Chapter 2

Economic and Social Development Policy and Programs

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2.1 Economic Development Policies Announced by the Zedillo Administration

This section reviews series of economic policy and industrial development policy announced by the Zedillo administration that inaugurated on December 1, 1994.

Table 2.1-1 Summary of Economic Policies Proposed by the Zedillo Administration

Year/month announced	Policy proposal	Major initiatives
January 1995	Emergency Economic Program (AUSEE)	- Foreign exchange policy - Revenue policy Public utility charges Privatization Tax revenues and system - Expenditure policy - Deregulation - Assistance to small enterprises and industries Establishment of National Council on Small-and Medium-Sized Enterprises - Financial policy - Agricultural policy - Labor policy - Wage policy - Price policy
March 1995	Action Program to Reinforce AUSEE (PARAUSEE)	<Foreign exchange> <Expenditure> <Revenue> <Finance> - Domestic debt rescheduling for small enterprises for 5 - 12 years <Wage> - To raise minimum wage by 10%, starting in April
May 1995	National Development Plan (PND) 1995- 2000	1 Sovereignty 2 The rule of law 3 Democratic development 4 Social development 5 Economic growth - Domestic saving - Stabilization of government finance, foreign exchange, financial system - Resource mobilization for growth - Environmental policy supporting growth - Sectoral policy

October 1995	Alliance for the Recovery of Economic Growth (APRE)	I Government finance - Tax incentives, corporate asset tax exemption (up to December 1996) - Taxation measures to promote job creation by automobile and related industries II Foreign exchange and financial policy - Maintaining freely fluctuating foreign exchange rate system III Promotion of saving and infrastructure development IV Deregulation - Cooperation with state governments V Employment promotion by small enterprises - Establishment of Corporate Competitiveness Center VI Development bank and housing VII Employment and vocational training VIII Wage IX Social expenditure X Assistance to agricultural sector
May 1996	Program of Industrial Policy and International Trade	i Macroeconomic stability and financial development ii Creation and improvement of physical infrastructure and the human and institutional foundation iii Promotion of the integration of production chains iv Improvement of technological infrastructure for industrial development v Economic deregulation vi Export promotion vii International trade negotiations viii Promotion of competition

Source : JICA Team summarized.

Each of the above major policies is described in the following sections, in order of announcement.

2.1.1 Emergency Economic Plan (Acuerdo de Unidad para Superar la Emergencia Económica: AUSEE announced in January 1995)

The Zedillo administration, inaugurated on December 1, 1994, switched to the floating exchange rate system on December 22, in an attempt to overcome the monetary crisis that required urgent attention. At the same time, it announced the Emergency Economic Plan (AUSEE), measures to correct the imbalances in external trade and foreign exchange, which consisted of the following initiatives.

(1) Foreign exchange policy

To maintain a foreign exchange market mechanism, i.e., to support the floating exchange rates after December 22, 1994.

(2) Taxation

a) To propose bills to increase tax revenues.

b) To initiate joint efforts by government and private sector for simplification of the tax system under Advisory Committee on Taxation (Comité Asesor Fiscal).

(3) Deregulation

To focus on finalization of deregulation at state government level.

(4) Assistance to small enterprises/industries

a) To establish a mechanism in the government procurement process to give favorable treatment for small enterprises, within the framework of Free Trade Agreement signed by Mexico.

b) To establish National Council on Small- and Medium-sized Enterprises under participation of representatives of the government and the private sector; to set up a mechanism to facilitate technical support in the areas of production technology, design, finance, and distribution. The council, under cooperation of large enterprises, devices plans to enable small enterprises to supply raw materials and parts to large enterprises.

To initiate competitive measures for labor-intensive, export industries.

(5) Financial policy (loan and credit)

a) To ensure orderly economic adjustment through controlled lending, while facilitating loans to agribusiness enterprises, small and medium sized firm and export industries.

b) The central bank focuses on efforts to keep inflation in check within a short period of time.

2.1.2 Action Program to Reinforce AUSEE (Programa de Acción para Reforzar el Acuerdo de Unidad para Superar la Emergencia Económica : PARAUSEE announced in March 1995)

This Action Program was announced on March 9, 1995, as a set of measures to implement AUSEE. It primarily aims at reconstruction of the domestic economy and at the same time serves as prerequisite to economic assistance from the U.S. and IMF.

i) Foreign exchange

To maintain the floating exchange rate system in operation.

a) To allow the central bank to make intervention as required for market stabilization, coupled with financial restraint measures.

b) To set up futures markets, complementary to the current exchange contract system, at domestic banks and securities companies as well as at the U.S. mercantile market in Chicago.

ii) Government expenditure

a) To cut government expenditure in the current year by 9.8%, which is equivalent to 1.6% of GDP.

b) Major areas of expenditure cutbacks are in the ordinary expenditure account.

iii) Government revenue

a) To raise LP gas and electricity charges for general households by 20%, effective in April.

b) To raise the value added tax rate from 10% to 15%, starting in April, provided that the current 10% rate is maintained for the border area and the free trade zone.

iv) Finance

a) To initiate domestic debt rescheduling, mainly for small enterprises, for the period of 5 - 12 years.

b) The initial round amounts to 65 billion pesos (10 billion US$), which accounts for approximately 13% of outstanding loans by commercial banks at the end of the previous year, exceeding the total amount of non-performing loans currently known.

c) Funds totaling around 3 billion US$ will be infused by the World Bank, IDB and other sources for the purpose of helping maintain solvency of domestic financial institutions.

v) Wage

a) To raise minimum wage by 10%, effective in April.

b) To extend the duration of social service payment to unemployed persons under social insurance coverage.

2.1.3 National Development Plan 1995 - 2000 (Plan Nacional de Desarrollo: PND 1995 - 2000)

As mentioned earlier, National Development Plan 1995 - 2000 (Plan Nacional de Desarrollo: PND 1995 - 2000) was announced by the Zedillo administration in May 1995. The five-year plan forms the foundation of the administration's policy.

The plan consists of five policy agendas.

Table 2.1-2 PND's Five Policy Agendas

1.	Soberanía (Sovereignty)
2.	Por un Estado de Derecho y un País de Leyes (The Rule of Law)
3.	Desarrollo Democrático (Democratic Development)
4.	Desarrollo Social (Social Development)
5.	Crecimiento Económico (Economic Growth)

Among them, "5. Economic Growth (Crecimiento Económico)" covers industrial development that is the major concern of the present study. The outline of the policy agenda is described as follows.

(1) Objective of "economic growth" policy

a) To assure sovereignty of the state and promote social development and political reforms under the new legal system, sustainable economic growth is essential.

b) Urgency to accomplish dynamic and sustainable economic growth comes from the need for job creation for working population that grows at an annual rate of nearly 3%.

c) Economic growth of nearly 5% per year is essential to absorb growing surplus labor.

d) An economic growth target of 5% or over will be set once the current monetary crisis is dealt with and the economy enters a stable recovery path.

e) Investment is required to accomplish sustainable economic growth.

f) Investment can only be fueled by domestic saving supplemented by external funds.

g) Economic growth of an annual 5% or over hinges upon a high level of annual gross investment that must exceed 24% of GDP.

h) Domestic saving, a primary source of investment, needs to be raised to 22% of GDP by 2000.

(2) "Economic growth" strategies

a) Production can only be expanded by addition of production factors by means of investment and the rise in productivity. The latter basically relies on taxation and legal systems.
b) To boost domestic saving, fundamental measures will be taken to control inflation on a permanent basis.
c) Direct investment, in addition to quantitative expansion, should be directed to modernization of technology.
d) Investment must be backed up by reliable financial sources that come from domestic saving. To increase domestic saving and avoid overdependence on external funds, the current account balance of payments surplus must be maintained on a sustainable basis.
e) External funds serve as a vehicle to accelerate economic growth and job creation. It is desirable to direct major portions of foreign investment to expansion of production capacity and product supply.
f) In the short run, economic recovery will primarily rely on export industries. After overcoming the crisis, growth of exports and investment will drive domestic demand expansion.

(3) Sectoral policy

Based on the above strategies, basic policy is prescribed for the following five areas:

1) Promotion of domestic saving
2) Stabilization of government finance, foreign exchange, financial system
3) Effective utilization of resources
4) Environmental protection measures
5) Sectoral policy

Basic policy for industrial development including the fostering of small enterprises is outline in "Industrial Plan" of 5) Sectoral Policy.

A general outline of the sectoral policy is described as follows.

1) Industrial plan

   To emphasize the fostering and promotion of micro-enterprises as well as small- and medium- sized enterprises (SMEs).

   a) To focus on industries with export potential, which are labor intensive in nature and require modernization.
   b) To reinforce inter-industrial linkage and its synergetic effects through domestic material supply programs.
   c) To promote the development of lagging regions.

2) Development of mining

   Legal warranty, export promotion, promotion of cooperation and consolidation of small mines, and financial arrangement

3) Tourism

   To devise and implement measures to promote deregulation and increase the period of stay by tourists.

4) Agricultural policy

   To raise farm income by taking initiatives to increase productivity and profitability. Direct support to the farming sector will continue. Exports will be promoted through expanded export finance.

The industrial plan in PND is very concise, covering only one page, and leaves the planning and implementation of actual programs to SECOFI. It should be noted that, at the PND level, the fostering of micro-enterprises as well as SMEs is given of high priority.

2.1.4 Alliance for the Recovery of Economic Growth (APRE Announced in October 1995)

In early August 1995, in an attempt to encourage recovery of the Mexican economy, a joint proposal for relief measures for Mexican industries was submitted to President Zedillo by trade associations including chambers of commerce and industry under Coordination Council of Industrial Associations (CCE), a bank association, a securities association, export and import associations, and a conference of corporate executives.

In response, extensive discussions involving the government, trade unions, farmers' associations, and business associations were carried out and led to an agreement on "Alliance for the Recovery of Economic Growth (APRE)." APRE consisted of tax reduction, promotion of public and private investment, and employment promotion for micro-enterprises and SMEs, and was announced in October.

I. Government finance : Tax incentives

A tax incentive program was introduced on November 1, 1995, valid until the end of December 1996.

a) For enterprises with annual revenues of 7 million pesos (930,000 US$) in the current year, the corporate asset tax will be exempted until December 1996.

b) Tax incentives are introduced to promote job creation by automobile and related industries.

- The new automobile tax is exempted for 1996.
- Depreciation of automobiles with value not exceeding those specified in applicable laws and regulations is unconditionally allowed for up to 71%.

II. Foreign exchange and financial policy

To maintain the floating exchange rate system.

III. Promotion of saving and infrastructure development

a) Pension system
b) Communication and transportation
c) Electricity

IV. Deregulation

The government requests state governors to sign on the Agreement on Domestic Deregulation (CND) and follow the deregulation process initiated by the federal government.

V. Employment promotion for micro-enterprises as well as SMEs:

a) To establish "Corporate Competitiveness Centers" in 10 cities throughout the country by February of next year, which will be managed by the private sector under cooperation of national and state academic organizations. The centers will provide, among other things, management consulting service for micro-enterprises and SMEs.

b) To raise concern of Micro-enterprises and SMEs in the field of production technology, national plans are established to utilize information and related technology in the production and business management processes.

c) The Mexican Bank for Foreign Trade (BANCOMEXT) will effectively increase fund supply to the export sector by 30%. Assistance to export-oriented industries and their suppliers will be stepped up through lending, technical support, and investment (generally referred to as "Mexico Exporta" Program). The National Industrial Development Bank (NAFIN) and the Commercial Development Fund (FIDEC) will effectively increase fund supply for Micro-enterprises and SMEs by 30% and 50%, respectively. In addition, NAFIN, under cooperation of commercial banks, will launch a business support program in the form of participating capital.

VI. Development bank and housing

VII. Employment and vocational training:

a) To expand an existing scholarship program for the unemployed and a quality and modernization plan, covering 900,000 persons, a 30% increase in 1996.

b) The Council on Certification of Standards and Labor Competitiveness (CNCCL) will support the development of a flexible and high quality vocational training program customized to the needs of both management and workers, under cooperation of the public and private sectors.

c) To expand a special program for farm road improvement to promote efficient use of labor force, with a budget exceeding the current year. The program is designed to create temporary jobs equivalent to 140,000 persons. Also, a temporary job creation program sponsored by the Ministry of Social Development will be expanded to create 700,000 temporary jobs in 1996, up 27% from the previous year.

VIII. Wage

The Ministry of Labor requests the Minimum Wage Committee to raise minimum wage by at least 10% on December 4, 1995.

VI. Social expenditure

X. Farm assistance

The alliance will continue to be active between October 29, 1995 and December 31, 1996.

2.1.5 Program of Industrial Policy and International Trade

On the basis of PND's policy agendas outlined in 2.1.3, SECOFI has published an industrial promotion plan in May 1996. The purpose of this plan is 1) create through coordinated action with workers and firms, an industrial base that is competitive internationally, and 2) geared towards the production of high quality goods with more technological content. Three strategic guidelines are stated as follow.

1) Create conditions of high and permanent profitability in direct and indirect exports, as well as broaden and strengthen the access of Mexican products to export markets.
2) Promote domestic market development and efficient import substitution in order to underpin the insertion of the domestic industry into the international economy.
3) Induce the development of industrial, regional and sectorial groupings, with a high participation of the micro, small and medium size firms.

2.1.6 Relationship between Major Policy Measures and Supporting Industries

In the context of various policy measures described earlier, the fostering of supporting industries, a primary purpose of the present study, should be included in small enterprise promotion policy, for most of supporting industries are classified under the category of SMEs.

The former administration did not have a particular policy to promote SMEs and let a market mechanism work to promote growth of Micro-enterprises and SMEs. The Zedillo administration is now placing priority to promotion of those enterprises.

AUSEE (January 1995) prescribes 1) to warrant the government procurement provisions favoring SMEs under NAFTA; 2) to establish the National Small and Medium Enterprise Council and reinforce support for SMEs; 3) to nurture the linkage with large enterprises; and 4) to increase competitiveness of labor-intensive export industries. PARAUSEE (March 1995) has announced a support program for SMEs.

PND (May 1995) has formally endorsed AUSEE's policy as part of national development plans. Then, APRE (October 1995) announced 1) tax incentives for 1996, plus employment promotion at micro-enterprises as well as SMEs, including 2) the establishment of Corporate Competitiveness Centers, 3) promotion of technical information service, and 4) extension of line of credit for small enterprise financing. On the basis of PND, SECOFI has proposed policy measures for the commerce and industry sectors in May 1996.

2.2 SMEs Promotion Policy

Supporting industries that are the major subject of this study consist of manufacturers of automotive parts and electrical/electronic parts. At present, Mexico does not have clear promotion policy for supporting industries. However, it is relevant here to discuss about the country's small- and medium-sized enterprises (SMEs) promotion policy since most of enterprises that belong to the supporting industries are SMEs.

2.2.1 Definition and Positioning of SMEs in Mexico

(1) Definition

The present definition of small- and medium-sized enterprises and micro-enterprises in Mexico is set forth in "Comprehensive Development Plan for Small- and Medium-Sized Enterprises" and is restated with some modification in "Modernization and Development Plan for Small- and Medium-Sized Enterprises 1991-94."

Table 2.2-1 Definition of SMEs

	Employment	Net annual sales
Micro-enterprises	15 or less	1.5 million pesos or less
Small-sized enterprises	16 - 100	15 million pesos or less
Medium-sized enterprises	101 - 250	34 million pesos or less

Net annual sales are established by SECOFI to indicate the upper limit for each category, either in actual or projected amount. For newly established enterprises, projected net annual sales must be consistent with production equipment installed and projected employment. Note that the above figures are announced by SECOFI.

(2) Positioning and trend

In the manufacturing sector, small- and medium-sized manufacturers including micro-enterprises account for 98% of the total. In fact, micro-enterprises dominate with a 80% share. In terms of employment, micro-enterprises account for 12%, and together with small- and medium-sized enterprises, represent 49% in 1994.

Table 2.2-2 Composition of Manufacture and Employee in 1994

(Unit : %)

	Large	Medium	Small	Micro	Total
No. of manufacture	2%	3%	15%	80%	100%
No. of employee	51%	16%	21%	12%	100%

Source : SECOFI, IMSS

In terms of both the numbers of establishments and employees, micro-enterprises and small enterprises peaked out in 1992 and 1991 respectively. In 1994, small enterprises showed a significant decline, decreased nearly 10% in the numbers of establishments and employees. Although large and medium sized enterprises faced similar downturns in 1994 from their peak levels, their rates of decrease were not as large as those of small enterprises, and also they started to increase in the same year (See Table 2.2-3, 4).

Table 2.2-3 Number of Manufactures by Size

(Unit: Establishment)

Year	Large	Medium	Small	Micro	Total
1988	2,104	2,941	17,668	76,526	99,239
1989	2,279	3,209	18,281	81,332	105,101
1990	2,386	3,266	19,685	92,556	117,893
1991	2,427	3,364	20,279	99,695	125,765
1992	2,367	3,297	19,895	101,446	127,005
1993	2,270	3,164	18,633	99,279	123,346
1994	2,388	3,245	18,444	98,225	122,302

Note : Shadows show peaks during 1988-1994.
Source : SECOFI, IMSS

Table 2.2-4 Number of Employee in Manufactures by Size

(Unit: Person)

Year	Large	Medium	Small	Micro	Total
1988	1,452,801	458,683	664,556	317,157	2,893,197
1989	1,575,515	500,866	690,927	338,304	3,105,612
1990	1,635,629	512,280	737,230	384,465	3,269,604
1991	1,674,931	524,417	756,650	412,389	3,368,387
1992	1,601,142	510,398	740,870	415,757	3,268,167
1993	1,542,905	493,040	696,195	402,224	3,134,364
1994	1,656,912	506,682	687,803	396,981	3,248,378

Note : Shadows show peaks during 1988-1994.
Source : SECOFI, IMSS

2.2.2 Historical Background of Basic SMEs Promotion Policy

SMEs promotion policy in Mexico dates back to 1953 when Fund for Guarantee and Development of SMEs (FOGAIN) was established under NAFIN. FOGAIN provides medium- and long-term loans for operation and equipment investment of SMEs. FOGAIN reviews and approves loan applications, and loans are extended by commercial banks.

In 1978, the Lopez administration founded Small- and Medium-sized Industries Comprehensive Support Program (PAI). Previously, loans to SMEs were provided by four trust funds[1] including FOGAIN, and PAI started to provide financial assistance in combination with technical support. Also, it extended support to SMEs throughout the country by establishing regional offices, which was previously limited to those in and around Mexico City. Then, in the process of government reorganization, PAI became defunct in 1988 as it merged with NAFIN.

In 1986, Mexico joined the GATT and the government shifts its policy to focus on the market mechanism. It started to open up the domestic market and opted for ending protection and promotion of local industries. In particular, the new policy minimized intervention in economic activities of private enterprises and left production and investment by private industries to the market mechanism.

In 1989, National Development Plan 1989 - 1994 (Plan Nacional de Desarrollo: PND) was announced, and based on the plan, SME Modernization and Development Plan 1991-94 was prepared. Promotional measures set forth in the plan was intended to encourage organization of small enterprises and improve their access to technology, thereby to help them attain international competitiveness and improve productivity.

[1] Fund for Guarantee and Development of Small- and Medium-sized Enterprises (FOGAIN), Industrial Development Fund (FOMIN), Trust Fund for Industrial Estates and Commercial Centers (FIDEIN), and Research and Development Fund (FONEP)

2.2.3 Policy Framework Related to SMEs

(1) National development plan and SME policy

National Development Plan (PND, 1995 - 2000) announced in 1995 states, in Chapter 5 "Sectoral Policy," that one of the major focuses in industrial plan is to promote micro-enterprises and SMEs, and at the same time, to strengthen labor-intensive industries with international competitiveness. In addition, the "Export Promotion" section in Chapter 5 sets forth the following measures:

1) To facilitate supply of trade finance to SMEs through the development bank; and
2) To incorporate export promotion measures into SMEs engaged in indirect export.

The "Technology Policy" section in Chapter 5 points out poor technical levels of small enterprises that lag behind large enterprises, and states the reinforcement of research and development organizations, dissemination of technology, and private investment toward technical innovation.

(2) Outline of SME policy

As mandated by PND, SECOFI has formulated its industrial policy (Program of Industrial Policy and International Trade, May 1996). The development of SMEs is one of key elements in this program and various action plan related to SMEs are stated (See Table 2.2-5). Among those programs, "Integration of Production Chains" is especially related to SMEs. This policy is to reintegrate production chains which has been severed by trade liberalization. Production Chains will be integrated with enforcement of linkage between micro, small and medium size companies supplies inputs and final producers. Following sectors for promotion of linkages of production chains are selected.

1. High-technology manufacturing industries.
2. Labor intensive light manufacturing industries.
3. Petrochemical industry
4. Automotive industry

5. Public sector suppliers.
6. Industrial forestry sector.
7. Agribusiness sector
8. Mining

The follow-up and evaluation of the program will work in the National Council for Micro, Small and Medium Enterprise.

Table 2.2-5 SMEs Policy in Program of Industrial Policy and International Trade

Strategic Guideline	Induce the development of industrial regional and sectorial groupings with a high participation of the micro, small and medium size firms
Policy items	**Action Plans for SMEs [1]**
1. Macroeconomic Stability and Financial Development	Broaden access to financing schemes for micro, small and medium size firms
2. Creation and Improvement of Physical Infrastructure and of Human and Institutional Foundations	Reduce administrative costs for smaller firms to allow them to comply with their tax obligations, through the simplification of administrative procedure
3. Promotion of the Integration of Production Chains	Promote business forums for suppliers
	Establish and strengthen the national information networks on suppliers
	Encourage subcontracting schemes
	Support programs for the integration of production chains
4. Improvement of Technological Infrastructure for Industrial Development	Technological modernization programs 2)
5. Economic Deregulation	Simplify regulation on business start-up and operation
6. Export Promotion	Provide integral credit support from beginning to end of the export chain
	Increase the participation of BANCOMEXT and NAFIN in financing suitable projects not served by private commercial banking institutions
7. International Trade Negotiations	
8. Promotion of Competition	Facilitate the access to the instrument which prevents against anti-competitive practices by smaller size firms

Note: 1) Only action plans seems directly related to SMEs are picked up.
2) All technology modernization and quality promotion programs are vital for SMEs.

2.2.4 Organizations Driving SME Policy Implementation

(1) Government organizations and trade associations involved in fostering SMEs

Traditionally, SME promotion policy in Mexico has been led by various organizations, mainly SECOFI and Development Banks. SECOFI's General Office for the Promotion of Micro, Small and Medium Size Companies and Regional Development is responsible for formulation and implementation of industrial policy including promotion and organization of subcontractors as well as related administrative guidance. Two government financial institutions(Development Bank), NAFIN and BANCOMEXT, provide financial support including investment and medium- and long-term loans for fostering and promotion of industries.

A private organization, National Chamber of the Manufacturing Industry (CANACINTRA), is playing a leading role in the policy implementation stage. CANACINTRA's activities include: 1) coordination of opinions among micro-enterprises and SMEs; 2) exchange of ideas with government; 3) dissemination of information on technology, policy, and economy; 4) education and training; 5) legal advice; 6) promotion of standardization; 7) trade promotion; 8) intermediary for subcontracting; and 9) technology transfer.

However, the present organizational arrangement and promotional measures have proven to have various drawbacks: 1) they fail to provide effective support for SMEs; 2) there is lack of coordination between government organizations and individual enterprises; and 3) support measures are loosely focused. To overcome these drawbacks and provide effective policy support required by SMEs, an ad-hoc organization, The National Council of Micro, Small and Medium Size Enterprises, was established under participation of related government agencies, representatives of private organizations and enterprises. The council's profile, objectives, and activities are described in the following section.

(2) The National Council of Micro, Small and Medium Sized Enterprises (Consejo Nacional de la Micro, Pequeña y Mediana Empresa)

The council represents a new initiative for SMEs launched on May 23, 1995 under a decree. It consists of representatives of both the public and private sectors. It is expected to clearly redefine the direction of promotion policy for micro-enterprises and SMEs.

1) Objectives

The council has the following objectives:

a) To coordinate and plan support measures to reinforce competitiveness of micro-enterprises and SMEs and coordinate various methods for implementation;
b) To consider and design a mechanism to enable micro-enterprises and SMEs to have more comprehensive and professional advice, particularly in the areas of commercialization, market exploitation, technology, production process, and standardization;
c) To promote organization of micro-enterprises and SMEs, reinforce their linkage with large enterprises, for the purpose of the integration and the efficiency of production chains;
d) To develop strategies for micro-enterprises and SMEs, both direct and indirect;

2) Organization

The functional structure of the council is as follows:

a) General meeting
The general meeting is chaired by the Minister of Trade and Industrial Promotion (SECOFI) and is held under attendance of the full members who are representatives of the public and private sectors.
b) Working groups
Various working groups are organized by members as required to perform the specific functions of the council.

c) State-level committee

The council encourages each state to organize a committee responsible for enforcement of the council's decisions and implementation of promotional measures adopted by the council. The state committee is organized by representatives of federal and state government, development banks, the representatives of the entrepreneurial organization participating in the national council, as well as commercial banks, and other financial institutions. The committee is held monthly and the council's secretariat is responsible for coordination between the committee and the council.

3) Activity

The council has tackled on various programs/projects as a coordination body, with the participation and approval of public and private sector including development banks. Main programs are described as follows:

a) Establishment of mechanism of quick payment for the government procurement
b) Promotion of sector of leather/shoes, textiles/cloth, toy, jewelry, silver products, sport goods and furniture
c) Creation of competitive enterprise development center
d) Special finance support program by development banks for SMEs
e) National Quality Program
f) Electronic government procurement system
g) Integrated promotion program for usage of information technology in SMEs
h) Development program for suppliers / subcontractors
i) Technical seminar for SMEs
j) Promotion program for Maquiladora industry
k) Promotion program for Integrated company
l) Promotion program for handy craft industry

Several working groups have been formed in the Council to analyze and discuss about theme which brought into the Council. The proper working groups were established by different themes such as finance, deregulation, quality assurance and government procurement, and by needs of the Council.

Major activities of working groups:

a. Agreement of development and finance assistance for SMEs (FOPYME)
b. Council for economic deregulation
c. government procurement system (COMPRANET)
d. Manual for pre-certification of ISO for SMEs
e. Manual for quality improvement specialized for SMEs

(3) Programs for SMEs

Various programs serving as instruments to promote SMEs are described as follows.

1) Integrated enterprises (Empresas Integradoras)

Integrated enterprises are established by a group of SMEs to share resources as well as information for the purpose of improving productivity and reinforcing competitiveness. In particular, integrated enterprises carry out joint marketing and sales of products manufactured by their members as well as joint purchase of raw materials. The integrated company is established by equity participation of member companies and must be approved by and registered with SECOFI. At present, there are more than 185 integrated enterprises, and only 30-35% of which are operated successfully. SECOFI is currently reviewing them one by one and is reconsidering the current system. Integrated enterprises are mainly found in the areas of agribusiness, handicraft, and textile. There is no integrated enterprises organized by electrical/electronic manufacturers or automotive parts manufacturers, although there is a proposal for the latter.

2) Unification of administrative service outlets

"Unified counters (ventanilla única)" - one-stop service centers - are established to ensure smooth implementation of SME programs, handling various licensing and approval procedures related to incorporation and operation of an enterprise. In Mexico City, the service center is located within CANACINTRA, where various administrative services are provided for small- and medium-sized manufacturers, jointly with Federal District Department (DDF).

3) Provision of consulting service, technical assistance, and education and training

Technology Transfer Center (UTT) under CANACINTRA is providing consulting service for SMEs in the field of industrial technology. Its major objective is to help SMEs increase their competitiveness by providing suitable technology. Since 1993, UTT has been providing service for a total of 1,500 companies. It has 10 employees including a general manager, who are mostly consultants.

NAFIN's Entrepreneur Fostering Program (PRODEM) provides training and technical support for SMEs. In 1994, 12,311 entrepreneurship courses were conducted and participated by 235,253 people in total. 490 courses on professional training were provided for 9,418 people. In addition, PRODEM holds exhibitions and seminars and conduct correspondence education course. In carrying out these activities, PRODEM collaborates with educational institutions, private enterprises and consultants from all over the country..

4) Subcontract intermediary system (Bolsa de Subcontratación)

The system is under way as part of SECOFI's policy and is designed to build a data base containing information on SMEs in order to encourage subcontracts. The system is managed by private organizations including CANACINTRA, Chamber of Manufacturing Industry of State of Jalisco (CAREINTRA), and that of Nuevo León (CAINTRA). For more detail on the subcontract intermediary system, see 2.3.

In addition to the SME data base, SECOFI conducted three exhibitions for promotion of subcontract work in 1995. At these exhibitions, companies requiring materials and parts displayed their products and met with suppliers for meeting.

5) SME loan programs of NAFIN and BANCOMEXT

NAFIN and BANCOMEXT are described in 2.5 "Financial System." APRE envisages to increase public loans to export industries and SMEs by

30%. In response, NAFIN and BANCOMEXT plan to increase their SME loans.

6) Credit Unions

Another instrument for SME production are credit unions which are established by a group of companies under their contribution to form the fund. NAFIN sets up a line of credit for each unions equivalent to 10 times the amount of the fund and extends loans to member companies.

2.2.5 SME Promotion Policy and Its problems

The current Zedillo administration has been emphasizing the promotion of micro, small and medium sized enterprises under Emergency Economic Plan (AUSEE) announced in January 1995 following the current crisis at the end of 1994, as well as National Development Plan (PDN: 1995-2000). Since then, Consejo Nacional de la Micro, Pequeña y Mediana Empresa was established as the joint initiative by the government and the private sector, and "Alliance for Economic Recovery (APRE)" agreed by the government and the industries under the leadership of "Council on Coordination of Trade Associations (Consejo Coordinador Empresarial) addresses promotion of micro, small and medium sized enterprises. This is significant improvement compared to the previous administration which did not give much consideration to this area.

Major issues related to future efforts for SME promotion are summarized as follows:

1) Since existing SME promotion policies are not laws but programs, its sustainability are not certain.
2) Consejo Nacional de la Micro, Pequeña y Mediana Empresa is only a coordination body with limited executing capability.
3) Allotment of the central government, state governments, development banks and each industrial organizations are not clear. Duplication of task are often seen.
4) There is a lack of human resources who can handle issues of SME.
5) There is a lack of attractive incentives for SMEs to operate their business.

2.3 Current status and problems of "Subcontractor Promotion Program"

2.3.1 Subcontract Intermediary (Bolsa de Subcontrataci6n)

(1) Outline

Subcontract Intermediary is a program to promote subcontracts between manufacturers and suppliers by collecting and storing information on both the demand and supply sides in a database. The program is promoted by United Nations Industrial Development Organization (UNIDO) as one of major SME support measures in LDCs, and UNIDO is providing technical assistance for Mexico.

UNIDO has established subcontract intermediary offices in 14 Latin American countries and is building up a networking linking the offices as well as a local-level service system within each country. It has also been sponsoring exhibitions to promote subcontract opportunities.

In Mexico, CANACINTRA is operating local-level subcontract intermediaries in the Federal District (D.F.) and six states, Aguascalientes, Hidalgo, Puebla, Veracruz, Querétaro, and Guanajuato. A similar facility is operated by CAINTRA in Monterrey and by CIMEG in Guadalajara. In addition, subcontract intermediary offices are being prepared in 7 places by CANACINTRA; Celaya, Chihuahua, Cd. Juárez, Oaxaca, San Luis Potosí, Toluca (state of Mexico) and Torreon. Registration with these intermediaries can be made with free of charge. Also, enterprises belonging to other trade organizations such as CANIECE can use these intermediary services. Currently, SECOFI has just started preparation for building the national-level system integrating these programs. (See 2.3.4)

(2) Activity record

In Mexico, the subcontract intermediary offices were established in 1991. In 1991/92, approximately 400 inquiries were made, followed by 300 in 1992/93, and 400 in 1993/94. Although detailed data are not available, the actual number of subcontracts concluded from these inquiries seems to be very small. The number of introductions from 1994 to 1995 is about 220. It is less than the number 400 in the previous year due to new activities such as technology assessment on the subcontractor promotion model program which is explained later. (See 2.3.4)

In 1993 and 1994, 10 exhibitions were held under financial assistance of the EU's American-Latin Invest program totaling 1.4 million ECU. 6 exhibitions were held in the EU and 4 in Latin America, promoting subcontracts and joint ventures.

(3) Major issues

SECOFI has pointed out the following problems about current subcontract intermediaries; the size is too small, persons in charge of the program are not sufficiently trained and are inexperienced, standards for registration of enterprises is not established, information on the customers is insufficient and the system is limited to large cities such as Mexico City, updating of information is not sufficient, there is no network that can promote local-level subcontract intermediaries on a nationwide basis, and the information system is not fully developed.

In addition to the above, the following issues can be seen. Firstly, it is difficult to find suitable trade partners due to a significant difference in technical requirements and capabilities between potential customers and subcontractors. Secondly, order quantities do not satisfy the quantities on the subcontractors. Thirdly, inquiries do not always result in actual business. Fourthly CANACINTRA, responsible for intermediary service, does not have a sufficient number of personal to provide effective service. Finally, there is the lack of follow-up activity after partnering.

2.3.2 Subcontract Promotion Model Program

(1) General

Starting in 1994, the Coordination Committee of "Bolsa de Subcontratación", with which SECOFI, NAFIN, BANCOMEXT, CANACINTRA, CAINTRA is affiliated, under the advice of Mr. Koyama, JICA expert, started a model program for subcontract promotion using the Subcontract Intermediary program. In this program, under cooperation of Nissan Motor Enterprise of Mexico in 1994 and Japanese Chamber of Commerce in Mexico in 1995, 17

Japanese companies as buyers were promoted to accept subcontractors. At the first stage, finding of a trade-partner between the customers and subcontractors was carried out, and also technical review (factory examination) was conducted for local SMEs to rate their technical levels form A through D. Enterprises rated at level A are capable of serving as subcontractors. Level B enterprises require customer support, while level C companies need consultation in technology and management. On the other hand, D-level enterprises are not acceptable as subcontractors. At the second stage, detailed factory analysis was made for C-level SMEs. The analysis result will be put forward to consultation.

The model program differs from the Subcontract Intermediary service in that it provides a variety of services in addition to intermediary, including consultation, technical support, and capital support. At present, the program only covers Japanese-affiliated companies as potential buyers, and at the second stage, will extend to U.S., Italian, French, and German companies.

(2) Activity record

Under the program, it has so far been confirmed that potential buyers look for 113 parts and components (amounting to 1,700 US$) and 148 SMEs has been qualified for subcontracting at varying technical levels (A, B, or C). Of total, approximately 60 enterprises were selected by potential buyers for factory visit (technical review), which was completed for 40 enterprises. In the end, approximately 20 companies are expected to enter into subcontracts.

(3) Major issues

The intent of this model program is to activate the Coordination Committee of "Subcontract Intermediary" under the slow development of subcontract intermediaries. However, unavailability of nationwide network does not allow smooth and systematic match-making between the buyers and subcontractors. A governmental sector must take initiative in building the infrastructure of the program. There are still differences in technical requirements between the buyers and subcontractors. These differences must be minimized based on the understanding of buyers and subcontractors. In other words, it is necessary to establish a system to improve the technical level of subcontractors.

Therefore, the first action is to establish a law or system for promoting SMEs or subcontracts. The Subcontract Intermediary as a center of the system has insufficient resources of persons and funds, result in unsatisfactory match-making. When it comes to factory analysis and consultation, further difficulties will be encountered.

2.3.3 Parts Trade Fairs

(1) Overview

In 1995, three parts trade fairs were held at World Trade Center (WTC) under the assistance of SECOFI and cooperation of related organizations including NAFIN and BANCOMEXT; "Export Promotion and Parts Industry Promotion Fair" between July 11 - 13, 1995; "Exploration of Domestic Suppliers for Maquiladora Companies" between November 14 - 16; and "First Trade Fair for Automotive Industry and Suppliers" between December 13 - 15. In 1996, four fairs are scheduled as joint efforts of SECOFI, NAFIN, and BANCOMEXT: "Commerce and Industry" between August 6 - 8; "Large Export Industries" between September 18 -20; "Maquiladora/Electronic and Automotive Parts and Components" between October 14 - 16; and "Products and Services for Hotels and Restaurants" between November 13 - 15.

(2) Export Promotion and Parts Industry Promotion Fair
(Primer Encuentro Nacional para el Desarrollo de Proveedores y Apoyo a la Exportación, July 11 - 13, 1995)

This was jointly managed by SECOFI, BANCOMEXT, NAFIN, BANCI, and WTC. Among others, 85 persons participated from SECOFI during the fair. Invitation letters were sent directly to members of INA, AMIA, ANPACT, ARIDRA, CANACINTRA, CAREINTRA, CAINTRA, CANIECE, and, Guadalajara Metal Industry Association, via state governments and representative offices of the federal government in each state.

43 companies (potential buyers) exhibited their products, consisting of 2,353 items listed for procurement. 1,000 suppliers were invited and 52% were micro-enterprises or SMEs.

The exhibiting companies met representatives of 5,158 suppliers in total and received corporate profile information from 1,156 suppliers. Suppliers came from 25 states and 314 companies (27%) already exported their products. Based on the result of an questionnaire survey for the exhibiting companies, 20% of suppliers are able to supply parts within a short lead-time.

A follow-up survey was conducted for two exhibiting companies, General de Telecommunications, S.A. de C.V. and Grupo Vitro. The former plans to meet 168 suppliers and visit their factories (at the time of preparation of SECOFI's final report, 70 companies were visited). The latter will conduct a questionnaire survey for potential suppliers and visit selected factories after preliminary evaluation.

(3) Fostering of Domestic Suppliers for Maquiladora Enterprises (Encuentro de Desarrollo de Proveedores Nacionales para la Industria Maquiladora, November 14 - 16, 1995)

This fair was participated by 9 states (Nuevo León, Chihuahua, Baja California, Durango, Estado de México, Sonora, Jalisco, Tamaulipas, and Yucatán) and 50 Maquiladora enterprises (80 if group companies were included). Approximately 2,000 parts and components were listed for procurement. 2,000 suppliers from 26 states registered, and 52% were micro-enterprises or SMEs. Also, 8 commercial banks (Banca Promex, Banco Mexicano, Banca Serfin, Banorte, Inverlat, Banca Mifel, Quadrum, and Bancomer) participated, indicating financial support after suppliers find customers. The fifty Maquiladora companies met a total of 3,798 supplies during the fair. The result of the questionnaire survey for the Maquiladora companies indicates that 71% of the potential suppliers are capable of supplying parts with short delivery schedule. Also, the follow-up survey reveals that 40 suppliers won contracts afterwards.

(4) First Trade Fair for Automotive Industry and Suppliers
(Primer Encuentro Nacional de Desarrollo de Proveedores de la Industria Automotriz Terminal de Automotores y sus Partes, November December 13 - 15, 1995)

This fair was jointly managed by SECOFI, BANCOMEXT, NAFIN, BANCI, and WTC. 126 persons participated from SECOFI. Invitation was directly made to members of INA, AMIA, ANPACT, ARIDRA, CANACINTRA, CAREINTRA, CAINTRA, CANIECE, and, Guadalajara Metal Industry Association, via state governments and representative offices of the federal government in each state.

42 companies (potential customers) exhibited their products and listed 2,353 parts and components for procurement. 2,479 suppliers participated and 88% were micro-enterprises or SMEs. The participants came from 22 states, including 31% from the federal district and 11% from the State of Mexico.

Each exhibiting company talked with 68 suppliers on average, totaling 2,708 companies. NEOBUS de Mexico met the largest number of suppliers, 206 companies. According to the responses by the exhibiting companies in a questionnaire survey conducted during the fair, 22% of suppliers are capable of supplying parts within a relatively short period of time.

(5) Major issues

The results of questionnaire surveys conducted at the fairs indicate that many suppliers want this type of fair more frequently as an opportunity to meet large enterprises, possible in rural regions. In light of the fact that nearly a half of participants came from Mexico City and its vicinities, local fairs are essential to meet large potential demand. Care should be taken, however, to conduct sufficient follow-up surveys to monitor how many contracts have been made, and what activities are required after match-making, since most of these information is not available.

Finally, suppliers registering at the previous fairs belong to broad-based industries and do not always match the exhibiting companies which fall into relatively a narrow range of fields. Also, some of the exhibiting companies are too large for small enterprises to directly deal with, except for the fair related to Maquiladora companies, many of which were direct buyers. To ensure the best results from the go-between efforts, the purpose and the type of participants must be focused further.

2.3.4 National System for Promotion of Subcontracts (Sistema Nacional de Promoción para la Subcontratación)

(1) Outline

The national system for promotion of subcontracts is the project to integrate existing various systems and programs and to create a nationwide system for promotion of subcontracts under the control of SECOFI. At the first stage, a national level subcontractor information system which shows capabilities of enterprises will be developed on the same format for satisfactory industry information. At the second stage, the consulting system will be developed for promotion of subcontracts. Also, the development of information system on the first phase at the first stage will apply to five industries; electric, electronic, metal and machinery, plastic, textile and apparel within this year. The second phase implemented next year will be determined by SECOFI after discussion with industry associations.

(2) Features of subcontractor information system

The subcontractor information system provides three types of information; buyers information, subcontractor information, and government agency and laboratory information for technology transfer. Subcontractor information includes information (classified in A, B and C) for capabilities of enterprises. For this purpose, external specialists assess quality, price, production capability and equipment while visiting factories. Lab staff or consultants will be assigned as external specialists. Seventy percent of the costs are paid by CIMO (grant for training and consulting from the World Bank) and the remaining 30% is paid by enterprises. Currently, the methods of factory analysis and selection of specialists are reviewed. With the aid of CIMO, external specialists (lab staff, consultants) can compensate insufficiency of man-power at industry associations such as CANACINTRA. The system allows updating of data annually.

Internet will be used for establishment of the information system. Information of buyers and subcontractors is shown on the home pages for promotion of match-making. Only CAINTRA in Monterey is currently using Internet. However, it will be developed nationwide. The concept and format of subcontractor promotion is subject to Bolsa de Subcontratación in UNIDO. The UNIDO system is using a special software and specialists from each industry may be required for appropriate operation of the system. Therefore, a system that can be easily handled by a layman will be introduced to the subcontractor information system.

(3) Future plan of this year

CANACINTRA has about 4,800 members covering 5 sectors. Excluding micro firms, about 8,000 enterprises will be the potential group. SECOFI estimates that 30% of the potential group will show interests in the subcontractor information system. The target figure is 2,000 to 2,500 enterprises. SECOFI will have campaign for the importance of subcontractor system through the state authorities and industry associations. In the process, using branches of NAFIN and BANCOMEXT, various programs will be integrated. For example, NAFIN has their supplier promotion program and BANCOMEXT has their export promotion program.

SECOFI is planning to promote the subcontractor program comprehensively through the coordination committee consisting of NAFIN, BANCOMEXT and industry associations. The subcontractor information system is considered as a component of the program. In the coming six months, about 500 of target 2,000-2,500 enterprises will be registered. The number allocated for each sector is being reviewed. In September, model project for plastic industry will start in Chihuahua and Cd. Juárez. Which of technology from a laboratory can be transferred as well as usage of CIMO have been reviewed since July. An experimental model project covering more details will start in September in San Luis Potosí. BANCOMEXT is now investigating subcontractors. 100 enterprises in Chihuahua and Cd. Juárez each in the industry of metal and machinery, and plastic have been registered. This information will be part of the subcontractor information system.

(4) Management of subcontractor information system

In principle, the registration is free of charge. It costs about 300 pesos for assessment of an enterprise. If 70% of the cost is paid by the grant of CIMO, enterprises have to pay around 90 pesos only. Since Internet is used for communications, it does not cost a lot. Some industry associations have been providing services of subcontractor information with charges. It has to be turned into free of charge. Some associations do not disclose the information, but the subcontractor information system is basically disclosing the information. 17 items out of 20 items, which are ready for registration, will be open to the public. Information of quantity and price and data regarding consulting results will not be open.

SECOFI will work around the information system to integrate the existing information. The main aim is to prevent the directories become out-of-date. There are many subcontractor promotion programs promoted by each state government, including the "supplier promotion project" under WTC. Therefore, the subcontractor promotion is spreading out to local authorities and considered as state level job. The overall management of the subcontractor information system is carried out by SECOFI.

2.3.5 Subcontract Promotion Program

The program is designed to promote subcontracts between local SMEs and foreign companies, and Bolsa de Subcontratación have been established as a promoting organization and are widely known. The program is usually carried out by regional trade associations (such as CANACINTRA) under cooperation of state governments and is supported and coordinated by SECOFI, the federal government. UNIDO also supports the Bolsa de subcontratación program in the form of direct support to local trade associations. Similarly, SECOFI is not directly involved in the UNIDO program, which does not have nationwide coverage. In fact, many states conduct similar activities without UNIDO's support. Essentially, Bolsa de subcontratación is responsible for the following two areas: 1) development of a data base on enterprises which have products to sell (mainly local SMEs) and intermediary service to potential customers who make inquiry, and 2) sponsoring of exhibitions by buyers to show products they purchase and create business opportunities.

Major problems are summarized as follows:

1) The data base is incomplete and is not frequently updated, thus failing to function as a reliable source of subcontract promotion. There is the lack of buyer data to prevent suppliers from making promotional efforts.
2) Enterprises listed in the data base and those participating in the exhibition are limited to a state level, which have not developed into nationwide networks.
3) The exhibition is dominated by large assembly manufacturers including Maquiladora companies, which display parts and components they procure, far exceeding offerings by local SMEs in terms of volume and quality. It should feature primary suppliers which directly deal with SMEs.
4) SECOFI maintains the position to allow each state's own activities and has still to start important initiatives such as unification of data base formats, and the building of nationwide networks (Internet).
5) Activities of trade associations, state governments, and SECOFI are limited to the development of data bases and the sponsoring of the exhibitions, and not responsible for follow-up activity to promote matchmaking.

2.4 Export Promotion Policy, Investment Promotion Policy and NAFTA

This section reviews the "Automobile Decree" which mandates localization of automotive parts, the "Maquiladora Decree" about the bonded processing zone, the "Temporary Import Program (PITEX)" to encourage exports, the "New Investment Law" to lighten the foreign investment regulations and "NAFTA" - the free trade agreement among the U.S., Canada, and Mexico. The Automobile Decree, the Maquiladora Decree, the PITEX and the New Investment Law, have been gradually deregulated by NAFTA that became effective in 1994 as well as Mexico's joining the GATT in 1986. This section examines how the changes brought by these new institutional frameworks affect the parts industry.

2.4.1 The Automobile Decree

(1) Major features and impacts of the Automobile Decree

The Automobile Decree (Decree on Modernization and Development of the Automotive Industry (Decreto para el Fomento y Modernización de la Industria Automotoriz)) originated in a presidential decree issued in 1962. It was amended, including various additions, in 1972, 1977, and 1983 to reflect the economic situations of the country. During the period, the Decree consistently pursued its original objective of promoting import substitution for the industry including the ban on imports of certain parts and components, and for that purpose, imports of assembled cars and parts have been banned or restricted. Clearly, the Decree served as an instrument to implement the government's protectionism policy relying on import substitution strategy. In 1986, Mexico became a GATT member and started to move toward trade liberalization. The Automobile Decree issued in December 1989 declared the end of the previous policy marked by protectionism and import substitution. Then, when the NAFTA came into effect in May 31st 1995, the Decree was amended and an additional decree was issued. While this report does not go into in-depth historical analysis of the Decree, it is relevant to review the current Automobile Decree, based on the 1989 decree as amended and added in 1995, as follows. Note that the current Decree will be effective until December 31, 2003, and it is unknown at this moment whether it will be entirely abolished in 2004 or some portions will survive in the form of a local law.

The Automobile Decree in December 1989 approved imports of assembled cars and autoparts, but it did not mean complete liberalization. Rather it has liberalized the imports within certain limitations. The import restriction under the Decree will be relieved step-by-step over the next decade. But from the opposite viewpoint the Decree continues to control imports at least over the decade.

The Automobile Decree regulates automotive industry roughly in two forms. One is regulation, and the other requires each company to maintain positive trade balance. Various equations are used to calculate the above indices, as outlined below. Since the entire calculation process is highly complicated, only key points are described here. Note that assemblers of large trucks and buses are not regulated by the Decree, because they are locally capitalized.

(2) Regulation on the rate of domestic value added

1) Equation to calculate the rate of domestic value added

The Decree introduces the concept of domestic value added rate in order to measure the local content. The rate indicates to what extent the assembler purchases parts and components from local suppliers.

$$\text{Domestic value added rate (\%)} = \frac{\begin{array}{c}\text{" Domestic value added"}\\ \text{of all the parts from local suppliers}\\ \text{(VANp)}\end{array}}{\begin{array}{c}\text{" Domestic value added"}\\ \text{by assembler}\\ \text{(VANt)}\end{array}} \times 100 \quad \text{.... (2.4.1)}$$

According to the official gazette dated May 31, 1995, the domestic value added rate will be gradually reduced following the schedule below in order to maintain consistency with NAFTA. It should be noted, however, that the abolition in 2004 has not been announced.

Effective date of NAFTA (June, 1995) - end of 1998	: 34%
1999	: 33%
2000	: 32%
2001	: 31%
2002	: 30%
2003	: 29%
2004 and after	: To be abolished

Prior to 1989, the domestic value added rate was calculated on the basis of parts costs. Under the 1989 decree, the domestic value added was defined as above. The calculation procedure for the domestic value added is described as follows.

2) Domestic value added of purchased parts from local suppliers (VAN_p)

The domestic value added of parts purchased form local suppliers is defined as a sum of domestic values added of all the parts and components purchased by assembler from local suppliers:

$$VAN_p = VP - (ID_p + IP_p) + TP \quad \text{......} (2.4.2)$$

Whereas,

VP : The value of sales from local suppliers to the assembler (Note: These suppliers, because of direct sales to the assembler, are defined as primary suppliers.)

ID_p : The value of direct imports contained in the parts sold by the suppliers to the assembler (including raw materials, parts, components for subassemblies)

Ip_p : The value of imported materials and parts purchased to produce the parts (representing the value of imports by secondary suppliers)

TP : Net foreign currency earning from export of parts under intermediary of the assembler

The domestic value added of parts, therefore, is the primary suppliers' sales to the assembler, less foreign currency portions contained therein and added by the net foreign currency earning (TP) realized by exports of the part via the assembler. As the equation 2.4.2 implies, however, the domestic value added count primary and secondary parts suppliers only.

Most importantly, the equation to calculate the domestic value added of the parts does not include that of parts produced by the assembler. The value added counted only for purchased parts, in this equation virtually restricts or discourage internal parts production.

In case of an assembler whose majority of the capital is owned by foreign investors, if a majority of the supplier's capital is owned, directly or indirectly by an assembler, those parts by the supplier are not deemed as locally purchased parts. This rule basically applies to the Maquiladora enterprises. This regulation prevents assemblers, in an attempt to clear the minimum rate of domestic value added rate, from separating their internal parts plants as subsidiary companies, thereby to encourage purchase from the independent suppliers. When an assembler whose majority of the capital is owned by local investors holds the majority of the supplier's capital, those parts by the supplier are recognized as locally purchased parts. In reality, however, there is no assembler with local majority of the capital, to which the Automobile Decree applies.

Note that the parts in the above equation refer only to OEM parts, except that TP includes the foreign currency earning from export of REM parts.

3) Domestic value added by assembler (VAN_t)

$$VAN_t = (VTV_d + X) - (ID + IP) + TP \quad (2.4.3)$$

Whereas,

- VTV_d : The value of domestic sales of cars and parts assembled by the assembler (excluding domestic sales of imported cars)
- X : The value of directly exported cars and automotive parts
- ID : The value of raw materials, parts, components, and subassemblies imported by the assembler for production of assembled cars
- IP : The value of imports included in the value of locally purchased parts (Total sum of ID_p and IP_p in (2.4.2) for all the suppliers, who are to inform the sum to the assembler)
- TP : Net foreign current earning by the suppliers from export of parts made through the assembler

VAN_t is thus calculated by subtracting from total sales by the assembler the value of its direct imports and the value of imports contained in locally purchased parts, i.e., ID + IP, and adding the net foreign currency earning from parts exports (TP).

In other words, VAN_t is defined as a sum of foreign currency earning by assemblers (from assembled cars and parts exported by them) and foreign currency savings (by assembled cars and parts sold locally).

(3) Trade balance requirements

Each assembler is required to achieve and maintain trade balance.

Trade Blanca by individual assembler (S) = X - (ID + IP) + TP........... (2.4.4)

Note that the same symbols as those in 2.4.3 are used here, and by subtracting domestic sales value from equation 2.4.3, net foreign currency earning by the assembler can be obtained. Equation 2.4.3 can be rewritten as follows. If S is negative, assume S = 0 to calculate VAN_t.

$VAN_t = VTD_d + S$ = Domestic sales + Trade balance........................... (2.4.5)

The first element of the trade balance requirements prohibits a negative value of S for the assembler. Foreign currency obtained by each assembler must be larger than that spent by the same company.

Subtracting (ID + IP) restricts the value of parts imported by assemblers, directly or indirectly, and is thus against the intent of NAFTA. As a result, the Mexican government will relieve import restriction each year by applying the following factor. Note that the abolishment in 2004 has not been officially announced.

1994	:	0.800
1995	:	0.772
1996	:	0.744
1997	:	0.716
1998	:	0.689
1999	:	0.661
2000	:	0.633
2001	:	0.605
2002	:	0.575
2003	:	0.550
2004	:	To be abolished

(4) Extended trade balance for car import

On the other hand, assemblers are allowed to import assembled cars so far as they maintain positive trade balance. Trade balance used here as a major criterion is called "extended trade balance" that represents a broad definition of trade balance by adding the following factors to the conventional trade balance (S).

Extended trade balance = $S + T + W + 0.3I + SF_t - Y$ ....(2.4.6)

Whereas,

S : Trade balance of the assembler (see (3).)

T : Transfer of net foreign currency earning between assemblers, and between assembler and supplier (i.e., an assembler or an supplier can transfer its trade surplus (S) to another assembler, provided that its surplus must be reduced by the amount transferred.)

W : Net foreign currency earning by a Maquiladora supplier, which must be owned in majority by an assembler or which parts are exported via the assembler.

I : The value of capital investment by the assembler; 0.3 means that 30% of the amount can be allocated to imports of assembled cars.

SF_t : Carryover of unused trade surplus (S)

Y : Penalty for the domestic value added rate (VAN_p/VAN_t) falling below the required level: zero if exceeded

While assemblers are allowed to import assembled cars up to each company's extended trade balance, the requirements intend to restrict imports of assembled cars and are thus against the intent of NAFTA. The Mexican government has set forth a deregulation schedule, under which the allowable value of car imports will be increased by dividing the extended trade balance by the above factors (0.800 in 1994 to 0.550 in 2003).

(5) Summary and outlook for the Automobile Decree

The Automobile Decree consists of 32 articles with supplemental provisions, based on which various cabinet orders have been issued. While the Decree contains detailed provisions, this section summarizes only the basic rules. In relation to NAFTA, the Decree must be modified stepwise to comply with the NAFTA agreement within ten years after its effect (by 2030). Nevertheless, it is uncertain whether the government will entirely abolish the Decree in 2004. NAFTA is only an agreement among the three countries and does not govern "domestic laws" in each country, so that the Decree may continue to exist in a different form. On the other hand, GATT is an international agreement that should govern the Decree designed to protect domestic parts manufacturers, although its fate after 2004 is still uncertain.

The amended Automobile Decree gives options to those assemblers who started operation before 1992 (Model Year) in terms of calculation of VAN_p, the rate of domestic value added, and calculation of trade balance taking account of their actual performance. Furthermore it is not easy to make a trade balance from the beginning of the operation for the new assemblers. The Decree helps the Mexican market to be reserved to the existing assemblers.

2.4.2 Maquiladora Decree

(1) Historical background and origin

Mexicans has historical background of seasonal worker across the border to the South and Southeast of the U.S. before the Second World War. Originally, the U.S. government granted special legal protection to the migrant workers under the Bracero Program. The program was abolished in the 1960s as illegal workers became a political issue, creating a large number of jobless people in Mexico along the border. In 1964, the Mexican government established the Border Industrialization Program (BIP) to cope with the unemployment situation, becoming a original text of the Maquiladora Program which was officially inaugurated in mid-1965. The U.S. government supported the program by providing favorable tariff treatment for products made by Maquiladora companies.

Based on the historical background, the Maquiladora Decree was originally enacted under the following principles: 1) to allow 100% foreign capital participation in Maquiladora companies, instead of the 49% restriction on foreign-affiliated companies in the rest of the country; 2) to require

Maquiladora companies to export all their products; 3) to exempt Maquiladora companies from import duties on raw materials and equipment that are required for production activities, thus "bonded; and 4) to require Maquiladora companies to located only in designated areas along the border.

Thus, the Maquiladora Program was originally intended to allow Mexico to secure employment for residents in the border area, while enabling U.S. companies to have low-cost work force at bonded factories.

Under the framework, many of Maquiladora companies were operated in the following form:

1) U.S. companies own and operate factories through their wholly owned subsidiaries in Mexico. These factories (Maquiladora) are responsible for labor-intensive elements of production processes.
2) The U.S. companies have their headquarters on the U.S. side along the border, which accommodate the management, sales, accounting, and other backoffice functions. For this reason, Maquiladora factories are referred to as the "twin plant" consisting of U.S. and Mexican portions.
3) The Maquiladora companies (factories) provide labor service for production activities and fixed assets (land, buildings, and office furniture), and collect charges therefor. In a sense, they function as one type of service provider. The U.S. companies own production equipment and lease them to Maquiladora. Raw materials and equipment are imported duty free from the U.S., so that Maquiladora serves as bonded factory.
4) The U.S. companies retain the ownership of raw materials and products in inventory, which are assumed to be in Mexico in transit or on transportation (temporary import). All the products manufactured by Maquiladora are taken over by the U.S. companies.
5) The U.S. companies pay to their Mexican subsidiaries labor costs, service charges, user charges for fixed assets (land, buildings, and office furniture) plus moderate profit margins. This is why Maquiladora companies are regarded as "cost centers."
6) The management and sales staff are stationed on the U.S. side and reside in the U.S. along the border. They go to Maquiladora as required, and

the Mexican government issues a special visa for them.

Under this arrangement, the subsidiaries in Mexico serve as bonded factories doing machining and assembly operations on a contract basis, just like a "mill" grinding flour for customers - the original meaning of Maquiladora. Note that the word "Maquiladora" refers to "companies" that are established and operated under the Maquiladora Decree.

(2) Transformation of Maquiladora

Over the three decades since the start of the Maquiladora Program, the act was amended several times and Maquiladora evolved from "a local mill" to "in-bond company" accordingly. In the initial stage, Maquiladora was dominated by labor-intensive job work shops doing relatively simple production work such as sewing shops. Today, Maquiladora represents the massing of enterprises having advanced production skills including electronics (TV assembly) and automotive parts (As of October 1995, there are 2,184 Maquiladora companies that employ 667,613 persons). Maquiladora plays an important role in the manufacturing sector in Mexico, accounting for 46.3% of the country's exports and 21.5% of employment (as of 1995). In particular, TV assembly has become major operation of Maquiladora, making the Maquiladora areas the world largest production base with a major concentration in Tijuana, Baja California. Other notable changes are summarized as follows:

1) Under the decree dated October 30, 1972, Maquiladora was allowed to be located in any areas other than the northern border area. As of October 1995, 1,489 Maquiladora companies were located in 6 states along the border and 695 in other areas. This reflects the intent of the Mexican government to relate the efforts to promote foreign investment under the Maquiladora Program to regional development.
2) Non U.S. based Maquiladora companies have emerged. For instance, an increasing number of small- and medium-sized companies, including those in Japan and Korea, has invested as Maquiladora. without having headquarters in the U.S. This marks a major shift from a traditional investment pattern led by U.S.-based Japanese companies.
3) Transactions between Maquiladora companies are on the rise. This

means, foreign subcontractors who have supplied parts and components to Maquiladora companies are investing with the same status. This is frequently seen in the northern border area. The move is initiated from a pure economic reason that supporting industries try to locate near their customers.

4) Local Maquiladora companies have emerged. The Maquiladora Program is designed to provide the major privilege for foreign companies to establish wholly owned subsidiaries. It now attracts companies wholly or majority owned by local investors.
5) In conjunction with growth of local Maquiladora companies, more and more foreign companies are using the shelter program, i.e., they use local enterprises operated as subcontractors, instead of establishing their own Maquiladora companies. In this case, foreign companies provide technology and raw materials, while keeping subcontract relationships with local enterprises, thus not involved in the management of Maquiladora by themselves.

Composition of Maquiladora Ownership (1996)

Ownership	*Percentage composition by the number of companies*
100% foreign	41.9%
50/50 (foreign/local)	0.8%
100% local	43.0%
Local majority	4.3%

6) Some of products manufactured by Maquiladora companies are allowed to be sold in the local market, partly because of keeping consistency with NAFTA (discussed in detail later).

(3) Relationship with supporting industries

The Maquiladora Program is essentially the bond system. As the bond system will be abolished under NAFTA in 2001, the program will lose its major benefit. Nevertheless, the northern border area has concentration of electrical/electronics assembly industries as well as automotive parts industries, which continue to serve as a major potential market for supporting industries in Mexico.

(4) Outline of the 1993 amendment of the Maquiladora decree

The Maquiladora Decree, "Decreto para el Fomento y Operación de la Industria Maquiladora de Exportación," was promulgated on December 20, 1989, and was amended and added on December 24, 1993. In addition, there are various laws containing provisions related to Maquiladora, namely the Tariff Law, the Trade Law, the Federal Administration Law, and the Investment Law. The amendment and addition in 1993 was made to ensure harmony with the NAFTA agreement.

Major elements of the Maquiladora Decree as amended in 1993 are described below, except for the provisions related to legal procedures.

(Qualification and Other Requirements)

The Bonding Program (i.e., the Maquiladora Program) applies to companies established by individuals with Mexican nationality or under Mexican law (Article 5).

Note: A company wholly owned by foreign capital is treated as a local company under the program so far as it was established under Mexican law.

Once the license is issued under the program, it is effective infinitely without renewal procedures. The Mexican government may inspect the licensed company to see if it continues to meet requirements of the program and revoke the license if noncompliance is found (Article 7).

(Location and Ownership)

Restriction on factory location had been mostly removed before this amendment, except for designated areas including those around Mexico City (Article 6). In fact, the Mexican government encourages investment in rural areas to promote industrialization. According to the "Law to Promote Mexican Investment and Regulate Foreign Investment," the in-bond company may be established by any form of ownership share. In addition, the new foreign investment law promulgated in 1993 (discussed later) authorizes most of manufacturing companies to be wholly owned by foreign capital without approval of the foreign investment committee. However, automotive parts are retained until 1998.

(Export Requirements and Domestic Sales)

The original Maquiladora decree required the licensed company to export all of its products. According 1989 Decree, the company were allowed to sale in domestic market not more than 50% of the total value of exports. On the official gazette dated December 24, 1993, the quantity allowed for domestic sales was amended as follows (Article 19).

The quantity is indicated as a percentage of the total value of exports in the previous year. For the company which has previously exported all of its products, the total value of sales is equal to the total value of exports. The company which has not exported previous year, are not allowed to sale in the domestic market. Therefore even after the year 2000, the company will not be allowed to sell all of its products in the domestic market. In the long run, the value of domestic sales allowed and that of export will be equal.

1994	: Up to 55%
1995	: Up to 60%
1996	: Up to 65%
1997	: Up to 70%
1998	: Up to 75%
1999	: Up to 80%
2000	: Up to 85%
2001	: Up to 100%

Note that the licensed company is required to pay import duties on raw materials and others incorporated into products to be sold to the local market (Article 20). Products sold to the local market must be made in accordance with the same quality control and industrial standards as those applied to exported products (Article 23). Thus, the licensed company is prohibited from selling products that are inferior in quality to exported products.

(Temporary Import)

The provisions related to bonded import (Article 10) that form the basis of privilege granted under the Maquiladora decree are based on the "temporary import" concept, i.e., the ownership of properties (raw materials, machinaries and equipments) imported by Maquiladora is deemed to remain with their exporter (a foreign company or individual). The concept assumes that properties so imported are transported in Mexico on a temporary basis or are kept in temporary storage, which is not subject to import duty.

Properties treated as temporary import	*Validity*
1)Raw materials	1 year
2)Equipment and instruments not directly related to production	Up to validity of the program
3)Machinery and equipment used for production	Up to validity of the program
4)Trucks, trailers, and	20 years

The Maquiladora Decree does not mention regarding abolition of "temporary import" by in-bond. However, abolition of "temporary import" by the end of 2000 is regulated under NAFTA. "In bond" and "duty draw back" are not allowed according to "Restriction on Drawback and Duty Deferral Program" in Article 303 of NAFTA. This Article will come to effect on January 1st, 2001, started under Annex 303.7.

(5) NAFTA and the future of Maquiladora

As discussed earlier, the Maquiladora Program is designed to create competitive advantage for labor-intensive industries to use labor force abundant in Mexico and export cost competitive products to the U.S. For such operation, the Mexican government exempts raw materials, machinery and equipment from import duties. In addition to the above, major advantages of the Maquiladora Program before the enactment of NAFTA are summarized as follows:

1) The licensed company can be established under 100% foreign investment participation.
2) Raw materials, machinery and equipment can be imported without customs duties (bonded).

3) When Maquiladora products are exported to the U.S., import duties may be exempted under most-favored-nation treatment or are only imposed on value added in Mexico.
4) Bonded materials and product inventories are not treated as assets of Maquiladora companies, and asset tax (2%) is exempted. Also, Maquiladora is used as the cost center to be virtually exempted from income tax in Mexico (the transfer price decree).
5) Value added tax (IVA) on products procured in Mexico can only be refunded.
6) Capital goods purchased in Mexico are eligible for special depreciation, including accelerated depreciation.
7) U.S. dollar accounts may be held to use U.S. dollars in free market for fixed assets investment.
8) Customs clearance procedures are simplified (one-stop shopping service by SECOFI).
9) Foreign managers and engineers can obtain visa easily to reside in the U.S. and commute to Mexico, or can reside in Mexico at their option.

SECOFI has denied a general belief that the Maquiladora decree will be abolished in 2001 as NAFTA was enacted on January 1, 1994. Instead, NAFTA's agreements on tariff and the foreign investment law will apply only to the relationship between the member countries, while domestic laws not conflicting with NAFTA will continue to exist.

Nevertheless, it is certain that many privileges granted only to Maquiladora companies will be discontinued by 2001: (1) the establishment of the wholly owned company in 2) will be authorized in most of manufacturing companies under the new foreign investment law of 1993; (2) bonded imports of raw materials and equipment will be terminated under NAFTA; and (3) tax incentives in 3), 4) and 5) will also be discontinued.

The Transfer Price Decree was repealed under the amendment of tax laws in December 1994. The decree assumed that Maquiladora was the cost center and did not produce profits in Mexico, so that income tax was due only on the U.S. side. In fact, the Mexican government earned virtually no tax revenues from Maquiladora (both assets tax and income tax). The abolition of the transfer tax decree means that tax will also be imposed in Mexico, although tax rates and other details have still to be decided.

Thus, the Maquiladora Decree will cease to provide its current advantages after 2001, even if it continues to exist in a certain form. It should be noted, however, that Maquiladora companies which can prove product origin in the NAFTA area will be able to enjoy the privilege under the Maquiladora Decree and a tariff-free privilege in the NAFTA area.

So far as customs duties are concerned, the Maquiladora Program after 2001 is expected to comply with the NAFTA agreement, as summarized below. Note that the treaty to prevent double taxation applies to customs duties in the NAFTA area. For instance, after 2001 if a Mexican company imports raw materials by paying customs duties, from which a product is manufactured and imported by a U.S. company who pays customs duties in the U.S., customs duties on either side, whichever is less, are refunded.

(Import)

- Import from the NAFTA area:
  No tax on products manufactured within the area. If the importer fails to meet the origin rules, Mexican import duties are imposed.
- Import from outside the NAFTA area:
  Mexican import duties are imposed all the time.

(Export)

- Export to the NAFTA area:
  No tax on products manufactured within the area. If the importer fails to meet the origin rules, customs duties in the importing country are imposed.
- Export to outside the NAFTA area:
  The importer is required to pay customs duties in the importing country.

2.4.3 Temporary Import Program (PITEX)

(1) Intent of the PITEX

The Temporary Import Program for Production of Export Goods (Programa de Importación Temporal para Producir Articulos de Exportación) is designed to exempt customs duties for companies who export portions of their products, thus treating them as in-bond. Its intention is to extend the duty-free privilege to Mexican companies who are primarily supplying their products to the local market by exempting customs duties from their imported parts or components for their export products.

(2) Program outline

(Validity and Basic Requirements)

This program will also remain effective until 2000 and is expected to be abolished and comply with the NAFTA agreement after 2001. Under the present PITEX, the scope of privilege varies with the value of exports as a percentage of gross sales of each company:

Export amounting to more than 10% of total sales or more than 500,000 US dollars: Bonded imports of raw materials and components are permitted.

Export amounting to more than 30% of total sales: Bonded imports of machinery and equipment, in addition to raw materials and components, are permitted.

(Maximum Allowable Stay Period of Imported Goods in Mexico)

Raw materials and components:	2 years
Machinery and equipment:	Up to validity of the program

(Obligations after Licensing)

The applicant is required to commence operation within 11 months after licensing. He shall keep and manage raw materials and components under the Customs Law and shall report annually to SECOFI as well as the Ministry of Finance. Also, he must make exports in excess of the value of machinery and equipment imported under the PITEX program within 2 years after the start of operation. Raw materials and components which have passed their stay period must be shipped back or customs duties must be paid for permanent import.

(3) Relationship with NAFTA

As seen in Maquiladora companies, companies enjoying the privilege under the PITEX will not be eligible for exemption on customs duties after 2001 to comply with the NAFTA agreement. Also, as the foreign investment law now permits the establishment of a company wholly owned by foreign capital other than Maquiladora, both Maquiladora and PITEX companies will be more and more equally treated in terms of privilege, and will be eventually abolished and incorporated into the NAFTA framework.

2.4.4 Foreign Investment Law

(1) Historical background of the foreign investment law in Mexico

The foreign investment law in Mexico originates in "The Law to Promote Mexican Investment and Regulate Foreign Investment" enacted on March 9, 1973. The "old" foreign investment law, as its official name implies, is designed to control foreign investment and in fact limits foreign investment in general to 49% of total capital. In August 1983, the decree was issued to authorize 100% foreign investment participation in Maquiladora. In this case, Maquiladora which had not been considered as a local company, became localized by force in exchange of getting 100% foreign capital status. Full foreign investment participation was extended to designated priority sectors in February 1984.

On May 16, 1989, shortly after the Salinas administration took office, "enforcement regulations" on the Foreign Investment Law of 1973 were issued. The most notable feature of the regulations was automatic approval of a company wholly owned by foreign capital who satisfied a certain set of conditions, i.e., only registration was required, not approval, thus not requiring the Maquiladora status. Other than restricted sectors for foreign investment, the condition is that trade balance should not be deficit for 3 years after establishment.

On December 28, 1993, with the imminent enactment of NAFTA, the "new" foreign investment law was issued. The name was changed to the Foreign Investment Law of the United Mexican States and the old law was repealed. However, the enforcement regulations issued in May 1989 will remain in effect until new enforcement regulations are promulgated, so far as they do not conflict with the new law.

(2) Outline of the new foreign investment law and major attributes

(Major points of amendment)

Under the NAFTA agreement, Mexico is required in principle to grant most-favored-nation treatment or national treatment to U.S. and Canadian investors, i.e., the government is expected to treat them exactly the same way as it treats Mexican investors. On the other hand, the new foreign investment law, although foreign investment participation was expanded to 100%, still contains some restrictions on foreign investment. It should be noted, however, that the new foreign investment law treats non-NAFTA investors equally as U.S. and Canadian investors.

Various obligations (performance requirements) related to foreign investment, including local contents, compulsory, and trade balance, have been abolished under NAFTA (Section 1106). However, this also contains various exceptions and retained provisions, and the Automotive Decree and the Maquiladora Decree will be phased out as mentioned earlier.

(Industrial sectors subject restriction on foreign investment)

Foreign capital may hold 100% of business enterprise capital in industrial sectors other than those subject to foreign investment restriction, as listed below.

Sectors exclusively owned by the country (Article 5)

I	Petroleum and other hydrocarbons
II	Basic petrochemicals
III	Electricity
IV	Generation of nuclear energy
V	Radioactive minerals
VI	Satellite communication
VII	Telegraph
VIII	Radiotelegraph
IX	Mail
X	Railroads
XI	Issue of currency
XII	Minting of coins
XIII	Control, supervision and oversight of ports, airports, and heliports
XIV	Such others as are expressly stated in the applicable legal provisions

Sectors which only Mexican is allowed to own (Article 6)

I	National surface transportation of passengers, tourism, and freight, excluding messenger and package delivery service
II	Retail trade in gasoline and liquid petroleum gas
III	Radio broadcasting service and other radio and television services different from cable television
IV	Credit unions
V	Development banking institutions, pursuant to the provisions of the law on the subject
VI	Supply of professional and technical services expressly set forth in the applicable legal provisions

Sectors for which foreign investment participation is restricted (Article 7)

I Up to 10% in:

Cooperative companies for production

II Up to 25% in:

a) Domestic air transportation

b) Air taxi transportation

c) Specialized air transportation

III Up to 30% in:

a) Holding companies for financial groups

b) Commercial (multiple) banking credit institutions

c) Securities brokerage firms

d) Securities market specialists

IV Up to 49% in:

a) Insurance institutions

b) Bonding institutions

c) Currency exchange houses

d) General deposit warehouses

e) Financial leasing companies

f) Financial factoring companies

g) Financial companies with purpose limited to those provided for in Article 103, paragraph IV, of the Law of Credit Institutions

h) Companies to which Article 12 Bis of the Securities Market Law refers

i) Shares representing the fixed capital in investment companies and operating companies of investment corporations

j) Manufacture and Commercialization of explosives, firearms, cartridges, munitions and fireworks, excluding acquisition and use of explosives for industrial and extraction activities or the preparation of explosive mixtures for use in said activities

k) Printing and publication of newspapers for circulation solely throughout Mexico

l) Series T shares in companies that own agricultural, ranching, and forestry lands

m) Cable television

n) Basic telephone services

o) Fresh water, coastal, and exclusive economic zone fishing, excluding aquaculture

p) Integral port administration

q) Piloting port services for vessels to carry out operations of inland navigation operations in the terms of the subject law

r) Shipping companies engaged in commercial exploitation of ships for inland and coastal navigation, excluding tourism cruisers and exploitation of marine dredging and implements for port construction, conservation and operation

s) Services connected to the railway sector that consist of passenger service, maintenance and rehabilitation of roads, rights of way, repair shops for tractive and hauling equipment, organization and commercialization of unit trains, operations of domestic terminals for freight and railroad telecommunications

t) supply of fuel and lubricants for ships, airplanes, and railway equipment

Sectors for which more than 49% of foreign investment participation requires approval (Article 8)

I	Port services for ships to effect their inland navigation operation, such as towing, mooring and lighterage
II	Shipping companies engaged in exploitation of ships solely for high seas traffic
III	Management of air terminals
IV	Private education services at the pre-school, primary, secondary upper middle, upper and combined levels
V	Legal services
VI	Credit information companies
VII	Securities classification institutions
VIII	Insurance agents
IX	Cellular telephone
X	Construction of pipeline for the transportation of petroleum and products derived therefrom
XI	Perforation of petroleum and gas wells

(Incentives for foreign investment)

The new foreign investment law does not contain tax incentives for foreign investment, i.e., there is no tax holiday (income tax) nor exemption on import duties on raw materials, machinery and equipment, which are widely granted in Asian countries under a set of conditions. Since the in-bond processing arrangement (Maquiladora and PITEX) will virtually cease to be advantageous for foreign investors by 2001, there will be no incentives for foreign investment thereafter if proceeded as scheduled. At the same time, U.S. and Canadian investors will be treated in the same way as investors from other countries.

(3) Relationship with supporting industries

In connection with supporting industries which are the main subject of the present study (automotive parts, and electrical and electronic components), Article 7 of Supplemental Provisions of the foreign investment law limits, for the time being, foreign investment participation in automotive parts industries to 49% of the capital by "allowing the provisions of the Automobile Decree to take precedence." Effective on January 1, 1999, full equity participation by foreign capital will be permitted without approval.

2.4.5 NAFTA, Automobile and Electrical/Electronic Equipment Industries

(1) General outline of NAFTA

On December 17, 1992, the United States, Canada, and Mexico signed the North American Free Trade Agreement (NAFTA) that became effective on January 1, 1994. The primary objective of NAFTA is to eliminate customs duties on properties originated within the NAFTA region and traded among the member countries, thereby to establish a free trade zone. NAFTA also requires its member countries to provide foreign investment by other member countries, in principle, with national treatment, e.g., elimination of the provisions related to restriction on capital ownership and exclusion of foreign investors or owners. In addition, it was agreed to abolish foreign investment regulations only favoring the regulating country, which was considered to violate the spirit of free trade, e.g., requirements related to mandatory export, local contents, foreign currency earning, and trade balance. As mentioned earlier, Mexico has already amended laws and regulations that would conflict with NAFTA, including the Automobile Decree, the Maquiladora Decree, PITEX, and the Foreign Investment Law.

The U.S. and Canada signed Free Trade Agreement (FTA) in 1989, under which tariff on the U.S.-Canada trade will be abolished by 1998. In the meantime, FATA will coexist with NAFTA, and tariff elimination between the U.S. and Canada will proceed in accordance with FATA. It should be noted, however, that the rules of origin under FTA will be adjusted to those under NAFTA.

This section review the overall schedule of tariff elimination, the rules of origin, and the provisions related to automobile and electrical/electronic industries.

(2) Tariff elimination schedule under NAFTA

NAFTA requires the member countries to eliminate volume restrictions on trade immediately, while tariff will be entirely eliminated with the varying grace periods (15 years at maximum), as determined in consideration to local conditions peculiar to each country. The tariff elimination schedule is summarized in Table 2.4-1.

Table 2.4-1 Schedule of Tariff Elimination by Share of Total Import (%)[1]

Trade		At effective	Within 5 years	Within 10 years	Within 15 years
Origin	Destination	(1994)	(1998)	(upto 2003)	(upto 2009)
Mexico [2]	U.S.	43 (5,900)	18/61 (2,500)	38/99 (3,300)	1/100
	Canada	41 (5,900)	19/60 (2,500)	39/99 (3,300)	1/100
U.S.A. [3]	Mexico	84 (7,300)	8/92 (1,200)	7/99 (700)	1/100
Canada [3]	Mexico	79 (5,900)	8/87 (2,500)	12/99 (3,300)	1/100

Notes : 1) The figures in the parenthesis indicate the number of commodities.
2) Excludes imports of crude oil
3) U.S.A. and Canada follow the Canada-United States Free Trade Agreement (FTA) agreed in 1989.

Of total, items eligible for the 15-year grace period account for 1% and are mainly agricultural products. Also, if a domestic industry of any item in any of the member countries suffer significant damage from a rapid increase in imports from other NAFTA countries within the grace period, the country is entitled to restore tariff rates on the item to those before NAFTA. This is one-time measures good for 3 years at maximum, with exception of 4 years for some items, called the safeguard provision.

(3) Rules of origin

Tariff-free trade of goods between the NAFTA member countries is limited to those originated within the NAFTA region (generally referred to as the North American origin, as Mexico is assumed to be part of North America). The rules of origin set forth the methods and criteria to determine if a particular product originates in North America, which are designated for each item. The methods and criteria are roughly classified into the following four types.

1) Change to tariff code (tariff jump rules)

This, together with 2) below, accounts for more than 70 of total 97 categories in the tariff code. The tariff jump rules mean that any product that has been processed in the NAFTA region to necessitate a change to the tariff code of the product is considered to be the North American origin.

The change in a tariff code take place at the following three levels: chapter (HS2-digit level), heading (4-digit level), and sub-heading (6-digit level) and tariff item (8-digit level). In most cases, any change in heading (4-digit level) automatically effectuates assumption of the North American origin.

For instance, production of aluminum pipes (7608) from aluminum ingots (7601) within the NAFTA region results in the code change, so that the aluminum pipes are treated as the North American origin. As for assembly industries, tariff codes of parts and components usually differ from those of final products at the four-digit level, thus meeting the tariff jump rules. In this sense, the definition of the change to the tariff code for assembly industries is "to at least carry out assembly operations within North America."

2) Processing of major components within the area, in addition to the tariff jump rules (processing stage rules)

1) In addition to the change to the tariff code under the tariff jump rules, this rule requires that the manufacturing process of a specific component(s) takes place within North America. The rules of origin for 14-inch or larger color TVs, for instance, require picture tubes to be manufactured in North America, in addition to the compliance with the tariff jump rules.

3) A certain level of value added within the area (regional value content rules)

This approach applies to more than 20 categories out of 97 in total. It mainly applies to product items assembled from parts, most of which are also required to clear the tariff jump rules in 1). Value added (regional value content) in the NAFTA region is computed by either of two methods; the transaction value method or the net cost method. Actual computation procedures under these two methods are illustrated by using typical examples applied in NAFTA.

8518.22	A change to subheading 8518.22 from any other heading; or A change to subheading 8518.22 from subheading 8518.29 or 8518.90, whether or not there is also a change from any other heading, provided there is a regional value content of not less than: (a) 60 percent where the transaction value method is used, or (b) 50 percent where the net cost method is used.

The provision may be interpreted as follows. Note that code 8518.22 denotes hi-fi systems, and 8518.29 and 8518.90 are both components for hi-fi systems.

> If six-digit tariff code of the product, denoted as subheading 8518.22, is changed at a four-digit level (or in heading), the product is deemed to be the North American origin, no matter how much it uses raw materials and components produced in an area outside the NAFTA region.
>
> If the product is assembled from parts within the same tariff item and thus it tariff code does not change at the four-digit level, it is still deemed to be the North American origin, provided that its regional value (value added in the NAFTA region) exceeds either of the following:
>
> (a) 60 percent where the transaction value method is applied, or
> (b) 50 percent where the net cost method is applied.
>
> It should noted that, in this case, the product may partly use raw materials and components under the different headings (four-digit level), but they are included in the regional value content for the evaluation purpose.

Equations used in (a) and (b) above are as follows.

(a) Transaction value method

$$\text{Regional content value (RCV)} = \frac{TV - VNM}{TV} \times 100$$

Whereas,

TV : Transaction value of the product on a FOB basis

VNM : Value of raw materials and parts contained in the product and produced outside the NAFTA region

(b) Net cost method

$$\text{Regional content value (RCV)} = \frac{NC - VNM}{NC} \times 100$$

Whereas,

NC : Net cost of the product

VNM : Same as the definition in (a)

The requirements of more than 60% under the transaction value method and more than 50% under the net cost method apply equally to all the items, except for automobiles to which special rates apply (discussed later).

4) Raw materials and components originated in other than North America accounting for less than 7% of total cost (De Minimis rules)

The product that does not meet the rules of origin in 1), 2) or 3) is still deemed as the North American product, so far as the value of raw materials and components originated in an area other than North America accounts for less than 7% of total cost incurred in the region (NAFTA Section 405 (6)) In other words, the product with the regional vale content of 93% or more under the next cost method is deemed to meet the rules of origin.

Note: Regional assembly requirements

On the other hand, the product that meets requirements in any of 1) through 4) above may not be deemed to be the North American origin if its final assembly takes place in a country outside the region. For instance, assuming a product which is assembled in Brazil by using raw materials and components, all of which are certified as the North American origin. The product, when exported from Brazil to the three countries in the region, is not deemed to originate in North American is thus subject to customs duties at an applicable rate. Semiconductors are only one exception to this requirement.

As discussed above, the rules of origin under NAFTA primarily consist of the tariff jump rules. However, the focal point of NAFTA negotiations among the member countries were automobiles and automotive parts, electrical/electronic, textile, and energy sectors, and eventually, special rules were established for these sectors.

(4) NAFTA rules related to automobile and electrical/electronic industries

1) Automobile and automotive parts industries

During the NAFTA negotiations, governments in the three countries received many requests from private industries in each country. As each government attempted to reflect the interests of its own industries in NAFTA, the final agreement contained a large number of exceptions and interim measures.

At the time of the NAFTA negotiation, the automobile industry in Mexico was dominated by three groups of companies; the U.S.-based Big Three (Chrysler, GM, and Ford), Japanese and European manufacturers (i.e., VW and Nissan), and large bus and truck manufacturers dominated by local companies. Each group had different interest. Furthermore, conflict of interest was seen between foreign-affiliated manufacturers who mass produced commercial vehicles, such as passenger cars, light trucks and vans on one hand, and large bus and truck manufacturers of small-lot, customized production type who were required to use a variety of imported parts and components.

While the Big Three intended to incorporate a high localization rate into NAFTA rules in an attempt to exclude competitors, which were opposed by VW and Nissan, local bus and truck manufacturers wanted to maintain strong protection from the government and all existing manufactures wanted to stave off new entries. They demanded different and often conflicting provisions to be incorporated into NAFTA, and through political maneuvering to find the point of compromise, NAFTA rules related to automobiles and automotive parts were drafted and revised. Needless to say, much moves were seen in the U.S. and Canada.

(Tariff Elimination Schedule)

Table 2.4-2 Schedule of Tariff Elimination (Automobile)

(Unit : tariff rate; %)

	Before NAFTA	Schedule 1994, Jan.	1998, Jan.	2003, Jan.
Imports to Mexico from U.S., Canada				
Passengers	20	10	→	0
Light trucks	20	10	0	
Big buses/trucks	20	→	→	0
Parts & components 1)	10~15 (av.13)	(5%)	(70%)	(25%)
Exports from Mexico to U.S.				
Passenger cars	2.5	0		
Light trucks	25	10	0	
Cab/Chassis	4	→	→	0
Other trucks	25	→	→	0
Buses	0			
Parts & components 2)	av. 3.1	(81%)	(18%)	(1%)
Exports from Mexico to Canada				
Passenger cars	9.2	4.6	2.3	0
Trucks	9.2	4.6	0	

Notes : 1) Tariff varies by item of parts and components from 10% to 15%. Elimination schedule is mentioned in percentage of import value in parenthesis.

2) Averaged tariff of various parts and components was 3.1% before NAFTA. The figure in parenthesis indicates the same meanings as above.

(Rules of Origin)

The rules of origin covering automobiles and autoparts require the regional value content determined by the net cost method to be complied with. The net cost is defined as the total cost less the following costs and expenses (NAFTA Section 402):

- Sales promotion
- Marketing and after-sales service
- Royalties
- Shipping and packaging
- Non-allowable interest

Table 2.4-3 Rules of Origin for Automobiles and Autoparts

(Unit : % of Regional value contents)

	1994 to 1997	1998 to 2001	2002 onward
· Vehicles for 15 or fewer persons · Vehicles for 5 tons or fewer cargo · Engines & transmissions of the above	50%	56%	62.5%
· Vehicles for 16 or more persons · Vehicles for 6 tons or more cargo · Other parts & components	50%	55%	60%

Source : NAFTA, Articles 403

As the regional value content required for certification of origin will be increased gradually, as shown in the above table, production of components and parts within the region needs to be boosted accordingly. This implies the need for fostering of supporting industries or increased in-house production by automobile manufacturers. It should be noted, however, that the Automobile Decree restricts in-house production up to 2003, as discussed earlier.

2) Electrical/electronic equipment and parts industries

The electrical and electronic industry in Mexico is characterized by concentration of assembly manufactürers which mainly export to U.S. (Maquiladora) along the northern border (no automobile assembly companies are Maquiladora) and their major area of concern about NAFTA was tariff agreement. Elimination of tariff exemption on parts imported from the areas outside the region (such as Asia) - the privilege granted to Maquiladora companies - would threat their competitiveness in U.S. exports, because tariff rates on parts from the non-NAFTA areas were generally higher in Mexico than those in the U.S., making manufacturing operation in Mexico uncompetitive if products are to be exported to the U.S.

The situation worked as pressure to keep the Maquiladora Program in place over the decade.

(Tariff Elimination Schedule)

The tariff elimination schedule related to electrical and electronic products requires tariff within the region to be eliminated immediately, within five years, or within ten years, depending to individual items. In the electrical and electronic industry, tariff on most items will be eliminated immediately or within five years. Comparing the three companies, the U.S. has eliminated tariff on most products immediately, while Canada and Mexico have many items with tariff elimination schedule of five years. Canada has eliminated tariff immediately on more products than Mexico has.

Table 2.4-4 Schedule of Tariff Elimination (Electrical/Electronic)

(Unit: % in import value)

	1994	1995-1998	1999-2003
Imports to Mexico from U.S. & Canada			
(1) CTV, Video, Audio	47%	51%	2%
(2) Computer and Software	70%	30%	
(3) Semiconductor	100%		
Exports from Mexico to U.S.			
(1) CTV, Video, Audio	100%		
(2) Computer and Software	100%		
(3) Semiconductor	100%		
Exports from Mexico to U.S.			
(1) CTV, Video, Audio		100%	
(2) Computer and Software	100%		
(3) Semiconductor	100%		

Source : JICA team's summary

(Rules of Origin)

Most of electrical and electronic products are completed by assembly manufacturers who purchase parts and components from outside sources. In this case, since tariff codes of parts at a four-digit level (heading) are often different from those of final products, e.g., TVs are in heading 8528 and CRTs in heading 8540, the tariff jump rules are satisfied even if such product is assembled from all the parts and components imported from non-NAFTA countries. For this reason, the tariff jump rules alone are not sufficient to determine qualification of electrical/electronic products under the rules of origin. The NAFTA's rules of origin apply the processing stage rules, in addition to the tariff jump rules, to a large number of items. In other words, the rules require critical parts and components to be manufactured within the region.

Components and parts of several electronic products, to which the rules of origin apply, are listed below. Note that a change to tariff code (four-digit level) is required for all the products.

Table 2.4-5 Rules of Origin for Electrical Products

Products	Rules of Origin
CTV (13 inches or less)	All circuit boards shall be mounted in the NAFTA region.
CTV (14 inches or more)	All CRT (Cathode Ray Tube), or funnel or front panel of CRT shall be the NAFTA origin.
Audio, Tape Recorder, Video	All circuit boards shall be mounted in the region.
Computer	CPU-mounted board shall be the NAFTA origin.
Semiconductor	The former part of manufacturing process shall be made in the region.

Source : NAFTA, Annex 401

2.4.6 Summary of Major Changes in Mexico's Legal Framework under NAFTA

As discussed from 2.4.1 through 2.4.5, the effect of NAFTA on major laws in Mexico relevant to the present study, i.e., how they are deregulated after NAFTA, is summarized in the table below.

Table 2.4-6 Comparison of Regulatory Impacts of Major Industrial Promotion Laws Before and After NAFTA

Law/decree	Before NAFTA	After NAFTA
Automobile Decree (Promulgated on December 11, 1989, Amended and added on May 31, 1995)	1) Domestic value-added rate of 36% or over 2) Trade balance: Each company is required to achieve positive balance of foreign currency position (exports > imports) 3) Restriction on newly assembled car imports: Manufacturers may import up to 20% of domestic unit sales.	1) 34% up to 1998, and will be lowered by 1% each year to 29% in 2003. To be abolished in 2004. 2) Export/import ratio at enterprise level was reduced from 1.0 to 0.8 in 1994, and will be down to 0.55 in 2003. To be abolished in 2004. 3) Volume import restriction was abolished immediately, with increased ceiling for foreign currency usable for imports
Maquiladora Decree (Promulgated on December 22, 1989, Amended and added on December 24, 1993)	1) Ownership: 100% share may be owned by foreign capital 2) Export obligation: Products equivalent to 50% of exports (value basis) may be sold to the domestic market. 3) Bonded imports (No customs on imported goods (raw materials, machinery and equipment)	1) Remain unchanged. However, the new foreign investment law will authorize companies wholly owned by foreign capital, depriving Maquiladora of the privileged status. 2) Will be deregulated from 55% in 1994 to 100% in 2001, i.e., domestic sales up to the value of exports in previous year. 3) Scheduled to be abolished on January 1, 2001.
Foreign Investment Law (Partially amended by decree on March 9, 1973, Entirely amended on December 28, 1993)	1) Industrial sectors allowing foreign investment: After 1989, companies wholly owned by foreign capital may be established without approval, except for designated sectors. 2) Performance requirements (localization rate, export obligation, trade balance, etc.)	1) Except for automotive parts, 100% foreign companies may be established in most manufacturing sectors without approval. 2) Performance requirements will be discontinued, excepting interim measures for the Automobile Decree and the Maquiladora Decree.

Source : JICA team summarized.

Figure 2.4-1 illustrates the yearly progress of liberalization in 4 areas which are strongly related to this study.

1) NAFTA's schedule on the complete abolition of tariffs
2) Ratio allowed to sell Maquiladora products to the domestic market.
3) Relaxation of automobile regulations regarding added value in the domestic market
4) Reduction of tariff rates on CTV decided by NAFTA

Figure 2.4-2 illustrates the average ratio of the four in different years. The liberalization rate of the NAFTA region, which amounted to 65% in the end of 1995, is expected to shoot up to almost 90% by 2001.

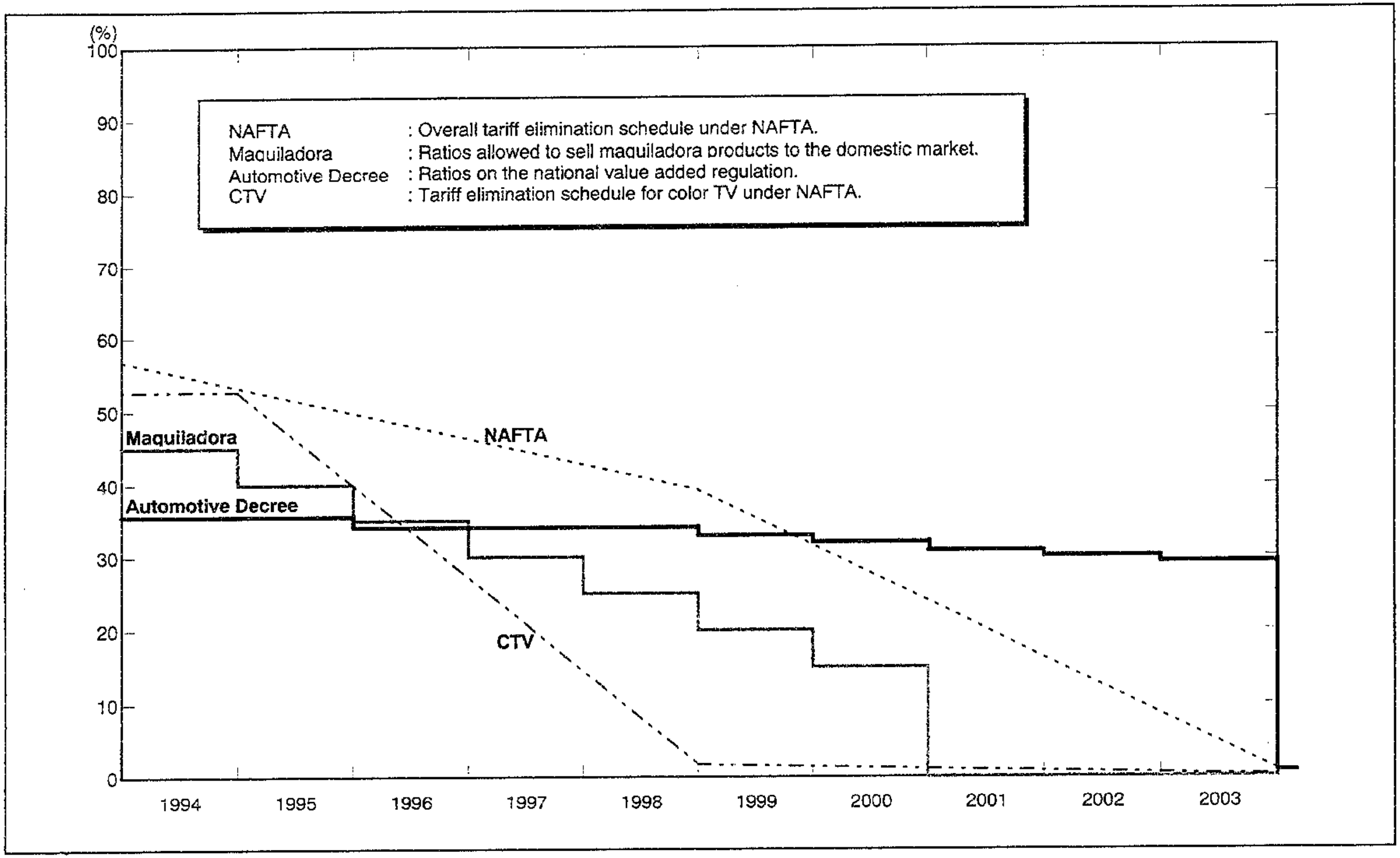
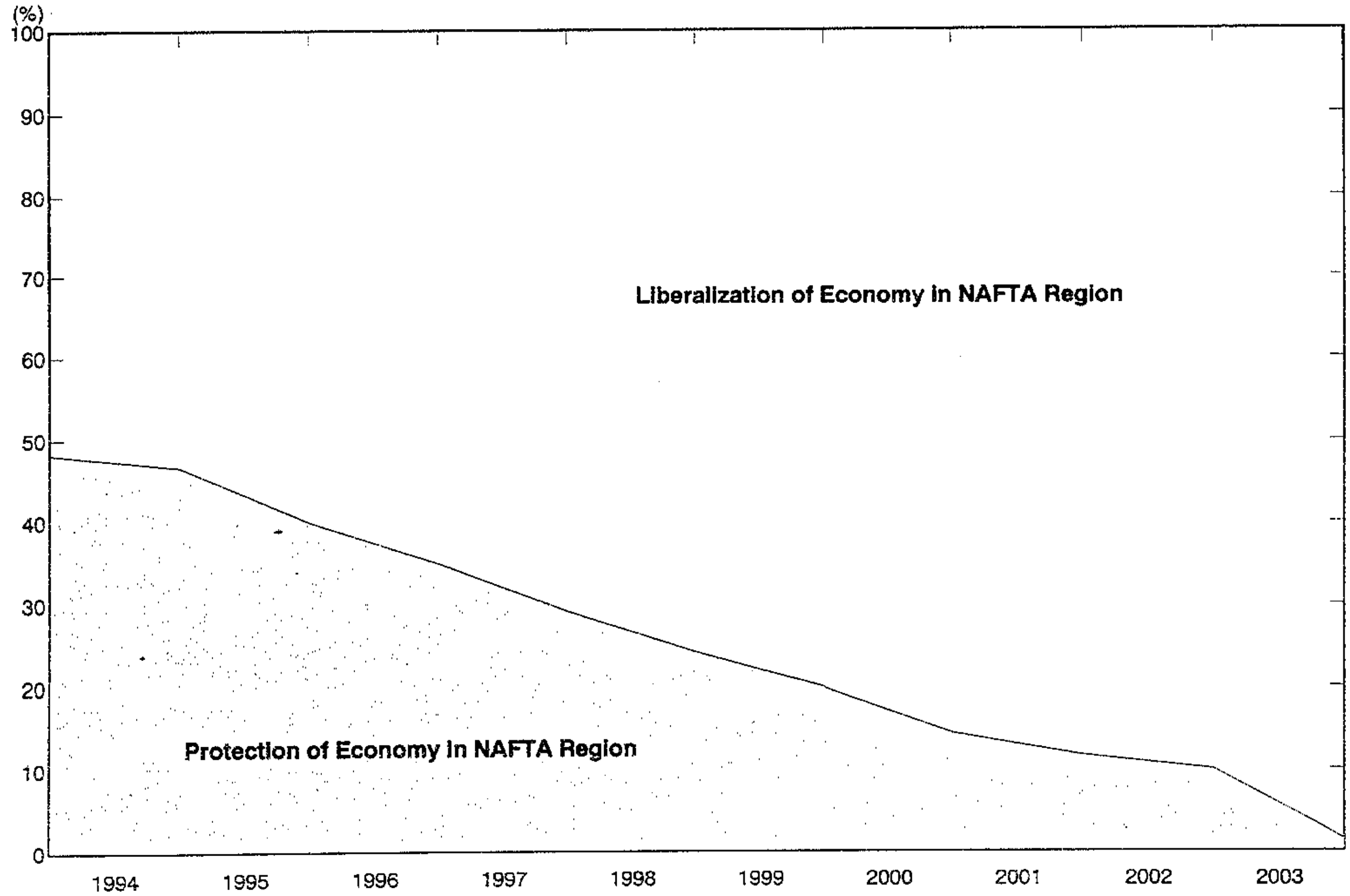


Figure 2.4-1 Deregulation Schedule of Major Elements under NAFTA



Source : Simple total average of Figure 2.4-1

Figure 2.4-2 Image of Overall Trend of Liberalization under NAFTA

2.5 Financial System

2.5.1 Financial Situation in Mexico after the Fall of the Peso

The sharp drop of the peso's value in 1994 created serious impacts on the financial sector. A slump in the domestic economy and market rendered a large number of loans non-performing, and towering interest rates drove up capital costs of banks, giving a hard time for financial institutions.

Table 2.5-1 Selected Financial Statistics of Mexico

	1992	1993	1994	1995
Foreign exchange rate (month-end median rate, peso/US$)	3.1199	3.1931	5.08	6.00
Consumer prices index (%)	11.9	8.0	7.0	51.97
CETES[1] (28 days, tendered price, %)	16.8	10.9	31.0	46.8
CPP (actual average rate, %)	21.8	14.7	29.9	46.54

Source : Banco de Mexico

To salvage the troubled financial sector, World Bank and IDB extended restructuring program loans which were designed to stabilize financial conditions and at the same time to tighten government control on the financial system. Using these loans, the government launched series of relief programs for commercial banks. These programs costed the government an estimated 83.9 billion pesos in total. Major relief programs include:

1) FOBAPROA (depositor protection program)
2) PROCAPTE (temporary capital increase support program[2])
3) ADE (emergency assistance for debtors)
4) UDIs (indexation of principal)

ADE and UDIs are designed to relieve SMEs who feel difficulty in repaying bank loans due to the sluggish market and a rapid rise in interest rate after the depreciation of the peso. ADE is a rescheduling program for micro-enterprises and SMEs, and individual debtors, together with a low interest rate for approximately one year. UDIs reduce inflation-induced interest burdens

1) Federal Treasury Certificate
2) A program to assist capitalization for the purpose of maintaining the capital adequacy ratio of banks above 8%.

by establishing an index that links to the inflation rate. Under the program, the principal increases with an increase in the index, but an interest rate can be controlled at a relatively low level to keep the amount of repaying when the interest rate increases rapidly. By combining these programs, financial burdens on debtors in terms of repayment to banks are reduced significantly.

2.5.2 Financial System and SME Financing

A general structure of the financial system in Mexico is illustrated in Figure 2.5-1. Financial policy is set forth by the Ministry of Finance, and with the advice of the National Council on Securities and Banks, and is implemented by the central bank. Note that the financial system does not include non-bank financial companies. Loans to SMEs are mainly provided by commercial banks and development banks. Since commercial bank loans are mostly short-term[3], development banks play an important role in medium- and long-term loans for capital expenditures by SMEs. In particular, NAFIN and BANCOMEXT serve as important financial sources for SMEs in the manufacturing sector.

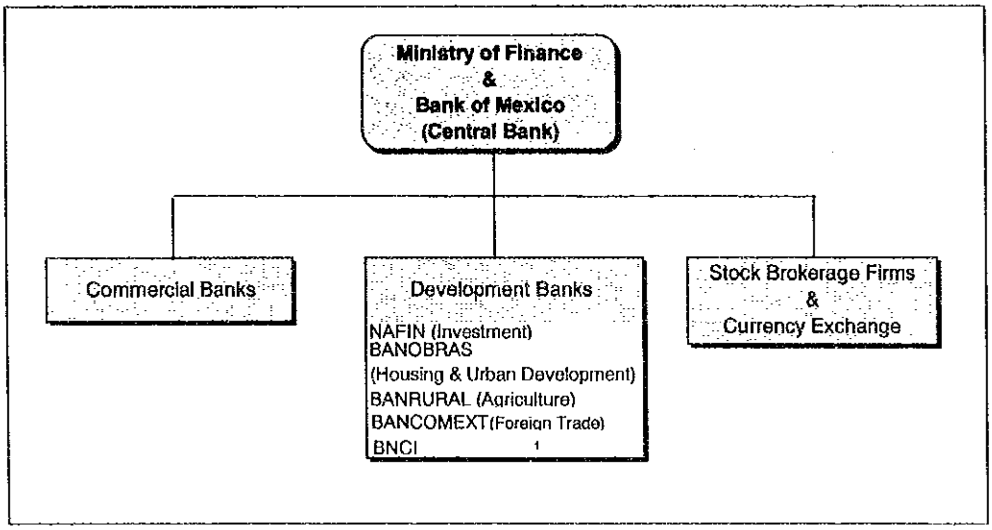


Figure 2.5-1 Financial System in Mexico

[3] It is difficult for commercial banks to make long-term loans since they obtain most of funds on a short-term basis. Besides, given the uncertainty in interest rates, banks are apt to avoid medium- and long-term loans.

(1) Commercial banks

Commercial banks, the largest financial intermediary in Mexico, provide a variety of financial services for SMEs, including deposit, foreign exchange, and loan and credit. In addition to conventional banking services, commercial banks are engaged in leasing, factoring, and insurance businesses through their group companies[4] and thus are capable of meeting diverse needs of business enterprises of varying types. At present, however, they are not in a position to expand loans and are especially reluctant to SMEs loans that are perceived to involve a very high risk due to the lack of sufficient collateral, and unstable business, e.g., the lack of business relations with large corporations.

(2) NAFIN

NAFIN (Nacional Financiera S.N.C.) is a bank which the government owns more than 99% of share. Accordingly, it assumes multiple roles as a financial institution for government authorities, a development bank for the private sector, and an investment bank for SMEs. Prior to 1989, NAFIN's major borrowers were state enterprises. Then, a major market has shifted to SMEs.

In fact, loans to micro-enterprises and SMEs accounted for more than 80% of NAFIN's total loan amount up to 1994. In 1995, loans to large enterprises jumped from 20% to 60% (Figure 2.5-2) to reflect the fact that the amount of loan to small enterprises and micro-enterprises dropped 94% and 92%, respectively, compared to 1994, whereas the rate of decline in loans to large enterprises and medium-sized enterprises was less abrupt, 32% and 68% respectively.

The 1996 loan plans of commercial banks envisage 4.1 billion pesos to micro-enterprises, 9.9 billion pesos to small enterprises, 4.5 billion pesos to medium-sized enterprises, and 12.4 billion pesos to large enterprises. As for sectoral breakdown, 25.8 billion pesos are allocated to the manufacturing sector, and 5.1 billion pesos to commerce and service.

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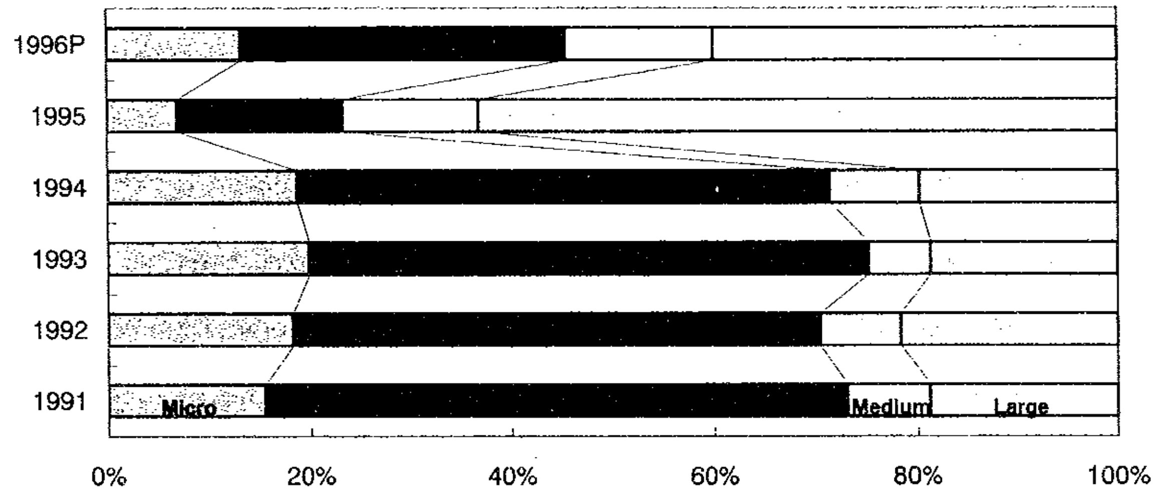
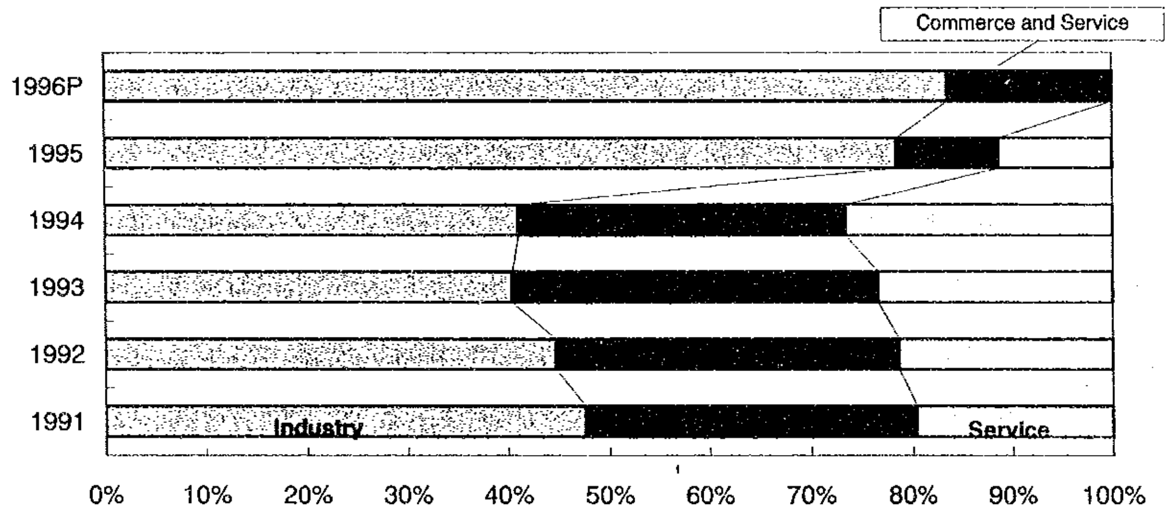
[4] Mexico adopts the universal banking system.



Note: Loan for Private Sector only
As of February 1996
Source: NAFIN

Figure 2.5-2(1) NAFIN Loan by Size of Company



Note: Loan for Private Sector only
As of February 1996
Source: NAFIN

Figure 2.5-2(2) NAFIN Loan by Economic Sector

The total amount of loan made by NAFIN[5], which has been on the rise up to 1994, plummeted to one fifth in 1995 due to a decline in NAFIN's capital, the rise in interest rate, and decreased demand for funds caused by the shrinking market. 1996 loans (under PROMIN) will be increased to 30.9 billion pesos.

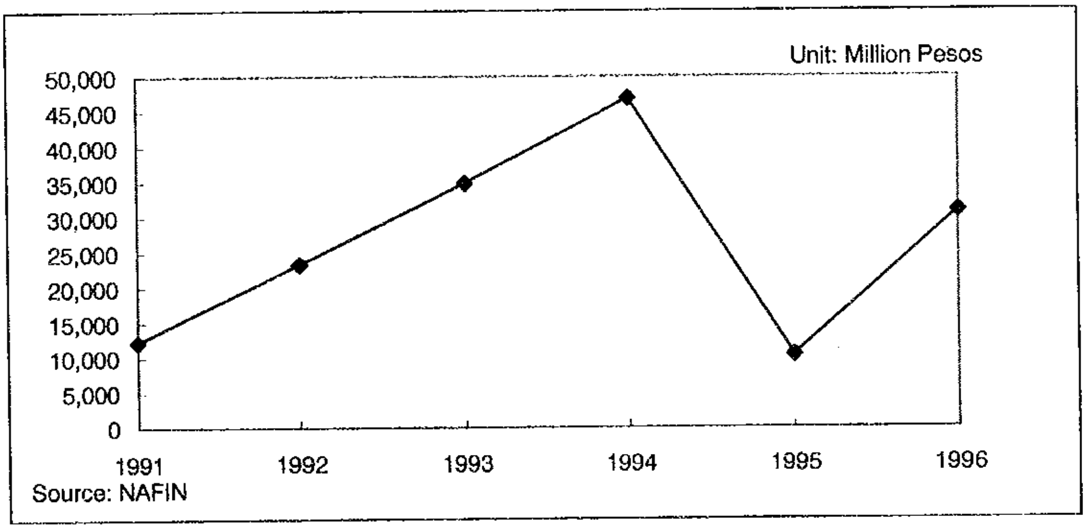
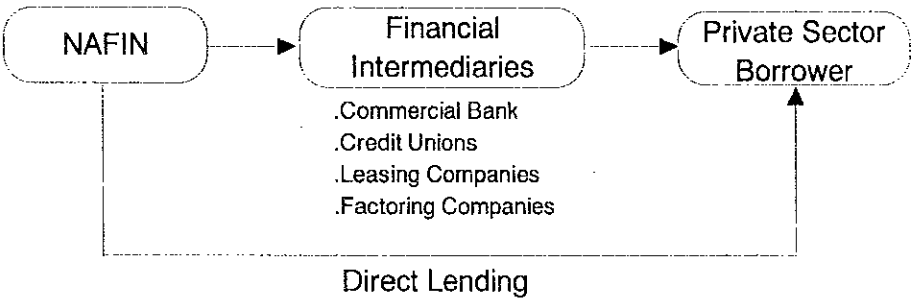


Figure 2.5-3 Amount of NAFIN Loan

To ensure the smooth lending process for a large number of SMEs, NAFIN uses private financial institutions as intermediary financial institutions (IFIs). IFIs include non-bank financial companies, such as credit unions, leasing companies, and factoring companies, in addition to commercial banks. In 1994, there were 548 IFIs which executed loans to 137,000 companies. After the depreciation of the peso as mentioned earlier, commercial banks tend to avert SME loans. Under these circumstances, NAFIN plans to increase direct loans, not relying on IFIs (up to 10% of total loans).

5) A total of loan programs for small enterprises and micro-enterprises, modernization, technical development, environmental preservation, research and consulting, infrastructure, and regional decentralization.



Source: NAFIN

Figure 2.5-4 Intermediaries

To cope with rapidly changing financial situation, NAFIN is developing new loan schemes. Major schemes for SMEs, based on information obtained in March 1996, are described as follows.

1) PROMIN
(Programa único de financiamiento a la modernización industrial)

NAFIN has previously offered loan programs for specific purposes, including small enterprises and micro-enterprises, modernization, technical development, environmental preservation, research and consulting, infrastructure, and regional decentralization. In 1996, all the programs were unified into Industrial Modernization Loan Program (PROMIN). Borrowers are allowed to spend PROMIN loans for working capital, technology development, infrastructure, environmental improvement, fixed investment, and debt restructuring. The term of loan is 20 years at maximum (including grace period), usually 5-7 years for capital investment and 1-2 years for working capital. Standard interest rates are a NAFIN rate (TFT) plus IFI's margin for peso-denominated loans, and a LIBOR rate plus 6% for U.S. dollar loans. The maximum amount of loan decreases with decrease in enterprise size, while the interest rate is lowered (see Tables 2.5-2 and 2.5-3). Note that the preferential interest rate applies only to peso-denominated loans. Collateral may be required or not required, depending on individual cases. For instance, a document certifying an order from a large corporation is sometimes treated as a substitute for collateral, resulting in loan amounting to the value of the order.

It should be noted, however, that PROMIN is not a loan program dedicated to micro-enterprises and SMEs. Large enterprises can also use the program for projects that involve the fostering or development of SMEs or suppliers.

Table 2.5-2 Condition of PROMIN

Destination of Resources	Max. Amount of Loan Unit : Thousand US$		Term
Working Capital	Micro	1,200	6 months to
Restructuring of debts	Small	12,000	20 years(with grace period)
Technology Development	Medium	26,000	
Environment Improvement	Large	65,000	
Infrastructure Technology			
Contraction with consultants			
Fixed Assets			

Source: NAFIN

Table 2.5-3 Interest Rates on NAFIN Loans [6]

(Unit : %)

Class	Interest rate to IFIs	Interest rate to borrower		IFI's margin
		Min	Max	
Micro	TNF-1	TNF+3	TNF+7	4-8
Small	TNF	TNF+3	TNF+7	3-7
Medium	TNF+1	TNF+4	TNF+8	3-7
Large	TNF+2	TNF+5	TNF+9	3-7

Note : TNF is 41.87% annually as of March 1996
Source : JICA Study Team

2) Credit guarantee program

In addition to loans, NAFIN extends credit guarantee to make things easier for enterprises to borrow funds. In 1996, it announced a credit guarantee program for new projects involving micro-enterprises and SMEs, called Grantia Immediata Automatics and Selectiva. The program guarantees up to 5 million pesos or an equivalent amount in U.S. dollars, with commission amounting to 2-4%, and may also guarantee long-term capital

[6] The interest rates are subject to change. The figures are effective as of March 1996.

investment loans. The maximum coverage is set at 50% of the loan, to share the risks with commercial banks and prevent them from applying slack standards upon reviewing firms, which happens to be the case when the whole amount is guaranteed. In some cases, however, the guarantee may exceed 50% in technical development and environmental improvement projects.

NAFIN applies Parametric Analysis to this guarantee system as the evaluation method, by which the candidate company can be objectively evaluated in a short period of time. Nevertheless, the criteria for evaluation is so high[7)] that only small number of firms qualify. As the guarantee system is only applicable to new loans, there is no guarantee for restructuring loans.

If a loan actually becomes irrevocable, NAFIN pays for the unrecovered amount only after commercial bank has done everything to recover them. The problem is that commercial banks tend to be reluctant to issue loans to SMEs despite the existence of such a guarantee system, because it is more time-consuming and costly for them to clear the secured items and high risks are involved in such loans in the first place. The amount of loans guaranteed by NAFIN totaled 13.7 billion pesos as of 1994, out of which roughly 50% accounted for those issued through IFIs.

3) Venture capital

NAFIN meets financial needs of SMEs in the form of equity participation under the following conditions:

1) NAFIN's contribution is limited to less than 24.5% of paid-up capital.
2) Total contribution by NAFIN and other banks must be less than 49% of paid-up capital.
3) Capital contribution by NAFIN can be used for working capital, fixed investment, modernization, debt restructuring, and factory relocation.
4) The equity participation period is 5 years at maximum.

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7) Many companies fail to achieve a criteria that requires candidate's liquidity more than 110%.

After expiration of the period, the enterprise receiving NAFIN's contribution or a third party enterprise will purchase NAFIN's share. In the 1996 budget, NAFIN allocates 5 billion pesos for this purpose.

4) Triple-A trust (Fideicomiso Triple-A)

In 1994, NAFIN launched a program called the Triple-A Trust, which encourages an "AAA"-rated large enterprise to establish a trust so that NAFIN may issue loans to the enterprise's customer and/or supplier up to 5-10 times the amount of the trust. Here, the Tripe-A Trust serves as an intermediary financial institution for NAFIN (refer to Figure 2.2-5). The program is designed to enable the Tripe A enterprise's supplier and/or customer to gain access to NAFIN's services, and provide sufficient funds to target firms to help them promote, modernize and consolidate their business. Target firms may enjoy not only the loan service but any SME-oriented service offered by NAFIN.

Qualification requirements for Triple-A Trust include the listing on a domestic stock market, annual sales of over 30 million pesos, operating history of 25 or more years in a domestic or overseas market, 1,000 or more suppliers and customers, the ability to earn foreign currency, and a sound financial base. However, these requirements are rather flexibly enforced, e.g., the number of suppliers may fall below 1,000. The trust established by a Triple-A company must be over 4 million pesos, which are managed by NAFIN in the form of low-risk investment, and earnings from such investment are allocated to cover administration costs related to the trust. Thus, the Triple-A company is required to bear only costs related to the establishment of the trust.

Loans to suppliers or customers of Triple-A companies are made under conditions similar to those for PROMIN loans. While loan rates are not fixed, they are often set below those of commercial loans. Long-term loans are repayable over 20 years at maximum (with a grace period of 1 - 2 years). Major benefits of the trust program for large enterprises include modernization of suppliers' networks and the strengthening of inter-industrial linkage. On the other hand, smaller enterprises can have access to loan service without strict collateral requirements, and the period required for reviewing loan applications can be reduced considerably. The review process is made by a technical committee which is established within the trust. The committee is organized by representatives of the Triple-A company and NAFIN.

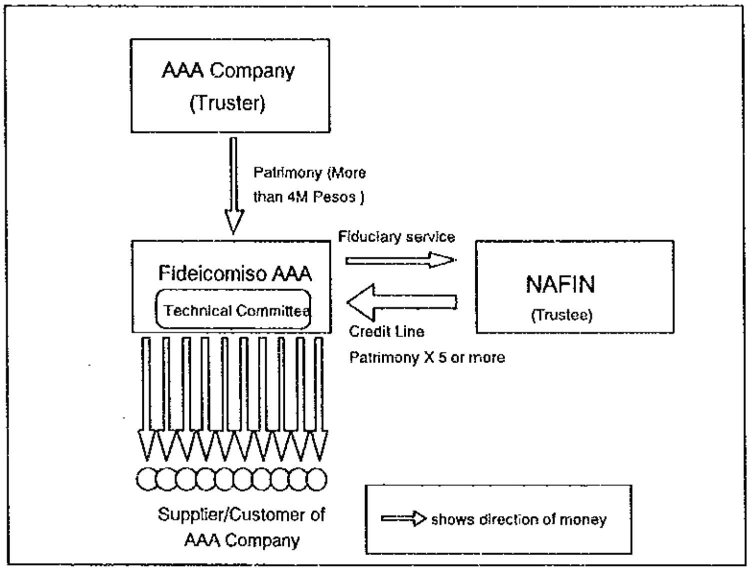

Figure 2.5-5 Fideicomiso AAA

Furthermore, NAFIN operates an entrepreneur fostering program (see 2.2.4) to support micro-enterprises and SMEs in the area of training.

(3) BANCOMEXT

BANCOMEXT's activities center on trade finance and export promotion. In terms of SME loan, therefore, it is fairly limited compared to NAFIN. Focusing on trade finance, short-term loans account for 70% of BANCOMEXT's total loans. Long-term loans mainly cover project development and imports of capital goods. BANCOMEXT's financial programs are summarized in Table 2.5-4.

In 1995, BANCOMEXT directed 60% of its loans for exports of industrial products, totaling around 6.7 billion US$ (Table 2.5-5). Note that most of loans to the manufacturing sector were made to SMEs. In 1994, 4,279 enterprises in the sector received loans from BANCOMEXT, and 98% were SMEs. Most borrowers are found in textile, apparel, leather, chemistry, and metal and machinery industries.

Table 2.5-4 BANCOMEXT Finance Program

Program	Currency	Interest Rates (without intermediaries)	Destination of Resource	BANCOMEXT Participation (%)	Term
Pre-Exportation					
Direct Exportation	Dollar	Libor + 2.5% (Fix interest)	Production cycle	100%	360 days
			Promotion activities	85%	
		Libor + 6.0% (Fix interest)			3 years
		Libor + 2.5% (Fix interest)	Working capital		180 days
Indirect Exportation	Dollar	Libor + 3.5% (Fix interest)	Production cycle	100%	360 days
			Promotion activities	85%	
			Working capital	100%	180 days
Export Sales	Dollar	Libor + 2.5% (Fix interest)	Foreign sales	100%	180 days
		Libor + 3.5% (Fix interest)	Direct export sales		
Invest Project	Dollar	Libor + 6%	Construction, equipment, development, etc.	70 - 85%	20 years
Import Equipment Unit	Dollar	A.R.I. + 0.5%	Machinery and equipment	85% of investment	5 years
Basic Product Importation	Dollar	A.R.I. + 0.5%	Import from USA and Canada	100%	360 days
Pre-Exportation	M.N.	TIIE + 0.5%	Production cycle	100%	360 days
			Promotion activities	85%	
		TIIE + 1.5%			3 years
			Working capital	100%	180 days
Export Sales	M.N.	TIIE + 0.5%	Direct export sales	100%	180 days
Invest Project	M.N.	TIIE + 1.5%	Construction equipment, developments, etc.	70%	5 years
		TIIE + 2.5%			10 years
		TIIE + 0.5% - 1.5%	Equipment acquired of computer and system	85%	3 years
Import Equipment Unit	M.N.	TIIE + 1.5%	Machinery and equipment	85%	5 years
Basic Product Importation	M.N.	TIIE + 0.5%	Import from USA and Canada	100%	360 days

Note: as of February 1996
M.N.; National Currency A.R.I.; Accommodate Rate of Interest of BANCOMEXT
TIIE; Inter-bank Interest Rates
Source: BANCOMEXT

Clearly, BANCOMEXT's loans are limited to SMEs who are doing direct and indirect exports. Loans can be used for production, sales, capacity expansion, modernization, and capital investment on production facilities and equipment. In addition, BANCOMEXT operates a scheme to provide loans for customers of large enterprises who serve as intermediaries and sureties. One example is a project to extend loans to metalworking enterprises via their material source, a steelmaker. This loan is conditioned on that the metalworking enterprise exports its products. The steelmaker, while assuming a risk of loan loss, can benefit from increased sales of its products which are used by metalworking enterprises as raw materials. BANCOMEXT plans to start a similar program for other industries.

BANCOMEXT, as part of export promotion efforts, provides loan guarantee for exporters in order to make financial resources available to SMEs and reduce a risk[8] of payment after export. BANCOMEXT offers both pre-shipping and post-shipping guarantees, and the former accounts for 90% of total.

Table 2.5-5 1995 Financial Program By Economic Sector

(Unit: Millions US$)

Item	Manufacture Products	Agriculture & Agroindustrial	Mining-Metallurgical	Fishery	Tourism	Total
Total	6,650	2,000	1,760	200	340	10,950
Credit	5,975	1,950	1,650	185	340	10,100
Guarantee	675	50	110	15	0	850
Participation	61	18	16	2	3	100

Source: BANCOMEXT

BANCOMEXT's export promotion program is marked by sectoral approach. Based on detailed surveys on each sector to identify the needs of customers, an export promotion program is developed. BANCOMEXT is currently focusing on automobile, electronic equipment and components, agribusiness, textile sectors.

In addition, BANCOMEXT provides the following services for SMEs:

[8] Post-shipment guarantee of BANCOMEXT only reduce political risk.

1. Technical training required for exporting
2. Foreign trade information concerning requirements and procedures, statistics, and directories of importers
3. Information on foreign trade opportunities
4. Information and publication of investment, association, strategic alliances opportunities with foreign companies
5. Consultation on export process
6. Consultation on product design and packaging
7. Consultation and support on participation in fairs and exhibitions
8. Participation in export projects targeting niche markets

2.5.3 Loan Programs for Promotion of Science and Technology

National Council on Science and Technology offers the following programs to promote technological development by private enterprises. A particular emphasis is placed on close collaboration and alliance between industry and research organizations including universities.

(1) FORCCYTEC (Fund for reinforcement of science and technology capabilities)

FORCCYTEC is a presidential fund (Fondo Presidencial) established in the form of government trust. It is designed to assist the creation and development of technical support organizations, such as Science and Technology Center, which are capable of providing a variety of services that help create benefits commonly enjoyed by multiple enterprises. Its activity includes loans to private organizations which render services related to standardization, accreditation, technology transfer, research and development, information, and training.

The fund is authorized to extend loans covering up to 50% of training and equipment costs incurred by private organizations. The repayment period is six years after a five-year grace period. Interest rates are established according to inflation rates from time to time, while there is no upper limit for line of credit.

(2) FIDETEC
(Investigation and development fund for technological upgrading)

FIDETEC supports the development of technologically competitive products and processes, which have still to reach a commercially applicable stage, and in particular, it creates an opportunity to finance technological research and development efforts conducive to modernization of industry in Mexico. FIDETEC's financial assistance is divided into direct loans and loan guarantee service.

Direct loans are extended by PROMTEC (Support Program for Upgrading of Industrial Technology), a fund created under financial assistance of IDB. PROMTEC mainly assists microenterprises and small- and medium-sized enterprises (medium-sized enterprises are exceptional) in implementation of R&D projects that have not reached a stage of commercialization (e.g., prototype development, and construction of a pilot plant). Interest rates are set in range of UDIs + 1% - 6& and the maximum amount of loan is limited to 80% of the total project cost, or the maximum amount in peso equivalent to 1.5 million US$ per project, whichever is higher. The borrower is required to offer a collateral in value equivalent to the amount of loan (minimum 100%). Since the start of the scheme in 1991, a total of 56 enterprises borrowed loans; 80% are microenterprises and small enterprises, and 20% medium and large enterprises. Each loan application is reviewed by the technical committee[9], taking about six months.

The guarantee program is designed to assist enterprises in borrowing commercial loans. The guarantee coverage varies with enterprise size, 100% for microenterprises and small enterprises, 85% for medium-sized enterprises, and 70% for large enterprises. The guarantee fee is determined by the amount to be guaranteed. So far, there are a relatively small number of cases.

(3) PIEBT (Technology-based business incubator program)

This program is designed to foster the process of creating an enterprise with

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[9] The committee is organized by representatives of CONACYT, NAFIN, SECOFI, the Ministry of Finance, and industrial organizations.

the ability to develop an innovative product or service, and assist existing enterprises that do not have sufficient facilities and equipment to conduct technological development activity. CONACYT is authorized to make equity investment in each incubator up to 30% of the total cost (10 years at maximum), while the remaining 70% is contributed by the development bank, local government, the local chamber of commerce and industry, research institutes, and other relevant organizations. In addition, the incubator's building and equipment are often provided by local government and/or other organizations. The incubator provides participating enterprises with a variety of services including telephone, electricity, banking, and legal advice. They can also obtain loans from CONACYT's FIDETEC and other programs.

Since the start of the program in 1991, 15 incubators have been established throughout the country up until September 1996. CONACYT's annual budget is around 1.5 million US$. At present, the establishment of a new trust is suspended to assess the current level of progress.

(4) PREAEM (Industry-academic joint program)

The program has the following objectives:

a. To lend funds to reinforce the linkage between the manufacturing industry and higher educational institutions including universities and research institutes.
b. To support corporate programs to deal with technical issues, including quality control.

In particular, the program assists; a) programs and centers to be established for the purpose of reinforcing competitiveness of enterprises, and b) projects which include research and development activities of experimental nature as well as technical training.

The amount of loan is limited to 50% of the total cost, and the remaining 50% must be financed in cash by the borrowing institution. A third party's organization evaluates the project, based on which CONACYT approves or rejects the application.

5) RCCT (CONACYT registration of consulting engineers)

This program is designed to register persons or enterprises which are capable of conducting technical assessment on CONACYT's loan programs including FIDETEC. RCCT registers consultants, consulting firms, and local enterprises specialized in the fields of industrial promotion, management, and technological development.

2.5.4 Funds for SMEs issued by the Export-Import Bank of Japan

In August, 1996, the Export-Import Bank of Japan (JEXIM Bank) promised a 960 million US$ loan to the Mexican government. Out of this loan, 460 million US$ will be used for environmental protection in the Mexican valley, 250 million US$ for the promotion of exports (in the form of loans to export firms through BANCOMEXT), and the remaining 250 million US$ for SME-oriented loans by NAFIN, the executing financial agency.

This loan is under co-finance scheme with IDB. The following information was obtained by the interview survey in September, 1996. It is probable that there have been some modifications since then.

(1) Eligibility

The loan is designed to serve as funds for capital investment and management streamlining in SMEs[10) which plan to (directly) export products. The export ratio is not a matter of concern, whether large or small. There are no restrictions on the origin of capital, meaning that even an enterprise with 100% foreign capital is eligible as long as it is a Mexican company.

(2) Funds for management improvement

e.g. The cost of employing consultants at the company.

(3) Currency and limitation of loan amount

The loan is quoted in dollars. There are no restrictions on the amount of loan per company.

[10) Consultant fee, management analysis fee and other fees for management modernization, but not including working capital.

(4) Lending rate

Loans from JEXIM Bank to NAFIN	: LIBOR + 0.5%
Loans from NAFIN to companies (direct loans)	: LIBOR + 3.0% (0.5% + margin 2.5%)
Loans from NAFIN to new borrower through commercial bank (indirect loans)	: LIBOR + 5.0%

Note: Assuming that LIBOR is 6.5%, the ultimate lending rate will at least be 9.5% for direct loans and 11.5% for indirect loans.

(5) Term of loan program

The program commences in January, 1997 and will terminate in 3 years time.

(6) Repayment term

The borrower must repay to NAFIN, and NAFIN to Ex-Im Bank, within a period of 8-10 years.

(7) Exchange risk

Exchange risks are to be borne by the enterprise (borrower). However, virtually no exchange risks would be involved if the enterprise exports 100% of its products.

(8) Guarantee

There is no particular guarantee for the loan. Financial institutions are to cover the risk of bad debt.

2.5.5 Issues Related to Financing of Supporting Industry

In Mexico, national banks, NAFIN and BANCOMEXT, serve as industrial development banks and expand SME loans. The both banks have sufficient funds and claim to offer favorable loan conditions (including collateral) for SMEs. In contrast, access to commercial loans is limited for SMEs, as perceived by respondents to our questionnaire survey who cited three problems related to fund raising: 1) commercial banks are reluctant to SME loans (34.7%), 2) loan application procedures are troublesome (32.6%), and 3) the lack of collateral (28.8%). As a result, certain portions of SMEs rely on informal financing from friends and relatives (13.9% in the survey). Thus, there is a significant perception gap between banks and SMEs.

Major problems and possible solutions are summarized as follows:

1) 90% of NAFIN loans are extended under the two-tier system through financial intermediaries, mainly commercial banks, to SMEs. Remaining 10% are directly loaned.
2) The two-tier system is not necessarily defective. However, commercial bank seek maximum profit just like other private companies, therefore, additional costs and risks for commercial banks, which may set off their profits make them reluctant to SME loans. This seems to be the major cause for preventing smooth fund flow from NAFIN to SMEs.
3) A possible solution is to raise loan charges of commercial banks, while reinforcing the loan guarantee system. This will increase interest rates for SMEs, which must be avoided by government assistance in the form of interest subsidy.
4) SME loans must be viewed from indirect benefits created by growth of SMEs to the national economy, which should justify certain cost sharing by the government.