

Chapter 8

Applicability of Japan's Development Experience to the Case of Mexico

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Introduction

Do the experiences of economic development of Japan and other East Asian nations offer lessons applicable to the cases of other developing nations? In recent years, Japan has been promoting its experience of economic development to developing countries through economic cooperation programs. The main purpose of this chapter is to consider the applicability of the Japanese experience to the situation in Mexico, taking Japan's government policy on small and medium-scale business enterprises as an example. Japanese policy for small and medium-scale enterprises (SMEs) refers essentially to laws and regulations devised on the government's initiative, meaning that the role of government is of decisive importance. The system of a horizontal division of labor, with SMEs serving as sub-contractors to larger enterprises, entailed, in effect, a parts suppliers network of great efficiency and minimal expense, within which SMEs are called "supporting industries." Financial aid for SMEs is, moreover, an integral part of the general finance system. In short, government policy on SMEs, from the perspective of systems theory, forms a kind of microcosm in its own right. I would like to consider the above issue from the developing countries' point of view, so as to make a meaningful contribution to the debate on the applicability of Japanese development experience to developing nations.

First, I will offer an overview of economic trends in Mexico and of the Mexican government's economic policies, with particular attention to the policies on SMEs. Government policies on liberalization initiated in the mid-1980's had a negative impact on the domestic

supply of parts and components. In addition, supporting industries have not yet developed to an adequate level in Mexico. The second section examines the reasons for this and considers possible strategies for the future based on experiences of Japan and other Asian nations, while further describing JICA-based Japanese projects for support of SMEs.

1 Mexican Economic Policy, with Particular Attention to the Policies on SMEs

1.1 Economic Policies in General

(1) The Salinas Administration

In 1982 Mexico faced the default on its foreign loans and forced to begin liberalizing and opening its economy to foreign investment. The response, first of all, was to proceed with trade liberalization measures, from 1983 through 1990. These measures, which included lowering of tariffs, lifting of quotas on imports and exports, and abolition of an official reference pricing system, were implemented gradually over three stages (for further information see Zabludovsky 1990). In 1986, Mexico joined the GATT. The commencement of NAFTA (North American Free Trade Agreement) in 1994, although directly involving trade with the U.S. and Canada only, amounted to a declaration that Mexico was prepared to pursue full-scale liberalization of its trade and investment regulations. In 1994 Mexico also became a member of OECD and thus both in name and reality appeared to have joined the club of the world's advanced economies.

The economic cabinet office of the Salinas administration (1988–94) was dominated by a group of economists who had studied in the United States, and vigorously pushed through neo-liberal and neo-classical economic policies. This resulted in a turn away from existing 'inward-looking' policy towards a policy of minimizing government intervention, with the emphasis placed on control via market mechanisms, liberalization and de-regulation ("small government"). At the macroeconomic level, this entailed adoption of policies of fiscal retrenchment, (relatively) low interest rates, and intervention in the foreign exchange market, resulting in the successful reduction of annual inflation rates from 159% in '87 to 52% in '88 and subsequently less than 30%. By 1994, inflation was held down to 7%. An important advancement in this respect was a call for social solidarity and the creation of a "social pact" among laborers, farmers, en-

trepreneurs and government. In the period between 1988 and 1994, the average real growth rate was 3%, outstripping growth in population.

However, due to overvalued exchange rates towards the end of the Salinas administration, the country's current account deficit increased rapidly, and too much emphasis was placed on short-term capitalization to spur the capital inflow, including, especially, large issues of short-term dollar-based government bonds (TESOBONOS). These precipitated the subsequent currency and fiscal crisis.

The specific policy initiatives which received the greatest emphasis were the "Plan for Modernization of Industry and Trade, 1990-94" the "Plan for the Promotion and Modernization of Micro, Small and Medium-scale Enterprises, 1991-94" the "Plan for Modernization of Science and Technology, 1990-94" and the "Plan for Modernization of Education, 1989-94." Above all, the "Plan for the Promotion and Modernization of Micro, Small and Medium-scale Enterprises, 1991-94" which is the most important in relation to the theme of this paper. This plan called for (a) expansion of the credit system, (b) technical cooperation, and (c) expansion of the sub-contracting system.

(2) Zedillo Administration

When in December of 1994 the Zedillo administration came into power, they soon had to face the currency and financial crisis. One direct result of this was its impact on the ability of the government to make payments against dollar-denominated TESOBONOS bonds, but it also caused a plunge in the value of the pesos, wild fluctuations in the stock market, and the flight of capital from the country. By January 1995, the influence spilled over to other developing nations, a phenomenon named to be the "Tequila Shock." There are a number of theories about the causes of this crisis, but generally speaking no one denies that the crisis was triggered by the combined impact of (a) an over-valued peso, (b) excessive inflow of short-term capital, and (c) a succession of political shocks (including the assassination of the presidential candidate) prior to the crisis (see Gil-Diaz and Carstens, 1996). An international aid package (approximately 50 billion dollars) and a shift to a floating exchange rate system for the peso more or less resolved this crisis. The problems which resulted, however, were that inflation regained momentum (the direct causes of this were the sharp rise in costs of imports due to devaluation of the peso, and a fall in production prompted by recessionary effects of the crisis—the rate of inflation for 1995 reached 52%), and interest

rates rose to the extreme (due to withdrawal of foreign capital and tightening of credit). These factors brought about bankruptcies among SMEs, while credit unions, which had expanded very rapidly during the last couple of years, either collapsed or were threatened with bankruptcy. In 1996, the government has on several occasions discussed plans for a moratorium on domestic loans and is planning to write off some debts, but interest rates are so high that such measures are likely to have negligible benefit (for example, interest rates on 3 month fixed deposits in March 1996 was 32%).

Generally speaking, the Zedillo administration continues to pursue neo-liberal economic policies. The "Plan for National Development, 1995-2000" announced in 1995 calls for a targeted annual growth rate of 5%, an increased rate of savings, tighter fiscal policy, maintenance of a floating exchange rate, de-regulation, and the promotion of privatization. With regard to industrial development, the emphasis is put on the strategy for promoting SMEs. The plan also calls for a reform of the national social security system (IMSS).

In 1996, the Ministry for Promotion of Commerce and Industry (SECOFI) announced the "Plan for Policy on Trade and Industry" which, in response to the "Plan for National Development, 1995-2000," focuses on the following eight industrial policies and development strategies:

- (a) Macroeconomic stabilization and development of financial sector
- (b) Construction and reform of infrastructure, institutional base, and human resources
- (c) Promotion of structural linkages in the form of productive chains
- (d) Improvement in technical infrastructures to promote industrial development
- (e) Relaxing economic regulations
- (f) Export promotion
- (g) International trade negotiations
- (h) Fostering competition

The plan describes concrete policies for each of these eight items, but since the Zedillo administration has only recently assumed power, the results are not yet to be seen. Let us take a closer look, then, at the differences between these two administrations in terms of the policies on SMEs.

1.2 Policies on SMEs

(1) Salinas administration

The focal point of the Salinas administration's policies for micro, small and medium-scale enterprises was the expansion of the credit system. From the latter half of the 1980's, in the context of liberalization and the move towards "small government," government-related financial organizations were advised by the World Bank to avoid competing with private commercial banks. As a result, government-related financial institutions such as NAFIN ('National Financiera,' i.e. the Development Bank of Mexico) and Bancomext (the Foreign Trade Bank of Mexico) began to function as second-tier agencies, providing funds not directly to business enterprises but to commercial banks and other financial organizations (to which lending discounts were offered). The target of NAFIN's lending operation was shifted from the large-scale projects of public corporations towards financing on behalf of SMEs. As for Bancomext, while it had concentrated on financing export companies, it was then expected to take account of the customer's point of view, and began to place more weight on financing for SMEs and selective lending to the specific trade sectors.

From 1989 NAFIN began a program specifically directed at small-scale enterprise (PROMYP), and introduced a financing guarantee system for such customers. At the same time, in response to the fact that the first-tier commercial banks were not actually offering much lending to smaller enterprises, the government promoted the establishment of credit unions to serve as non-bank financial institutions.

In addition, the "Program for Modernization and Quality Integration" (CIMO) was initiated for assisting quality control education to support the training of personnel for SMEs. A program for supporting quality control and productivity enhancement was in place from 1988, operated under the auspices of the Ministry for Labor and Social Security funded by the World Bank; from 1993 this was expanded and strengthened to become CIMO, which defrayed as much as 70% of the expenses involved in personnel training (including training courses and consulting, etc.) for SMEs.

(2) Zedillo administration

The "Plan for Policy on Trade and Industry" mentioned above called for the establishment of supply chains for industry and emphasized the development of industrial clusters in different fields of production and geographical areas (pp. 45-78 of the "Plan"). In con-

crete terms, the plan proposes the establishment of supply chains, which would encompass SMEs for parts and components for the automotive industry, mining, agricultural processing industry, forestry, and procurements for public and government agencies. It also specifies the need for strengthening and expansion of the existing subcontracting system ("*bolsas de subcontratación*," hereafter "*bolsa system*"). The "*bolsa system*" originated in France in 1950 and was introduced in Latin America in the latter half of the 1970's and provides for the mediation, by industry organizations and business associations, of subcontractor relations among large enterprises and SMEs. The system is not very well developed in Mexico, however (it has been adopted in other Latin American nations, and in the case of Brazil, is said to have been established on a relatively wide scale, especially in the automotive industry). The bolsa system is operative in seven cities in Mexico (Aguascalientes, the Federal District of Mexico, Puebla, Pachuca, Guadalajara, Monterrey, and Querétaro), and plans are under consideration for the establishment of this system in seven further cities (SECOFI 1996).

In May 1995, the National Advisory Committee for Micro, Small and Medium-scale Enterprises was organized. Its members consist of representatives from government agencies, industrial organizations, and banks (NAFIN, Bancomext, the Internal Trade Bank of Mexico). The Committee's task is to encourage the micro and SMEs. In particular, it is responsible for actively providing advice in the areas of (a) strategies for increasing the competitiveness of SMEs, (b) reinforcement of consulting services for SMEs, (c) promotion of supply chains, and (d) promotion of exports by SMEs.

2 Current Situation and Problems faced by SMEs

2.1 Liberalization and the Manufacturing Industry

What changes have been brought about in Mexico's economy, especially in the manufacturing sector, as a result of gradual economic liberalization since the middle of 1980's? If one compares the Industrial Census for the two years 1988 and 1993, there had been a relative growth in employment in the light industry sector. In share terms, the number of establishments involved in food, beverages and tobacco declined, but the number of employees grew, while the numbers of both establishments and employees in textiles, apparel, and leather goods increased. In lumber, wood products and furniture, lit-

tle change occurred. On the other hand, in the heavy industry sector, large-scale plant industries (petroleum, basic metallurgy, etc.) suffered declines in both numbers of establishments and of employees in share terms, while in metal products, machinery, and precision equipment, the number of establishments fell off but employment figures rose (see Table 8.1).

In terms of employment shares, the decline in employment in the large-scale plant industries was accompanied by growth in employment in the light industries and machinery. Employment share increases, although very slight, were registered in the electrical and electronic and automotive industries. This was due to the development of export industry, especially under the *maquiladora* (bonded export processing system). In addition, the number of employees per manufacturing establishment showed an increase in efficiency. Rationalization (reductions in the labor force) was carried out in all sectors with the exception of basic metal products. In the basic metal sector, a sharp decrease in the number of establishments (due to closing down of iron works) yielded an apparent increase of employees per establishment (from 109 to 128). Increased efficiency (rationalization of labor) was quite clear in the heavy industry sector, notably in the decreases of nearly 30 to 40 persons per plant in the automotive, electrical and electronic industries. Taken on average, the number of laborers per plant for all the manufacturing industries decreased during this period from 18.8 to 12.0.

The most dramatic structural changes occurred in the area of exports. The share of petroleum exports, once the mainstay of Mexico's export economy, declined while exports of machinery and other manufactured goods showed remarkable increase. The shares for exports of petroleum and related products and for manufactured goods in 1984 were 58.9% and 36.1% respectively. By 1993, these corresponding figures had become 14.8% and 80.3%. This turnaround was due to the growth of exports by the automotive, electrical and electronic industries, especially through *maquiladora* (apart from which, steel, textiles and leather goods registered export increases). In this connection, exports under *maquiladora* exceeded 30 billion dollars in 1995, thus accounting for more than 40% of all exported goods (Banco de México 1996). In the case of *maquiladora*, there is an emerging trend towards the use of manufacturer-affiliated subcontractors in the automotive industry, and the same is said to be true for electronics, as well. For example, in the case of the automotive industry, it is reported that the five assembly-makers rely almost exclu-

Table 8.1 Manufacturing Industry in Mexico (Results of Industrial Census)

Manufacturing Sector	Code	No. of establishments			No. of employees		
		1988	(%)	1993	(%)	1988	(%)
Food, beverages, and tobacco	(31)	51,151	36.2	93,289	34.4	544,669	20.5
Textile, apparel, and leather	(32)	16,853	11.9	44,548	16.4	419,793	15.8
Wood, wood products, and furniture	(33)	16,141	11.4	31,969	11.8	133,949	5.0
Paper, paper products, and printing	(34)	7,952	5.6	15,425	5.7	143,467	5.4
Petroleum, coal, rubber products, plastics	(35)	5,472	3.9	8,239	3.0	379,604	14.3
Nonmetal products	(36)	14,502	10.3	24,757	9.1	148,883	5.6
Basic metal products	(37)	932	0.6	454	0.2	101,851	3.8
Metal products, machinery, precision equipment	(38)	26,945	19.0	47,706	17.6	757,030	28.5
Electrical and electronic products	(3831 + 3832)	1,423	1.0	2,272	0.8	257,133	9.7
Automobiles	(3841)	852	0.6	1,501	0.6	136,912	5.1
Other manufacturing industry	(39)	1,496	1.1	4,780	1.8	30,809	1.1
Total	(3)	141,446	100.0	271,167	100.0	2,660,055	100.0

Note: Including Maquiladora companies

Source: Censos economicos 1989 (XIII Censo industrial); Resultados definitivos, Resumen general, 1992 and Censos economicos 1994; Resultados oportunos, INEGI, 1994.

sively on foreign-affiliated enterprises for primary subcontracting, and selectively use domestic (Mexican) enterprises for secondary subcontracting.

2.2 Changes in Micro and SMEs

Looking at the Industrial Census for changes in the manufacturing industry by scale (number of employees), there had been an increase in the number of establishments for micro enterprises from 1988 to 1993, with a decline in the number of establishments for small, medium-scale and large enterprises in share terms. On the other hand, there was a striking contrast between the decrease in employment shares for large enterprises and an increase for micro enterprises (see Table 8.2). Calculating figures for employees per establishment, we find that there was very little change for SMEs, whereas for large enterprises, there was a decline in the average from 677 to 623 employees per plant. For micro enterprises, the figures showed a slight decline, from 3.1 to 2.7 employees per plant.

In short, economic liberalization caused an increase in industrial efficiency. This may be a direct result of intensified competition in the global economy, but it can also be argued that workers who lost their jobs due to labor rationalization (especially in large-scale enterprises) had no choice but to enter the informal sector (as street vendors, for example) or to start their own micro enterprises (in the manufacturing sector, this includes tacos and other food products, crafted goods, garment-making, leather goods, etc.) It appears to be the explanation for the increase in employment figures for micro enterprises. It does not, however, mean that there has been development in SMEs to serve in a supply chain linked with the large enterprises to provide parts and components. Subcontracting in the narrow sense has always been important in areas such as metal-processing, plastics, garment-making, etc. (see Kagami 1995). But if anything, it can be said that rapid liberalization has begun to destroy such relationships.

2.3 Problems

A number of complex and interrelated factors, at both the demand (large enterprise) and supply (SMEs) sides and in the areas of policy and institution, account for the sluggish development of micro and SMEs to become a parts-supply industry, in particular.

- (1) Among factors on the demand side:
 - (a) In the context of general liberalization, it has become easier

Table 8.2 Trends in Manufacturing Industry in Mexico by Scale

	No. of establishments			No. of employees		
	1988	(%)	1993	(%)	1988	(%)
By scale						
Micro enterprises 0 to 15 persons	120,747	87.0	244,214	91.8	373,854	14.1
Small enterprises 16 to 100 persons	13,482	9.7	16,439	6.2	521,858	19.8
Medium enterprises 101 to 250 persons	2,641	1.9	3,120	1.2	414,309	15.7
Large enterprises over 251 persons	1,965	1.4	2,260	0.8	1,330,451	50.4
Total	138,835	100.0	266,033	100.0	2,640,472	100.0
					3,174,455	100.0

Source: Same as Table 8-1.

to import high quality finished products and parts at low prices. This tendency was encouraged by the high exchange value of the peso during the Salinas administration. For example, in the 1980's there were 20 companies supplying television sets in the Mexican market, whereas today there is only one, a Japanese affiliate. This Japanese company bought 80% share of its parts and components from the domestic market in the 1980's, but today that figure is down to 20%; the remainder are imported from Asia and the U.S.A. Liberalization had two-fold effect of wiping out weak domestic manufacturers of finished products, which were unable to compete with cheap foreign imports, and of encouraging stronger domestic manufacturers to import the high quality parts and components. In short, SMEs were placed under severe pressure, not only in the assembly-maker but in the parts supply field as well.

(b) Enterprises under *maquiladora*, involved primarily in exports, have always been able to take advantage of the bonded processing system to import parts and capital goods duty-free, so did not after all depend very much on procurement from domestic suppliers. Even now the share of procurements from the domestic market is estimated at only 2 to 3% (for inland *maquiladora* enterprises, the share is somewhat higher). The PITEX program (temporary measures for imports of manufacturing goods for export), which allow domestic enterprises apart from those of *maquiladora* to import parts on a duty-free basis, has contributed to the growth of exports, but has an adverse impact on the development of the domestic parts supply industry.

(2) Factors on the supply side:

(a) There are very few parts manufacturers which can provide high quality, low cost goods while consistently meeting delivery schedules. In other words, not enough has been done to foster the growth of SMEs which can successfully compete in the global marketplace.

(b) Pervasive individualism tends to hinder the spirit of conciliation and cooperation in the work place. Workers are reluctant to form relationships on the basis of mutual trust and there is a tendency to be suspicious of outsiders which discourages the separation of management from ownership, so most enterprises are still owned and operated as family businesses. For example, even when entrepreneurs are taught by a multi-national enterprise in order to encourage the formation of long-term relationships, those who have learnt certain skills will often claim for their independence and start

to establish relations with other multi-national enterprises. In other words, it is difficult to create the conditions for subcontracting and long-term relationships.

(c) Information is in short of supply; there is widespread ignorance of world-wide trends and of developments in Asia, etc. Hence there is little general sense of concern about achieving or maintaining global competitiveness. When things go wrong, other people or the government are expected to take the blame.

(3) Policy and institutional factors:

(a) Much of the lending available from NAFIN have been used for the sales and service sector industries (minibuses, video cassette rental shops, etc.) and not very much were invested in manufacturing production. Even in the manufacturing industry, the emphasis was placed on foodstuffs, dairy products, leather goods, and textiles. Critics also pointed out that the interest rates and spreads offered by NAFIN to commercial banks and other first tier agencies were too high.

(b) Management of commercial banks has not been modernized. The sense of family ties remains strong and many banks are said to make loans only on the basis of familial or marital ties. The growth of credit unions have been very rapid, but many of these have bankrupted by policy instability at the macroeconomic level due to the currency and financial crisis of 1995.

(c) Policies such as SECOFI did not function well where strong ties with local government were absent. Many programs never got beyond the planning and discussion stage. When the administrations change, bureaucrats are replaced. The newcomers, seeking to outdo their predecessors, will devise new policies expressly undermining those pursued by the previous administration. The result is a lack of consistency and failure of continuity at the policy level.

(d) The bolsa system for mediating subcontractor relations received support from the United Nations Industrial Development Organization (UNIDO). Lists of enterprises on demand and supply sides were drawn up and a computer database was prepared. However, due to poor maintenance, this is reportedly of little use in practice. To keep up with today's rapid pace of progress in technology, and the constantly changing economic situation, maintaining a database of this kind requires much effort and funds.

3 Establishment of an Institution and Questions of Applicability

As described above, Mexico does in fact have both an economic policies and some form of institution for the development of micro and SMEs, but neither can be said to be functioning well. Considering the institutional issue in light of the experiences of Japan, Korea and other Asian nations, the following suggestions can be made:

(1) First of all, a legal framework in the form of a fundamental law for SMEs is necessary. That framework should provide for legal guarantees with such measures as (a) financial support, (b) technical support, and (c) improvement of relations between large enterprises and SMEs (for example, statutory measures for preventing excessive delays in payments, to protect subcontractors).

(2) Establishment of organizations and agencies to carry out these strategies. In Japan, the Ministry of International Trade and Industry encompasses a Small and Medium Enterprise Agency, under which Japan Small Business Corporation (JSBC) serves to implement the policies. Institutions to provide financial support include the Japan Finance Corporation for Small Business, the People's Finance Corporation, the Shoko Chukin Bank, and the Environmental Sanitation Business Finance Corporation. For financial guarantees and insurance, there are organizations such as the Credit Guaranty Associations and the Small Business Credit Insurance Corporation. Technical support is provided by eight college-level schools run by JSBC, the public research centers and local technology demonstration centers, etc. Other agencies such as the Subcontracting Enterprises Promotion Association are concerned with the needs of subcontractors. It is important that such activities are conducted not only by the central government but through cooperation between central and local government support organizations. The Small and Medium Enterprise Agency also issues a white paper on SMEs each year, and it is obligatory to be presented in the Diet.

(3) Awareness and initiatives in the private sector: Private enterprises are aware that they are able to reduce transaction costs by conducting subcontracting arrangements on a long-term basis, which assures a stable supply of orders. In the case of subcontracting for the automotive industry, which forms pyramid-shaped supply chains, private initiatives led to the formation of "associations" intended to foster a sense of trust. In addition, systems like "Just in Time," for supplying parts from subcontractors (while reducing inventory costs),

were created. Small and medium-scale enterprises themselves also cooperate, in regions where such enterprises are concentrated, to develop strategies for dealing with fluctuations in demand and economic changes through horizontal division of production.

3.1 The Present Situation

Concerning the present situation in Mexico, it may as well be said that there is no fundamental law for the support of SMEs as such. When the government announces policies or plans for the advancement of certain industry, laws pertaining to SMEs are often fragmentary and are not systematically organized. Within SECOFI, the agency specifically responsible for SMEs is the "Department for the Promotion of Micro, Small and Medium-scale Enterprises and Regional Development" within the Bureau for Promotion of Trade and Industry (the Department for Promotion of Industry of the above Bureau, and the Department of Industry of the Bureau of Standards and Services for Trade and Industry as well carry out some measures regarding SMEs). As noted above, SECOFI devised the "Plan for Policy on Trade and Industry" which calls for the promotion of productive chains. The National Advisory Committee for Micro, Small and Medium-scale Enterprises was also established to adopt measures on behalf of SMEs. In the area of finance, NAFIN and Bancomext have primary responsibility for loans to SMEs. With regard to technical support, although not focused exclusively on SMEs, the National Science and Technology Council (CONACYT) handles a variety of support programs (the Fund for R&D in Technical Modernization <FIDETEC>, the Fund for Reinforcement of Scientific and Technical Capability <FORCCYTEC>, the Program for Reinforcement of Relations between Businesses and Universities <PRAEM>, etc.) Moreover, training and support programs (CIMO, etc.) are conducted by the Ministry of Labor and Social Security.

As noted above, individualism and the spirit of independence are strong within private enterprises, and there is not much enthusiasm for the construction of subcontracting networks, but industry associations have been testing various initiatives in this area. In Mexico, chambers for industry and for commerce are separate, yet at least in the case of the manufacturing industry, measures for SMEs are carried out independently or through collaboration among organizations such as CANACINTRA (the National Chamber of Manufacturing Industry), CONCAMIN (the Confederation of Industrial Chambers.) and the members of CAINTRA (the Chamber of Manufactur-

ing Industry of the state of Nuevo León, mostly enterprises in Monterrey and elsewhere in the state of Nuevo León which do not belong to CANACINTRA) and CAREINTRA (the Regional Chamber of Manufacturing Industry of the State of Jalisco, most of whose members are concentrated in the City of Guadalajara which also do not belong to CANACINTRA).

In the example of the support system for micro and SMEs under the direction of SECOFI, the various organizations noted above are expected to cooperate along the specific organizational and structural lines shown in Figure 8.1.

3.2 Efforts by Local Governments

In Mexico, the activities of managers' unions and entrepreneurial organizations in the private sector have been relatively energetic. Chambers of Commerce and Chambers of Industry, and industry-specific federations, in particular, have sponsored a range of cooperative and collaborative activities. The best known among national organizations in this field is CANACINTRA. Members of CANACINTRA account for 69% of Mexico's sales in the manufacturing industry as well as 57% of total employment in this industry (CANACINTRA 1996). However, as has been pointed out, there are two regional organizations, CAINTRA in the state of Nuevo León, and CAREINTRA in the state of Jalisco, which maintain their own chambers and are independent of the national organization.

In the case, for example, of Guadalajara City in Jalisco, CAREINTRA covers 24 different areas of manufacturing industry and has 2600 member companies and organizations (CAREINTRA 1996). An organization within CAREINTRA known as the Jalisco State Industrial Chamber Liaison Council (CCIJ) is composed of representatives from member chambers of the edible oil, apparel, textiles, leather, footwear, furniture, precious stones, metal processing, electronics and plastics industries, among others, who are delegated to attend CCIJ. For example, the metal processing industry's assembly is CIMEG (Chamber of the Metal-processing Industry of Guadalajara), while the plastics industry, in place of an industrial chamber, has an organization known as the Plastics Research Center, and both of these are, in turn, members of CCIJ. These organizations cooperate closely with city and state governments and work to promote their own interests, programs and policies. CIMEG is well known as the first organization in the nation to adopt (in 1982) and popularize the bolsa system for subcontracting arrangements.

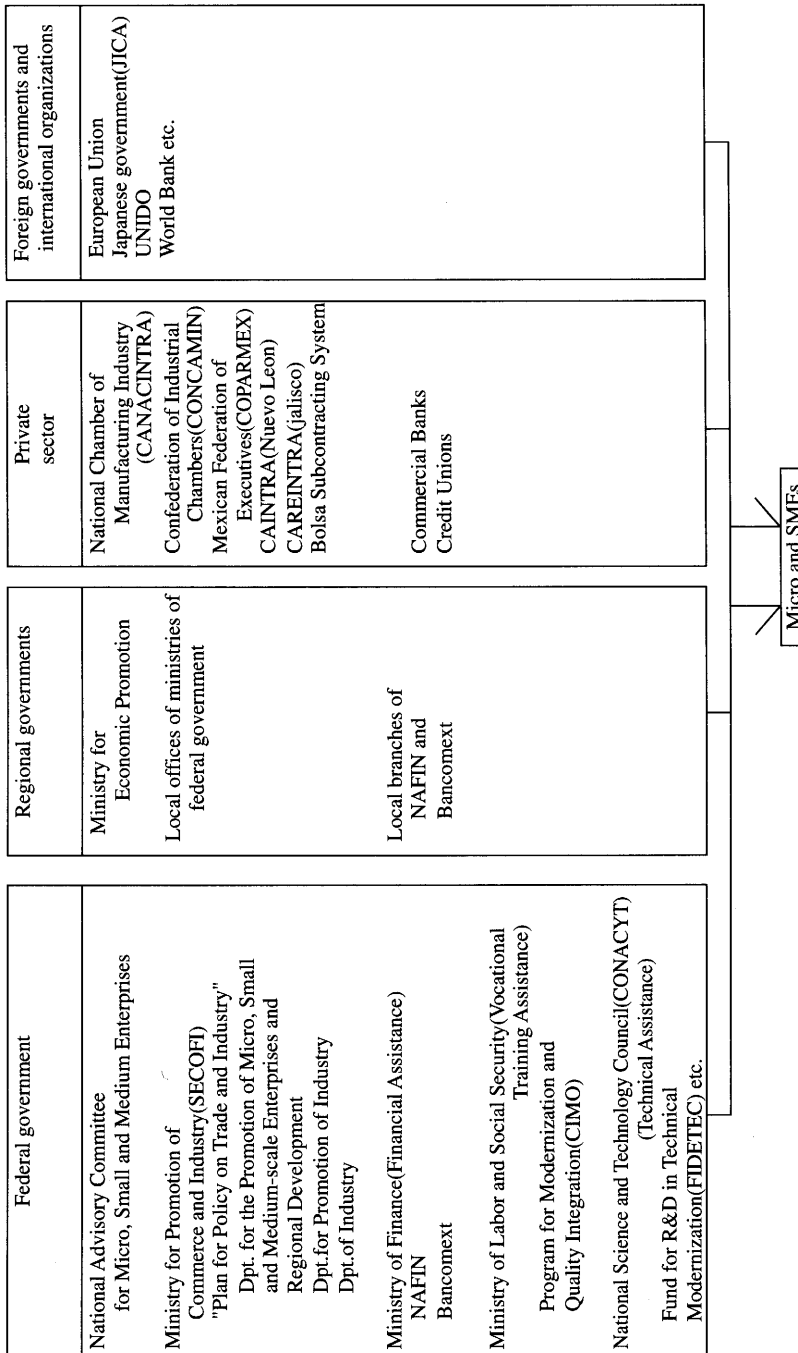


Fig. 8.1 System Diagram of Small and Medium-Sized Enterprise Policy of Mexico

3.2.1 Support Measures for Micro Enterprises

The trend of the manufacturing industry in the state of Jalisco is comparable to that of the nation as a whole: employment shares in the large enterprises have been declining, while rising in the case of micro and SMEs (see Table 8.3). In terms of numbers of establishments, the share of these for micro enterprises has been expanding rapidly. The average number of employees per establishment declined from 17 to 12 (from 1988 to 1993), which is also in line with the national trend. Twelve employees is within the range (0 to 15) of the micro industry classification, and the large majority of enterprises in the state of Jalisco fall into this category.

Financing for micro and SMEs has so far been conducted largely through the NAFIN program. This has entailed various problems, however: this program was not widely known, its priorities were biased in favor of service sector enterprises, and finance tended to be provided to large rather than to micro enterprises. The system introduced in May 1996 by the Jalisco State government (Ministry for Economic Promotion) for financial support to micro enterprises (GEMICRO, *Generación de Microempresas*) represents a breakthrough in respect to the three following points:

- (1) Initiative for the system originated internally, at the state government level, and funding, at present, is drawn entirely from domestic sources
- (2) Collateral is not required
- (3) Emphasis is placed on creating supply chains

GEMICRO is targeted at micro enterprises with (a) 15 or fewer employees and (b) annual turnover of 1,500,000 pesos (\$200,000) or less. Conditions on loans are as follows: (a) amount: from 1,000 to 100,000 pesos; (b) period: maximum of 60 months (5 years); (c) interest rates: depending on the industry, either half or one fourth of the C.P.P. (fixed deposit average interest rate); and (d) grace period: 3 months for repayment of interest, 6 months for repayment of principal. All sectors and types of industry are covered (primary, secondary and tertiary). Although no collateral is required for these loans, applications must undergo intense scrutiny from the GEMICRO Financing Committee, and a formal plan must be submitted by entrepreneurs and approved by the committee. The following are among the criteria applied by the committee in reviewing applications: (a) potential contributions to generate employment, (b) contributions to the local economy, and (c) realistic prospects for commer-

Table 8.3 Trends in Manufacturing Industry in the State of Jalisco by Scale

By scale	No. of establishments				No. of employees			
	1988	(%)	1993	(%)	1988	(%)	1993	(%)
Micro enterprises 0 to 15 persons	8,471	85.7	15,963	88.7	32,824	18.7	56,782	25.5
Small enterprises 16 to 100 persons	1,198	11.7	1,687	9.4	46,329	26.4	60,166	27.0
Medium enterprises 101 to 250 persons	168	1.6	239	1.3	27,467	15.7	36,921	16.6
Large enterprises over 251 persons	97	1.0	113	0.6	68,651	39.2	68,873	30.9
Total	10,204	100.0	18,002	100.0	175,271	100.0	222,742	100.0

Sources: Jalisco, XIII Censo industrial 1989, INEGI 1992 and Jalisco, XIV Censo industrial 1994, INEGI 1995

cial success and integration with supply chains in the local economy. The committee has eight members, among whom are representatives of the state government, private industry (CCIJ), NAFIN, SEDESOL (the Ministry for Social Development), COPARMEX (Federation of Executives), etc.

The federal and state governments are responsible for finding sources of fund. The supply of funds for 1996 totaled 45 million pesos (\$6 million), 30 million of which (66.7%) was drawn by the federal government from SEDESOL's "No. 026 Fund," with the state government supplying 15 million (33.3%). In the past, the SEDESOL Fund had been used to generate such short-term employment as hiring laborers for street-cleaning work (on a 3 month basis), but since it was no more than temporary work, the fund did not contribute to the provision of permanent jobs. In response to this problem, the Jalisco state government came up with the idea of using these funds to finance micro enterprises with a view to generate long-term jobs. The contact channel for this financing system is provided by FOJAL (Fond Jalisco) of the Jalisco state government.

By the end of August of 1996 (4 months after initiation of the program) 10 million pesos in loans had already been disbursed. This has yielded an estimated 1200 jobs, so the average lending per new employee amounts to 9,500 pesos. The rate of repayment of loans as of the end of August has reached 92%.

3.3 Trial Projects based on Japanese Cooperation

The Japanese government has been providing assistance for SMEs in Mexico for many years though cooperative efforts sponsored by JICA (Japan International Cooperation Agency). Since 1986, JICA has been sending specialists in SMEs to SECOFI. At the present time, Mr. Yoshio Koyama is providing support activities as an advisor to the SECOFI's Dept. for the Promotion of Micro, Small and Medium-scale Enterprise and Regional Development. Mr. Koyama is the 3rd advisor from JICA to play this role. Until recently, JICA advisors in this area have concentrated on collecting data on Mexico's micro and SMEs and introducing case studies from Japan's experience. Since around 1995, however, they have begun to be involved in the direct support operations through two projects, one designed to foster the growth of supporting industries, and the other to offer technical assistance to local industry. Both projects are now in progress. The result of these projects will serve as a test of whether Japanese policies for assisting SMEs are suitable to the current state

in Mexico, and in this way testing for the applicability of the Japanese model to the case of Mexico.

The project for assisting supporting industries is aiming at fostering domestic parts and components supply industries and at building relationships for subcontracting. At the present time a consulting team from Japan is at work in Mexico preparing a 'master plan' for the project. This plan is to be handed over to the government of Mexico in March 1997. The team has already completed more than 300 interviews with companies, mostly Japanese-affiliated manufacturers in the automotive and electronics industries. (In response to the question "What is the most urgent problem facing micro and SMEs," they have received responses such as (a) shortage of systematic financing, (b) the need for modernization of equipment, (c) the need for promotion of direct export of parts, and (d) the need for promotion of subcontracting relationships.) Based on the results of these interviews, the project team will offer useful advice on how to organize supporting industries (including advice on the legal system, financial support, creating networks, industrial standards, tax incentives, technical assistance, etc.)

The project for technical assistance for local industry takes the example of Japan's public experimental research centers (in particular, industrial testing centers set up by the local public organizations, of which amount to 176 nationwide), and hopes to introduce a similar kind of system in Mexico. The project team has already made contact with industrial testing center of the Hokkaido Prefectural Government, and has received promises for assistance in planning training programs, dispatch of specialists, etc. There are plans for the future call for selecting 3 model states in Mexico and for conducting a study on the possibilities for introducing the public testing center system to support local industry in those states.

Note that Prime Minister Hashimoto, who visited Mexico in August 1996, pledged credit of US\$960 million to the country, of which, US\$250 million will be provided in the form of loans from the Japan Export-Import Bank and used for funds to assist SMEs through NAFIN. Another US\$250 million will be provided through loans of the same bank to Bancomext for export promotion. The remaining US\$460 million will take the form of yen loans and used for the improvement of health in the Mexico City area (construction of the sewage systems).

Concluding Remarks

This is the first occasion that Japanese promotion policies for SMEs (fostering supporting industries, the system of public experimental research centers, etc.) have been transferred to a developing country such as Mexico through Japan's economic cooperation programs. At the moment, it is too early to evaluate the applicability of the Japanese system because it is still only the final stage of the preparation of the master plan; its implementation with respect to the promotion of supporting industries will begin during 1997. In the case of the public experimental research centers, SECOFI first contacted the Hokkaido Prefectural Government in 1996 to introduce the system and exchange experts and training staff; the actual cooperation program will start in 1997 when one of the Mexican states chosen as a model case.

However, some concerns have been expressed about the diffusion of the supporting industries system in Mexico: (a) a similar system of subcontracting (the bolsa system) was introduced in Mexico as long ago as 1982 but its diffusion and results have been slow and not what was anticipated; (b) in Mexico, high-tech parts and components are mainly supplied by foreign-affiliated parts companies because almost all domestic parts makers are far behind the modern technological levels with obsolete shop-floor equipment; (c) with regard to automobiles, the demand for parts from Mexico will shift to the U.S.A. and Canada if the local content rule of NAFTA (62.5%) is applied from 2002.

With respect to public research centers, services such as basic research, the diffusion of standardized technology, and the public use of expensive inspection equipment provided by the central as well as local governments are all widely useful. The applicability of the Japanese system to Mexico seems to be highly possible. In particular, local government plays an important role in this field. Therefore, cooperation between local governments from Japan and Mexico should be promoted.

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