a manufacturing facility and three sales offices, employs approximately 30 people in Mexico. Mexican Nationals plan and run the joint venture on a day-to-day basis. Maxon supplies financial direction and marketing and technical support. CICSA follows its own strategic plan, with coordination with Maxon. CICSA does not do total manufacturing as does the U.S. company; it buys manufactured product from Maxon to which it adds value. CICSA assembles, does some light manufacturing, and provides additional levels of service that Maxon does not provide in the U.S. because of the different Mexican market requirements.

Length of Negotiations

As a result of Maxon's previous relationship with CICSA, the length of negotiations for the joint venture was relatively short. However, the legal work took longer than expected to complete, and its estimates for start-up legal costs were significantly understated.

Ownership Arrangements

The ownership arrangement was set at 49% Maxon and 51% CICSA, following foreign investment requirements.

Financial Arrangements

Both Maxon and CICSA contributed equity and operating capital at the start of the joint venture. At a later point, Maxon and its partners increased the equity contributions to provide additional working capital. Also, Maxon provided a long-term loan to provide additional operating capital. CICSA established its own banking relationships with Banco Nacional de Mexico. Profits are to be distributed in the form of dividends.

Political Arrangements

Maxon's legal firm dealt with the Mexican government on all legal and political matters.

Overall Experience

Maxon's experience indicates that they have been overly optimistic as to what the amount of investment in management time and capital from the U.S. company needs to be and the length of time to develop the business. Some of the lessons Maxon learned were the following:

- It will take longer than expected.
- It will cost more than planned.
- In Mexico, business is handled with more personal relationships than in the U.S.
- Cultural differences are important in developing trust and communications.
- Lack of language and cultural understanding impacts the joint venture.

Parker Hannifin

Description of Products of Venture

Parker Hannifin is a U.S.-based multinational corporation with annual sales in excess of $2.3 billion. Parker Hannifin has three Mexican joint venture partners. The partners produce O-rings, pneumatic components, and fittings for industrial applications. Parker-Seal de Mexico produces O-rings used in automobiles, of which 100% of the product is produced in Mexico for the Mexican market. Schrader-Bellows Parker produces pneumatic products, such as cylinders, hydraulic valves, and pneumatic valves, in Mexico. Conductores Fluidos Parker manufactures industrial fittings (brass). Conductores Fluidos Parker also manufactures hose assemblies, consisting of fittings that it manufactures and hoses imported from Parker Hannifin in the U.S.

Currently, Parker-Seal is number 1 in its market, but is facing increasing competition from the U.S., Korea, and Italy. Schrader-Bellows Parker's position in their market is approximately number 2 or 3. Conductores Fluidos Parker is the market leader in the brass fittings market but is facing increasing competition from the U.S.

Motivation for the Joint Venture

Parker Hannifin's desire to penetrate the Mexican market was hampered by Mexico's foreign investment laws, which prevented a foreign company from owning or having a controlling share of a company doing business in Mexico. So, the joint venture entry strategy was the obvious choice. In the case of Parker-Seal, Parker Hannifin transferred their O-ring technology to the Mexican market through Parker-Seal's existing distribution network. Both Schrader-Bellows Parker and Conductores Fluidos Parker produced their own products at the time the joint venture was formed. However, Parker Hannifin contributed a superior technology to replace these in exchange for access to the Mexican market through Parker-Seal's sales force and distributors, through Schrader-Bellows Parker's sales force, and through Conductores Fluidos Parker's distribution network.

Role of Each Participant

The Board of Directors is made up of members of both sides of the venture, according to the percentage of ownership. Strategic plans are developed by Mexican management and reviewed by the Board of Directors. Parker Hannifin provides mostly technical assistance to their partners. Some personnel, including management and engineers, are sent to the U.S. for training. Parker-Seal and Conductores Fluidos Parker receive technology from Parker Hannifin to improve the quality of their product.

Length of Negotiations

Information regarding the Parker-Seal joint venture is unavailable because it was formed 25 years ago. Negotiations went smoothly for Conductores Fluidos Parker (in 1985) and Schrader-Bellows Parker (in 1987); the talks lasted about 2 years and 1 year, respectively.

Ownership Arrangements

Parker Hannifin's ownership shares for the companies are as follows: Parker-Seal 49%, Schrader-Bellows Parker 40%, Conductores Fluidos Parker 40%. The sharing of the profits is mirrored by the ownership share.

Financial Arrangements

The partners provided equal start-up capital in each joint venture. Parker Hannifin receives income from stock dividend payoffs, royalties from the use of their technology, fees for technical assistance, and market share. Annually, Parker-Seal has sales of approximately $5 million, Schrader-Bellows Parker has sales of approximately $10 million, and Conductores Fluidos Parker has sales of approximately $18 million.

Political Arrangements

Parker Hannifin reported that it had no problems with the Mexican government and it used attorneys that were Mexican Nationals in writing the contracts, which followed the foreign investment laws regarding foreign ownership.

Overall Experience

Parker Hannifin is happy with its joint ventures because they all have been successful. Parker Hannifin stated that their negotiators had considerable experience in Mexico, which was very important. Nonetheless, they still had some difficulties associated in dealing with a different culture.

Some advice given by Parker Hannifin was the following:

- Put everything in black and white.
- Establish rules of how the company should be run.

3.3 Summary of Findings of the Case Histories

Table 3.1 provides a summary of the case histories. A discussion of the most important findings follows.

Table 3.1. Summary of Case History Findings

Criteria	Aeroquip	GE-MABE	Maxon	Parker Hannifin
Products of venture	High-pressure hydraulic hoses, fittings, and hose assemblies	Household appliances	Industrial valves, gas and oil burners, and related control systems	O-rings, pneumatic components, and fittings
Motivation for venture	Competitive and strategic benefits; technology exchanged for access to distribution system	Competitive and strategic benefits to both partners	Competitive strength of both partners in Mexico	U.S. partner gained market entry and share
Participant's roles	Management and production are by Mexican partner; U.S. partner supplies technical support	Venture managed by Mexican partner; resources provided by U.S. partner	Operated by Mexican partner; financial direction, marketing, and technical support provided by U.S. partner	U.S. partner provides technical assistance; Board of Directors (represented by ownership) oversees activities
Negotiations	3 months, with prior relationship	1 year	Relatively short as a result of former relationship	1 to 2 years
Ownership	49% U.S. partner	48% U.S. partner	49% U.S. partner	U.S. partner; 49%, 40%, 40% (three joint ventures)
Financial arrangements	Capital contributed by U.S. partner; assets provided by Mexican partner; profits shared 49%/51%.	Start-up costs and profits shared 48%/52%	Both contributed capital and equity (U.S. partner somewhat more); profits shared 49%/51%	Profits shared by ownership percentage; start-up capital provided equally
Political arrangements	None	Overseen by Mexican partner	Legal firm retained by U.S. partner to interact with Mexican government	Mexican attorneys employed to establish joint ventures
Overall experience	Successful	Successful	Successful	Successful

These case histories provide a sampling of the experiences of a variety of U.S. companies who have engaged in Mexican joint ventures. In all cases, the U.S. company judged the joint venture to be a success. In most cases, the joint venture provided the U.S. company access to and a strong competitive position in a foreign market that it could not otherwise have obtained. From these case histories, a few important guidelines to establishing and operating a joint venture in Mexico can be given:

- Put everything in writing. During the negotiation process, lay out all the terms and conditions of the venture in black and white terms to which both parties agree.

- Research in depth the country or countries in which you are considering doing business. Become as familiar as possible with their culture, history, current events, language, etc., all of which will smooth your relation and interaction with your potential partner and foreign business contacts. Time spent in this research will pay off well in the long term.

- Select a partner familiar with U.S. ways and expectations of doing business; conversely, allow your Mexican partner to introduce you to and lead you through the Mexican business and cultural environment, which is substantially different from the U.S.

- Establish and maintain open communications with your partner from the outset. Do not allow language or culture to become communication barriers to your Mexican partner.

- In most cases, the Mexican partner best knows how to conduct business in Mexico, as well as the characteristics of the Mexican market. Therefore, allow the Mexican partner to operate the venture. The role of the U.S. company should, in many cases, be that of upper level policymaking and oversight.

4.0 A Brief Guide to Forming a Joint Venture in Mexico

4.1 Background

Mexico is both a market where joint ventures are frequently used by U.S. companies and an excellent market for the production and sale of renewable energy technologies. Under Programa Nacional de Solidaridad (PRONASOL), the Mexican government has electrified a number of rural communities using renewable energy systems. This effort is expected to expand greatly through the efforts of the Mexico-U.S. Renewable Energy Cooperation Program (PROCER), whose goals include assisting in the development of the Mexican renewable energy industry. Because the Mexican government retains exclusive control over the electric power generation industry (i.e., governmental and parastatal companies are encouraged to "buy Mexican" whenever possible), one way in which U.S. companies can participate in the market is for Mexican and U.S. renewable energy companies to collaborate through joint ventures.

Mexico is the 14th largest country in the world and the 12th largest in population. This size, as well as its 2,000-mile border with the U.S., make it an ideal springboard into the entire Latin American marketplace. This expanding market may be entered in a number of different ways. As described in the Introduction, the most feasible means of doing so is often through a joint venture. This process is complicated, however, by many different facets that vary with every pair of companies forming a new business entity. In preparing this brief guide, seven major topics are addressed:

- partner selection
- economic climate in Mexico
- legal climate in Mexico
- financial climate in Mexico
- political framework of Mexico
- cultural and business practices.

4.2 Partner Selection

The essential business decision is partner selection. There are many questions that need to be addressed by both parties. Business International Corporation (1991a) published a 20-point checklist for partner selection. Full disclosure on the part of both parties of the issues in Table 4.1 is essential.

Table 4.1. Questions to be Answered When Forming a Joint Venture

1.	What are you looking for in a partner: technology, market access, manufacturing capabilities, distribution channels?
2.	Can an existing relationship be extended?
3.	Have you examined a sufficient number of potential candidates?
4.	Is there any "chemistry" between the senior and middle management of your company and that of the potential partner's management teams?
5.	Do the partners' corporate cultures contain similar risk orientation, management, organizational, and decision-making structures? If they differ, could you successfully integrate the two?
6.	Does your partner have previous experience in collaborative ventures? If so, what is its "track record?"
7.	Is there any conflict of interest? Does your partner have alliances or business dealings with any of your competitors? If so, how may this affect the partnership?
8.	Do you and the partner have complementary technology, market access, manufacturing, and distribution capabilities?
9.	Does the potential partner have strengths that might benefit more than one division of your company?
10.	Have you thoroughly researched your partner's capabilities? A company may face unexpected burdens if a partner's technology or market prowess proves considerably weaker than expected.
11.	How committed will each partner be to the venture? Does your partner appear willing to contribute the resources and skills necessary to make the alliance a success?
12.	Is the activity central to your business? If not, what are the chances that the venture will be relegated to the sidelines?
13.	Are you trying to forge too many alliances at the same time and, consequently, overlooking critical issues and problems that may disrupt the relationship? Is your emphasis where it should be, on the quality of the alliance and not the quantity?
14.	How difficult will it be for your partner to withdraw from the venture?
15.	What are the partners' respective direct costs?
16.	How much does the partner need the alliance to meet its tactical and strategic objectives?
17.	Is the partner willing to devote additional resources (capital, human, technological) to the alliance?
18.	What are the alternative strategies available to the company?
19.	What are the internal and external barriers to the partner's participation?
20.	What is the price of failure?

One way to evaluate the impact of these questions is to evaluate the relative strengths of each partner and each country with respect to the joint venture. A simple matrix can be developed, similar to that in Table 4.2, using the criteria that are pertinent to the specific situation.

Table 4.2. Sample Matrix Used to Rank Prospective Joint Venture Partners

Factors	Potential Foreign Partner	U.S. Company
Knowledge of market		
Access to markets		
Manufacturing capability		
Established distribution channels		
Qualified senior management		
Qualified middle management		
Flexible in negotiating		
Previous experience in joint ventures		
Conflict of interest		
Dealings with competitors		
Commitment		
Activity central to business		
Additional alliances		
Difficult to withdraw from venture		
Sufficient financial resources		
Political acumen		
Banking access		
Exclusive product lines		
Access to new technology		
Economies of scale		
Lower capital cost		
Access to government incentives		
Access to suppliers		
State-of-the-art equipment		
Risk reduction		

4.3 Economic Climate in Mexico

Mexico's economic climate has been improving. The government has reduced inflation, and experts predict a further reduction in the future. The government has also liberalized trade both by privatizing its parastatal companies and by reducing its national debt. The growth of the gross domestic product (GDP) is estimated to be approximately 4% in 1992. However, while Mexico's economy is growing, manufacturing growth slowed toward the end of 1991.

Industry	% of Total
Agriculture, forestry, and fishing	8.9
Mining	2.3
Manufacturing	22.9
Construction	3.4
Electricity and water	1.9
Transport and communication	7.9
Commerce, restaurants, and hotels	27.6
Total (including others)	100.0

Source: The Economist Intelligence Unit (1992).

Since the introduction of the Economic Solidarity Pact of December 1987 and the Pact for Stability and Economic Growth in 1988, the Mexican government has instituted stringent fiscal, wage, price, and exchange rate controls. The Mexican government is dedicated to increasing efficiency within both the public and private sectors. To that end, the government has been divesting itself of nationalized companies.

Mexico is making real progress in reducing its inflation rate. In 1992, the government set a goal of having a 9.7% annual inflation rate. It remains to be seen if that goal will be reached. However, the elimination of the public sector's financial deficit and an exchange rate policy aimed at keeping the depreciation of the peso against the dollar to just 2% should help to bring inflation down from the 1991 level. Another benefit of the Economic Solidarity Pact and the Pact for Stability and Economic Growth is that inflation in Mexico has declined from 160% in 1987 to 18.8% in 1991.

As evidence of its liberalization of trade, Mexico joined the General Agreement on Tariffs and Trade (GATT) in 1986. While during the last 10 years total foreign direct investment was less than 5% of the total GDP, recent divestment of Mexicana Airlines and other parastatal companies should have a positive impact on the percentage of foreign investment to the GDP. Some of the most important reprivatizations are the following:

- Mexicana de Aviacion--Airline
- Terftalatos Mexicanos--Chemical

- Aerovias de Mexico--Airline
- Mexicana de Cobre--Mining
- Telmex--Telecom
- Cananea--Mining
- Conasupo--Agroindustry.

Mexico is reducing its foreign debt. Through a Program for Exchange of Public Debt for Capital (Swaps) enacted in 1990, Mexico hopes to cancel $3.5 billion of its public debt with domestic and foreign investment in reprivatized companies. The Economist Intelligence Unit (1992) estimates that Mexico will make repayments of approximately $3.7 billion on its long-term debt in 1992.

The Economist Intelligence Unit (1992) estimated overall economic growth in 1992 at 4%. in line with the official estimate of the Mexican government. Inflation was predicted to fall to approximately 12% in 1992 as well. While the current account deficit should be around $14 billion in 1992, about the same as in 1991, the GDP has grown from 1.7% in 1987 to 4.0% in 1991. According to The World Bank (1991), the government has made the restoration of sustainable economic growth a major policy objective and hopes to achieve a real GDP annual growth rate of 6% by 1994.

The origins of the Mexican GDP for 1990 show that manufacturing and service industries comprise 50%. Of this percentage, manufacturing represented 22.9%, including motor, steel, and textiles industries. Toward the end of 1991, manufacturing growth slowed. A third quarter growth of 2% has been the worst quarterly result since 1988. The textile industry is currently in a weakened state after textile imports rose by 25% in 1991, leaving the large deficit in foreign trade. This industry stands to benefit greatly from the North American Free Trade Agreement (NAFTA).

The steel industry also saw a drop in output in 1991; however, the industry is expected to recover because of an increase in privatization and the strength of the motor industry. In 1991, output of cars and trucks grew significantly and overseas demand remained high.

The most important factor in Mexico's trading future is the NAFTA. The recent conclusion of this agreement was not expected earlier in the year, and with ratification by the U.S. Congress, Mexico should see a significant boost to its economy as a result.

The statistics in Table 4.3 give a time series of economic indicators for Mexico.

Table 4.3. Major Economic Indicators Between 1987 and 1991

Macroeconomic Indicators	1987	1988	1989	1990	1991
GDP (billion pesos)	193.7	392.7	516.7	668.9	---
Real GDP growth (%)	1.7	1.4	3.2	3.9	4.0
Consumer price inflation (%)	131.8	114.2	20.0	26.7	22.8
Population (million)	77.2	78.8	80.5	81.1	82.6
Exports FOB (billion $)	20.7	20.6	22.8	26.8	27.2
Imports FOB (billion $)	12.2	18.9	23.4	29.8	37.0
Current account (billion $)	4.0	-2.4	-4.0	-5.3	-11.9
Reserves, excluding gold (billion $)	12.46	5.28	6.33	9.86	14.4
Total external debt (billion $)	109.4	100.8	95.6	96.5	95.0
Debt service ratio (%)	38.0	45.2	36.3	29.0	---
Exchange rate (average peso per $)	1,378.2	2,273.1	2,461.5	2,812.6	3,018.0

The stabilization of the peso is a goal of the Mexican government. The current exchange rate policy limits the rate of peso devaluation to the dollar at 20 centavos per day. Business International Corporation (1991b) has cited some analysts who feel the peso will have to be devalued because of the slide limits. The Mexican government, however, feels that because the peso is tied to the dollar and because the dollar has devalued against European and Japanese currency, there is no disequilibrium. Further, because past devaluations of the peso have led to high inflation, the government is not anxious to devalue the currency.

The peso will be reissued in 1993 in a new form that will eliminate three decimal places from the currency (i.e., a 10,000-peso bill will be reissued as a 10-peso bill). This reissue will make currency conversion and exchange easier and does not devalue the pesos that a business or an individual holds; current pesos will be exchanged for the new pesos.

While historical foreign investment has been small, it is being actively encouraged by the Mexican government. In the 1980s, total foreign direct investment was a relatively small portion--less than 10% of the total gross fixed investment in the economy--and its share of the

GDP has been less than 5%. Foreign investment has been actively promoted in Mexico in recent years, and in May 1989, the government published new regulations intended to stimulate its positive development. Other new legislation has also been passed that allows up to 49% minority foreign ownership in most Mexican financial intermediaries. The goal of the current Mexican administration is to bring in a total of $25 billion in foreign investment during the 1989-1994 period (Dacher 1990). Mexican authorities would like to increase the amount of investment progressively from approximately 10% to 15% to 20% of total annual new investment, according to the 1989-1994 National Development Plan.

The Mexican government has placed particular emphasis on attracting complex industries that could not otherwise be developed in Mexico. Such industries include those that require large investments per employee, those with high export potential, and the in-bond industries. Among the high-priority industries for foreign investment are machinery, transportation, chemicals, biotechnology, and telecommunications (Dacher 1990).

4.4 Legal Climate in Mexico

4.4.1 Introduction

In this section, some of the pertinent legal issues facing the prospective joint venturer are discussed. Because U.S. law-enforcement responsibilities reach far beyond its boundaries, antitrust legislation is a critical concern. Domestically, the U.S. legal system is confusing and intimidating to many; the prospect of submitting a dispute to a foreign legal system is often even more mysterious. Therefore, some of the aspects of Mexican legislation and how the NAFTA could affect the laws are discussed. Finally, two mechanisms, mediation and arbitration, for resolving disputes without resorting to costly and time-consuming litigation are given. Mediation and arbitration are increasingly becoming a cost-effective and practical means for resolving even major civil disputes between partners, companies, and employees.

Because these topics are rather complex, only a superficial treatment is feasible in this guide. Also, coverage of all pertinent laws is beyond the scope of this guide, and potential investors are encouraged to retain counsel in the U.S. as well as in Mexico when they begin to seriously investigate opportunities for investment in Mexico and what form that investment should take.

4.4.2 U.S. Antitrust Legislation

While a joint venture is not controlled by the same criteria under the antitrust laws as a merger or consolidation, the same considerations apply overall to joint ventures as to mergers (40 ALR Fed 343).

There are several pertinent pieces of U.S. legislation with which a U.S. investor looking at foreign opportunities should become familiar: the Clayton Act (15 USCS §§ 12-27), the Sherman Act (15 USCS §§ 1-7), the Wilson Tariff Act (15 USCS §§ 8-11), and Section 5 of the Federal Trade Commission (FTC) Act (15 USCS § 45). In addition, there are regulations promulgated by the FTC, with the concurrence of the Justice Department, that require certain joint ventures to notify Justice and the FTC prior to formation to give the two agencies time to consider possible anticompetitive effects on the U.S. economy (Marks 1991).

The Clayton Act addresses itself to issues relevant to joint venture formation, while the Sherman Act is applicable to actions that could be interpreted as restraints on trade. Section 73 of the Wilson Tariff Act is not more comprehensive in its scope than the Sherman Act and serves only to make the law more specific in its application to foreign commerce. The Wilson Act does not supersede the Sherman Act with respect to import trade, and both acts can be applied to restraints on import trade. Because the Sherman and Clayton Acts are the primary legal rules governing joint ventures, each, as it applies in this area, is discussed below.

Clayton Act, Section 7, Joint Venture Formation

Section 7 of the Clayton Act was enacted to deal specifically with mergers and acquisitions. This section has been applied also to joint ventures because, at formation, there usually is either an acquisition or merger of assets. Analysis of a joint venture for purposes of Section 7 of the Clayton Act is narrow because it addresses the issue of whether it is reasonably probable that the effect of the acquisition or joint venture will substantially lessen competition or tend to create a monopoly in some relevant geographic and product market (Marks 1991). "Actual restraints need not be proven in order to establish a violation...the requirements of the statute are satisfied when a tendency to monopoly or the reasonable likelihood of a substantial lessening of competition in the relevant market is shown" (12 L ed 2d 775).

The leading U.S. Supreme Court case developing the standard for this analysis is United States versus Penn-Olin Chemical Co., 378 U.S. 158 (1964) . However, Penn-Olin analyzes only one variant of the many types of joint ventures. In Penn-Olin, the joint venture involved production of sodium chlorate and sales distribution in the southeastern U.S. Neither joint venturer previously was in the market. Moreover, the Merger Guidelines, promulgated in 1984 by the Antitrust Division for Section 7 analysis, emphasize two factors not present in Penn-Olin but are certainly relevant to international joint ventures: 1) whether the market is limited to U.S. sales or is worldwide and 2) whether the lack of barriers to entry support only a broader product market (Marks 1991).

Sherman Act, Section 1, Ancillary Restraints

Section 1 of the Sherman Act applies generally to all contracts, including joint venture agreements. Section 1 provides that "...every contract combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal." The U.S. Supreme Court, analyzing the legislative history, concluded that Congress could not have meant to have prohibited all contracts or even all contracts that had some effect on the ability to trade. Rather, the prohibition was limited to those agreements "...which were unreasonably restrictive of competitive conditions" (Marks 1991).

Thus, the "Rule of Reason" came into being. In determining the reasonableness of a contract provision, the court is to weigh and evaluate the procompetitive effects of the provision against the anticompetitive effects. Thus, the U.S. Supreme Court early on stated that the question was whether the restraint "merely regulates and thereby promotes competition or whether it is such as may suppress or even destroy competition" (Marks 1991).

In contrast to the limited use of Section 1 of the Sherman Act in challenging the simple formation of a joint venture, it is the principal statute against which all of the other aspects of a joint venture are measured. Thus, the myriad of ancillary restraints found in joint venture agreements are normally evaluated under the Rule of Reason. In practice, it is these ancillary provisions that can raise antitrust problems far more serious than the mere formation of the joint venture (Marks 1991).

The National Cooperative Research Act of 1984 supplements the Sherman Act by providing that any "joint venture and development venture" can only be challenged under the antitrust Rule of Reason; thus, no per se challenge is allowed. This act defines "joint research and development venture" to include 1) theoretical analysis and experimentation; 2) development of basic engineering techniques; 3) extension of scientific or technical theories into practical application ("including the experimental production and testing of models, prototypes, equipment, materials, and processes"); and 4) collection and exchange of research information. Actual commercial production is not included (Marks 1991).

The joint venturers cannot 1) restrict the sale or licensing of inventions or developments not the result of the joint venture or 2) restrict a party's participation in another research and development project unless it is "reasonably required to prevent misappropriation of proprietary information contributed by any person who is party to such joint venture or of the results of such venture" (Marks 1991).

4.4.3 Mexican Legislation

Any legal system is inevitably affected by politics. One has but to look at the historical controversies surrounding U.S. Supreme Court nominations to find an example close to home. In Mexico, the judiciary has rarely shown the independence that would give foreign investors confidence in legal protections. However, great strides have been made in Mexico under the administration of President Carlos Salinas de Gortari. Although the influence of the single strongest political party (the Partido Revolutionario Instucional [PRI]) in Mexican politics has come under recent attack, it is still predominant and that influence extends to the judiciary. Under the administration of President Salinas, there has been increased independence of the judiciary; the critical test will be to see how enlightened will be the next administration.

Mexico and the U.S. have always had a mercurial relationship. Recently, the Mexican government refused U.S. financial assistance for programs in counternarcotics. This was in reaction to the kidnapping of a Mexican National believed to have been involved in the murder of U.S. Drug Enforcement Administration agent, Enrique Camarena, in 1985 and the recent U.S. Supreme Court decision condoning kidnapping of criminals from foreign venues to bring them to the U.S. even if the foreign government objects. These are examples of the types of political issues that can color the bilateral relationship and could translate into detrimental effects for the U.S. investor in Mexico.

However, even with the caveat of the volatile political relationship that exists between Mexico and the U.S., there is ample reason to believe that the reforms engineered by President Salinas will endure. Treaty commitments are among the strongest guarantees that the reforms will continue beyond the current administration. In 1986, Mexico joined GATT and made a commitment to reduce informal trade barriers. Official reference prices were eliminated and prior import permits were abolished for 95% of all imported items (Business International Corporation 1991b). Mexico is evolving from a country that was once antagonistic to foreign investment, principally driven by political motivation, to where it now openly courts foreign investment and, especially, U.S. investment.

President Salinas is an economist by training and a political pragmatist. Among the key reforms he has instituted to attract foreign investment to Mexico are legal reforms. These include the following:

- Reform of Foreign Investment Rules: Foreign investment conditions were relaxed in May 1989 through a change in the regulations governing the 1973 Foreign Investment Law. Investment procedures have been streamlined and made more transparent. Prior approval requirements have been eliminated for many investments, and foreign companies can now hold 100% equity in most sectors. It is expected that the 1973 Foreign Investment Law will be revised in conjunction with free trade talks (Business International Corporation 1991b).

- Enhanced Intellectual Property Protection: In the past, the lack of protection for proprietary technology acted as a disincentive to new investment and meant that most Mexican goods were produced with obsolete technology. In the case of the pharmaceutical industry, for instance, insufficient patent protection impeded foreign company executives from launching breakthrough drugs in Mexico (Business International Corporation 1991b). However, the Pharmaceutical Manufacturers Association likes what it sees in the NAFTA. The association says the NAFTA provisions for patent protection are better than those in GATT and provide a strong precedent for GATT's Uruguay round of multilateral trade negotiations.

  Technology transfer rules were greatly liberalized in 1990. Most important, a landmark intellectual property law was passed in June 1991, strengthening patent protection for processes and products already covered while extending such protection to many products and industries that did not receive patent coverage under previous legislation. Trade secrets were granted coverage for the first time. In addition, a revised copyright law was approved in July 1991, granting explicit protection to computer software and sound recordings, as well as strengthening enforcement provisions (Business International Corporation 1991b).

- The Free Trade Agreement: Under Mexican law, the NAFTA would have international treaty status equivalent to Mexican federal law issued by Congress. Any federal law conflicting with the NAFTA would be overridden. The provisions could not be amended without the consent of the treaty's other parties. This ensures a level of permanence and continuity that could not be achieved solely through legislation. Under the NAFTA, foreign investors would have the security of knowing their investments were protected by law and this would produce a sense of permanence to liberalization in Mexico.

  Although at this printing the negotiations have been concluded on the NAFTA, there are still political barriers to be surmounted before the NAFTA can be implemented. Many issues remain unresolved, particularly in regard to environmental regulations.

The government of Mexico has done much to revise its laws to attract foreign investment. However, the political climate can change quickly and it bears remembering that Article 3, Chapter 1 of the Law to Promote Mexican Investment and Regulate Foreign Investment states: "Foreigners who acquire properties of any kind in the Mexican Republic agree, because of such action, to consider themselves as Mexican nationals with regard to these properties and not to invoke the protection of their governments with respect to such properties, under penalty, in case of violation, of forfeiture to the Mexican Government the properties thus acquired" (Business International Corporation 1991b).

4.4.4 Dispute Resolution

Most legal systems appear burdensome and intimidating. Even if you are in the right, defending yourself can be a very costly undertaking. At a minimum, the experience of a law suit can be costly and time consuming. For the parties engaged in a joint venture, resort to litigation often means the dissolution of the business relationship. For an investor unfamiliar with the cultural, much less the legal, traditions of a foreign country, the prospect of seeking recourse in a foreign legal system to resolve a dispute may provide little solace. The alternative of taking a dispute to the U.S. judiciary is not comforting consolation for either investor.

The U.S. judiciary long has been subject to much criticism for the cost and time involved with even minor litigation. Often times even the threat of a suit is so intimidating that a party is forced to settle out of court, even when that party believes it is in the right. In an April 13, 1992 article in Business Week, corporate executives expressed grave misgivings about the U.S. courts. "Executives fear the U.S. legal system is crippling America's ability to compete in the global marketplace...62% of those surveyed believe the U.S. civil justice system significantly hampers the ability of American companies to compete with Japanese and European rivals. Dow Chemical spends 'in excess' of $100 million a year on legal services and liability insurance." The total cost to U.S. companies for litigation is estimated to be between "$51 billion and $58 billion a year" (Business Week 1992).

There has to be a better way and there is. Increasingly, U.S. companies are seeking "alternative dispute mechanisms" to resolve issues that were once taken to court. Alternative dispute mechanisms include mediation and arbitration. These mechanisms can be used to resolve almost any civil issue. The obvious exceptions are cases where a new point of law is being argued and, certainly, criminal cases.

Mediation is a method that can have great utility in the operation of international joint ventures. No partner can foresee all eventualities inherent to a business relationship, and there inevitably will be disputes. Mediation is an informal process. A mediator does not judge, but rather will work with the parties to help them come to a resolution of the problem. Statistics show that disputes resolved through mediation leave both parties feeling positive. This is important, especially in a joint venture that relies to a great extent on the continued good will of the partners. There are many professional organizations that offer mediation services. Mediation can be either binding or nonbinding. The mediator has no authority to impose a solution. If an agreement is reached between the parties, it can be translated into a binding contract.

Even if a dispute cannot be resolved through the efforts of a mediator, there are many measures short of litigation that are less expensive and time consuming. Arbitration is a more formal procedure that can involve hiring a judge to hear a case between disputants. In the case of a joint venture involving multiple cultures, a board might be appropriate. The board can be composed of three adjudicators: one chosen by each party to the dispute and the third chosen by agreement of the two. Arbitration is a formal process and more closely approximates a judicial proceeding, with procedural rules followed.

When forming a joint venture, it is relatively easy to include language in the agreement allowing for alternative dispute mechanisms. The following is an example used by Lovenheim (1989):

If a dispute arises out of or relates to this contract, or the breach thereof, and if said dispute cannot be settled through negotiation, the parties agree first to try in good faith to settle the dispute by mediation under the (whatever rules you chose to apply) before resorting to arbitration, litigation, or some other dispute resolution mechanism.

Mediation is an appropriate mechanism to resolve not only small disputes but, as in Lovenheim (1989), the following example shows how it also can be economical in both time and money for large disputes.

In April, 1987, L'Ambiance Plaza, a 13 story apartment building, collapsed while under construction in Bridgeport, Connecticut. Twenty-eight workers were killed and sixteen others were injured. In the following months, two retired judges, acting as mediators, met with nearly 100 lawyers representing contractors, subcontractors, and the victims families.

In November, 1988, in what has been called a "remarkable breakthrough in the use of mediation" which "eliminated years of potential litigation," it was announced that a settlement had been reached through mediation, resolving all legal claims for a total of $41 million.

Relatives of the victims told a reporter for the New York Times that they were relieved at not having to relive the tragedy in months or years of courtroom testimony. "We're glad to have it behind us and get on with what's left of our lives," said a man whose son was killed when the building collapsed.

"I've been involved in a lot of mass disaster cases," said the lead attorney for the workers families, "but I think never before has one been brought to a close so quickly and in a way that has so satisfied all the parties."

Mediation is confidential; there is no press; the proceedings are strictly private. Neither party can lose through mediation. However, either party can resort to litigation if all efforts fail. Ultimately, a joint venture undertaking is based on the continued good faith and trust that exist between partners. Mediation can help maintain that trust relationship and resolve disputes that threaten to divide the parties.

4.5 Financial Climate in Mexico

Three primary reasons for forming joint ventures are to share costs, to speed market entry, and to provide complementary strengths. The first of these reasons, sharing costs, requires a judicious investigation of the financial climate in Mexico.

The 1989-1994 National Development Plan shows a liberal approach to foreign investment. Its objective is to actively promote such investment by the following:

- making the procedures for authorizing new investments permitted by the law automatic, rapid, and transparent
- simplifying procedures and formalities and defining requirements precisely
- taking maximum advantage of technological know how and access to foreign markets that foreign investment permits
- creating mechanisms such that foreign investment does not place additional pressures on national financial markets (American Embassy, Mexico 1991).

In the past few years, the Mexican government has attempted to change bureaucratic thinking and to streamline the administrative procedures required for the approval of foreign investments. The foreign investment regulations of 1989 stipulate that investment applications must be acted on within 45 calendar days of their presentation to the National Foreign Investment Commission. If no response is given within that period of time, the application is automatically approved.

Mexican authorities have tried to be flexible in allowing 100% foreign capital share for projects in a number of sectors, including electric and nonelectric machinery and equipment, electronic computer equipment, transport equipment, chemicals, and high technology services.

Many Mexican states also have development programs for attracting industry. These include exemption from or reduction of state taxes, real estate taxes, land transfer taxes, and deed registration taxes. Companies receiving such benefits are usually disqualified from receiving federal benefits.

The Nacional Financiera (Nafinsa), a state-owned development bank, provides loans to companies in priority development areas and industries. Nafinsa is active in promoting joint Mexican-foreign ventures for the production of capital goods. Most of Nafinsa's operations are through trust funds to promote industrial development. These funds include FOMIN, which helps to capitalize small- and medium-sized industries by purchases of stock shares in the companies; FIDEIN, which helps to decentralize industries and stimulate development of certain regions; and FONEP, which finances feasibility studies. Nafinsa also has several trusts to undertake coinvestments with foreign banks.

Business activities that do not involve signing contracts or payments can be conducted using a Tourist Visa. Individuals engaging in making business deals must have a Visitor Visa, also called a Business Visa. A Business Visa allows for multiple entries, is issued for one year, and has a fee of $55.00.

Mexican labor, while plentiful and relatively inexpensive, is highly organized with more than half of the nonagricultural work force belonging to a union. For the past few years, strikes have been limited and are usually settled quickly. Strikes that are more difficult will usually draw government mediators to help facilitate the settlement process.

Mexico has an established minimum wage of approximately $4.00 per day. Over 80% of Mexican workers earn more than the minimum wage. Benefits are a higher percentage of a worker's salary than in the U.S. Those benefits cost employers between 12% and 15% of salaries (American Embassy, Mexico 1991). The Mexican government plans on improving workers' benefits by establishing a 2% pension fund.

However, some restrictions still exist. Among the criteria required by the National Foreign Investment Commission are that foreign investment should increase local employment opportunities and incorporate local inputs into its products. Other barriers to conducting business in any country are tariffs, taxes, customs fees, licenses, marking laws, labeling laws, documentation laws, health regulations, and technical standards. Each of these can affect the viability of a joint venture.

Mexico has three exchange rates. The controlled exchange rate applies to most exports and imports, debt payments, and in-bond industry receipts. The official free rate is the rate commercial banks use to buy and sell dollars. The private free rate is the rate offered at the exchange houses. The government has generally kept the difference between the official and private rates below 1% between 1988 and mid-1991.

The Mexican government maintains price controls on a number of sensitive products. Tight controls pertain to many basic foodstuffs. Less rigorous controls, based on changes in costs, are applied to another group of products such as steel, cellulose, fertilizers, household appliances, trucks, buses, tractors, soap, paper, etc. The Mexican government is making an effort to reduce price controls for as many products as possible.

The tax on royalties varies, depending on the goods or rights used or enjoyed:

> *Income from royalties is considered to be located in Mexico when the goods or rights on which royalties are paid are used or enjoyed there. Unless proven otherwise, this is assumed to be the case when the person making the related payments resides or has a permanent establishment in Mexico* (Trade Commission of Mexico 1992).

Mexico employs the Haromonized Tariff System to classify products for export and import. Import duties are assessed according to commodity classification. Mexico's tariffs on imported products range from zero to 20% in increments of 5%, with the majority of products subject to tariffs of 10%, 15%, or 20%.

Mexican Customs determines import charges by applying the tariff rate to the quoted Cost, Insurance, and Freight (CIF) value of the imported product, plus a 0.8% customs processing fee on the CIF value of the product. In addition, a 10% Value Added Tax (VAT) is assessed on the cumulative value of the CIF, the tariff, and the customs processing fee. The VAT applies equally to all products sold in Mexico, whether domestically produced or imported.

Tariffs, taxes, and customs fees are paid by the Mexican customs broker to a Mexican bank on behalf of the Mexican importer. To release products from Mexican Customs, the

Mexican customs broker must present to Mexican Customs the bank receipt attesting to payment of the customs processing fee, the tariff, and the VAT.

In some cases, Mexican companies and individuals involved in exporting can be eligible for a refund of the duties paid on imports of raw materials, parts, and components incorporated into exported merchandise. Components, raw materials, and machinery imported for use in the in-bond assembly industry are also exempt from import duties.

Mexico applies its tariffs on a most-favored-nation basis, with the exception of a series of preferential duty rates offered on certain imports from fellow members of the Latin American Integration Association. Mexico is a full member of the GATT.

Most imported products are exempt from licensing restrictions in Mexico. Licensing requirements do, however, apply to approximately 200 products, however, including a number of agricultural commodities, automobiles and parts, chemical and pharmaceutical products, and some farm and heavy construction equipment.

A Mexican company importing an item controlled by import licensing requirements is responsible for securing the import license, though they may request a pro forma invoice from the supplier to complete the application.

All products entering Mexico have general label and instruction sheet requirements that vary from product to product. Special labeling regulations apply to various products, including silver- and nickel-plated articles, wearing apparel, packaged foodstuffs, beverages, and insecticides. Certain products, such as food and medical devices, must be registered with the Secretary of Health. To be fully protected, goods having their trademarks registered in Mexico should bear the words "marca registrada," the trademark, and the location of the factory, including the name of the country of manufacture.

The freight forwarder must be provided with a commercial invoice, a packing list, a bill of lading, and depending on the product, a packing description in Spanish that specifies the material, structure, sealing materials, and packing capacity of each line of packing container to be used for export.

Additional requirements include sanitary certificates, when shipping live animals and plants, and a physicochemical analysis of food, beverage, pharmaceutical, and cosmetic products. The Mexican government is enforcing strict animal and plant health standards through the Secretary of Agriculture, as well as strict sanitary and labeling import regulations through the Secretary of Health. A Certificate of Free Sale, stating that the product proposed to be imported into Mexico is freely saleable in the U.S., is also required.

Mexico uses the metric system, and imports use metric markings on all shipments. And, in addition to the technical standards adhered to in most industrialized countries, Mexico follows standards from the American Society of Mechanical Engineers, the American Society for Testing and Materials, and the Society of Automotive Engineers. In electronics, Mexico follows CCITT standards.

Many products, including building and construction materials, electronics, chemicals, and medical equipment, require a quality and standards authorization from the Mexican Bureau of Standards before they will be allowed into the country.

The United Nations Conference on Trade and Development outlined the following tariff and nontariff measures that can affect international trade equity. Investors should obtain current information on as many of these measures as is necessary:

Added Tax on Imports
Advance Duty
Antidumping
Cash Margin Required
Commodity Tax
Compulsory Local Fee
Consignment Sales
Consular Invoice Fee
Consumption Tax
Countertrade
Countervailing Price
Customs Surcharge
Customs Valuation
Customs Surtax
Domestic Assistance
Environmental Rules
Excise Duties
Fiscal Charges
Fixed Valuation
Foreign Exchange Risk
Health, Sanitary Regulations
Import Surveillance
Import Duties
Inward Processing License
License Specified Use
License Fee
Local Content
Marking, Labeling
Money, Finance Measures
Multiple Exchange Rates
Nonautomatic Licensing
Packing Requirements
Preferential Rates
Preferential Listing
Preshipment Inspection
Price Measures
Production Tax
Prohibition
Quotas
Regional/Bilateral Agreements
Retaliatory Rates
Safeguards
Sales Tax on Imports
Single Channel
Sole Agency
Special Authorization
Stamp Tax
State Monopoly
Statistical Tax Value
Suspension of License
Tax on Foreign Exchange
Tax on Transportation
Technical Standards
Temporary Augmentation
Temporary Reduction
Variable Levies
Voluntary Export Restraints
Voluntary Export Rules
Voluntary Export Price

4.6 Political Framework of Mexico

The official name of Mexico is the United Mexican States. Mexico has a presidential form of government, where one party forms the government. This has been the status quo in Mexico since the Mexican Revolution in the 1920s. Its official language is Spanish. The presidential term of office is 6 years, with most Mexican presidents serving only a single term. The presidency is a powerful office. As in the U.S., the president appoints a cabinet.

Mexico has a bicameral congress: two deputies from each state and two elected for the Federal District. The term of service for each deputy is 3 years. State governors are elected for 6 years. In addition, 68 district courts, a series of appellate courts, and a supreme court constitute the judicial system.

The government of Mexico is relatively stable. The PRI has dominated Mexican politics since 1920. The current president will be in office until August 17, 1997. Deputy elections are every 3 years, with the next in July 1994.

In addition to the PRI, there are other opposition parties in Mexico, primarily Partido de Accion Nacional (PAN), Partido Revolucionario Democratico (PRD), Partido Popular Socialista (PPS), Partido Autentico de la Revolucion Mexicana (PARM), and Partido del Frente Cardenista de Reconstrucion Nacional (PFCRN).

Principal members of the government as of January 1992 are the following:

President	Carlos Salinas de Gortari
Secretaries (ministers)	
Agrarian Reform	Victor Cervera Pacheco
Agriculture and Hydraulic Resources	Carlos Hank Gonzalez
Commerce and Industrial Development	Jaime Jose Serra Puche
Communications and Transport	Andres Caso Lambardo
Comptroller General	Maria Elena Vazquez Nava
Education	Ernesto Zedillo Ponce de Leon
Energy, Mines, and Parastatal Industry	Fernando Hiriart Balderrama
Finance, Budget, and Planning	Pedro Aspe Armella
Fisheries	Maria de los Angeles Moreno Uriegas
Foreign Relations	Fernando Solana Morales
Government	Fernando Gutierrez Barrios
Health	Dr. Jesus Kumate Rodriguez

Labor and Social Welfare	Arsenio Farell Cubillas
National Defense	General Antonio Riviello Bazan
Navy	Admiral Luis Carlos Ruano
Tourism	Pedro Joaquin Coldwell
Social Development	Luis Donaldo Colosio

National elections are not scheduled until 1994. Several recent local elections have been challenged and overturned because of election fraud. The federal government seems to be committed to preventing blatant fraud and to modernizing the political system. In addition, President Salinas has instigated reforms in agriculture, education, and state relations, as well as started an antipoverty program. These efforts have been in an effort to build support for the PRI.

Mexico has attempted to maintain good relations with the U.S. through its handling of electoral fraud and corruption among the military and customs officials, as the FTA between the countries is being negotiated. Past elections have been charged with fraud and vote rigging, which has led to violence and occupation of town halls. The PRI achieved a clean sweep of state, congressional, and municipal elections held in November 1991. The results were contested by the PRD but the protests did not lead to violence. Both parties have made positive efforts to keep the peace and negotiate for clean elections (The Economist Intelligence Unit 1992).

Mexico is the U.S.'s third largest export market (Table 4.4), and the U.S. is Mexico's leading supplier and principal customer, supplying over two-thirds of Mexican imports and taking nearly 70% of its exports (U.S. Department of Commerce 1992b). Taking into account the close relationship between the two nations, the danger that U.S.-owned companies will face expropriation by the state is very small.

Some activities are reserved exclusively to Mexican companies, but as a result of a more liberal approach toward foreign investment, the Mexican authorities have placed special emphasis on attracting foreign investment in the automotive, textile, and agricultural sectors. In addition, majority foreign ownership has been allowed in some sectors where it was previously prohibited, such as cement, iron, and steel.

Trade relations between the U.S. and Mexico are positive. Trade and investment agreements signed in 1987 and 1989 have provided forums for discussions on a wide variety of issues, with a goal of reducing barriers. The Joint Committee for Investment and Trade has been established to provide a formal structure to promote business opportunities in the U.S. and Mexico.

Table 4.4. Mexican Exports and Imports by Country of Destination and Origin

Main Destination of Exports, 1990	% of Total	Main Origin of Imports, 1990	% of Total
U.S.	69.3	U.S.	68.0
Spain	7.2	Japan	4.5
Japan	5.8	Germany	4.2
France	3.5	France	2.3
Germany	1.4	U.K.	1.9

The government of Mexico passed the May 1989 Regulations of the Law to Promote Mexican Investment and Regulate Foreign Investment. Title 7 of that law is entitled Promoting Foreign Investment. The purpose of Title 7 is to appoint a national director to facilitate the participation of Mexican investors with foreign investors. This eliminated the Foreign Investment Council's discretionary ability to restrict foreign investment.

4.7 Cultural and Business Practices

There are many reasons why ventures succeed or fail. In addition to business and political considerations, cultural factors can have a positive or negative effect on the overall corporate experience in a joint venture. How a country views its own government, its attitude toward labor/management relations, and its attitude toward foreigners are important indicators of overall success.

There are some cultural differences that can affect trade with Mexico; however, many companies have adapted and conditions exist that can help overcome these differences. First, personal contacts and visits to Mexico can be very helpful, and many Mexicans speak or understand English, especially in the larger cities and along the U.S.-Mexican border. Second, Mexico's proximity to the U.S. can decrease travel time and help with developing close working relationships. Last, Mexican companies have often incorporated U.S. components or manufacturing processes, increased the sophistication of marketing techniques and distribution channels, and have adopted U.S.-style marketing techniques.

Successful joint ventures all have one major criterion: they achieve the goals of each partner. This results from complementary contributions from each partner, resulting in the synergy of combining each of their unique contributions. In successful joint ventures, the nondomestic partner generally contributes manufacturing technology, a specific product knowledge, and technical knowledge. The host-country partner generally contributes capital, knowledge of the indigenous market, contacts within the government, knowledge of local suppliers, and a relationship with local labor. Small- and medium-sized nondomestic companies are sometimes more acceptable to host-country governments because there is a more even distribution of resources. It is essential that all parties agree to the allocation of responsibilities. It doesn't matter which party agrees to be responsible for financing, marketing, or research and development, as much as it matters that both parties agree to the arrangement. It is also important that transfer prices of components be negotiated and agreed to prior to the formation of a joint venture. All of this requires constant communication on a regular basis. Communication must occur not only between the two companies but also from the management to the operational level of each company as well. This communication must include reasons why business decisions are made, what steps will be taken to implement those decisions, and what each partner is expected to do. The successful completion of common goals requires that everybody has equal knowledge.

All of the opportunities and threats that any company has are also germane to joint ventures. In addition, however, there are some major obstacles that pertain primarily to joint ventures. The major reason why joint ventures fail or dissolve is that the partners have differing business goals (i.e., one partner wants to reinvest profits and expand the business, while the other desires an immediate return). Another reason for failure is that one partner wants global integration of their business, while the other wants to focus on operations within the country. Because the commitment from the nondomestic company is generally not a large percentage of its resources and, generally, the commitment from the host-country company is a large portion of its resources, there is often disagreement as to the level of effort each company will invest. Often, companies do not think they are getting sufficient return for their investments especially if the contract does not spell out precisely what resources will be contributed and at what time, what the share of profits will be, etc. Differences in management styles and philosophies also contribute to eventual dissolution. And, the market for a particular product may not be as large as predicted, which negates some of the economies of scale for which the joint venture was formed. After a period of time, many joint ventures face the point at which the initial goals leading to the joint venture's formation are met or at which one partner's potential contribution is exhausted, after which the companies may wish to pursue their operations independently.

5.0 Sources of Data

Other researchers involved in complementary programs, such as PROCER, and individuals at the U.S. Department of Commerce's Mexico desk, U.S. Agency for International Development representatives, Export-Import Bank personnel, etc., were contacted by PNL to ascertain the most current secondary data. PNL gathered and reviewed data about U.S. companies doing business in Mexico from three sources: American Chamber of Commerce of Mexico, World Trade Academy Press, and North-South Center.

The following is a list of individuals and agencies to contact by type of information sought.

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