MEXICO'S ECONOMIC CRISIS:
CHALLENGES AND OPPORTUNITIES

Edited by
Donald L. Wyman

Monograph Series, 12

Center for U.S.–Mexican Studies
University of California, San Diego Q-060
La Jolla, California 92093
MARKETS AND BARGAINS: FOREIGN INVESTMENT AND DEVELOPMENT STRATEGIES IN MEXICO

by Van R. Whiting, Jr.
Brown University

Introduction

With the massive increase in commercial bank lending to Mexico and other developing countries in recent years, students of development have begun to pay less attention to foreign direct investment and more to foreign borrowing.1 Still, transnational enterprises making direct investments have played an undeniably crucial role in the structure of Latin America's regional economy and in its pattern of development.2


2. This role was highlighted by the Latin American literature on dependency. For the best general statement of the dependency perspective, see Fernando Henrique Cardoso and Enzo Faletto, Dependency and Development in Latin America (Berkeley, Calif., 1979). For a treatment (by a Chilean economist and his Mexican co-author) of the specific topic of foreign direct investment in Mexico, see Fernando Fajnzylber and Trinidad Martínez Tarragó, Las empresas transnacionales: expansión a nivel mundial y proyección en la industria mexicana (México, D.F., 1976). For a similar perspective from the United States, see Richard S. Newfarmer and Willard F. Mueller, Multinational Corporations in Brazil and Mexico: Structural Sources of Economic and Non-economic Power, report to the Subcommittee on Multinational Corporations, Committee on Foreign Relations, U.S. Senate (Washington, D.C., 1975).
Literature about third world development recently has suggested that a dynamic relationship exists between transnational enterprises and third world states. Social scientists refer to this perspective as a "bargaining" approach and note that, in contrast to the earlier "dependency" literature, it places the study of the state at the center of analysis and focuses on bargaining between the state and foreign enterprises. This paper examines one aspect of the bargaining relations between the Mexican state and transnational enterprises by focusing on the importance of market structures as an explanation for the nature of that bargaining.

Underlying the argument in this paper is the assumption that the choices that policymakers adopt or fail to adopt in response to particular situations are not isolated, voluntary decisions. Rather, they are constrained choices within very real limitations. One of the most important constraints is economic structure, and particularly the market characteristics of specific sectors of the economy. Market structures are important explanations of the bargaining position of the state, and the results of state-business negotiations are very different in the raw materials and basic infrastructure sector, in the domestic manufacturing sector, and in the integrated export manufacturing sector. In this paper the relationship between the state and foreign investors in each of these sectors is characterized, respectively, as an "obsolescing bargain," a "renewable bargain," and a "transnational bargain." Timing and current economic conditions influence the exact character of each relationship.

The emphasis on structural constraint raises two important points regarding relations between transnational enterprises and


4. The discussion of constraints and their relation to bargaining models is developed in Van R. Whiting, Jr., "Transnational Enterprises and the State in Mexico" (Ph.D. diss., Harvard University, 1981), chapters 2 and 3. See also the discussion of constraints on decisions to join or participate in international regimes in Robert Keohane, "The Demand for International Regimes," International Organization 36:2 (spring 1982), pp. 325-355.
third world states. One, it suggests that state actions to change ownership patterns are constrained by the market characteristics of industrial sectors, rather than the other way around. The state does indeed adopt policies under the assumption that the structure of ownership affects the behavior and performance of industries. However, as this paper shows, those policies are much more likely to be adopted in some industrial sectors than in others. The structural characteristics of sectors of the economy operate as constraints on state action.

Two, it calls attention to sectors as the most appropriate units of analysis. This does not mean that global policies and policy analysis are not needed, but rather that sectoral strategies are the necessary components of global strategies. Similarly, policy on an industry-by-industry basis should be considered in light of the characteristics of the sector. Evidence indicates that policymakers take sectoral considerations into account in adopting industry regulations, and this sectoral approach can help us to understand otherwise anomalous decisions at the industry level.

This study will first analyze some continuities and discontinuities in the case of Mexico's development, then show that foreign investment will have continuing importance. The paper also will demonstrate that the relationship between transnational enterprises and the Mexican state differs in different sectors of the economy, and it will describe three types of bargains.

Continuities and Discontinuities

There is no denying that the massive debt incurred by Mexico has changed some of the conditions for continued industrialization. But during the long struggle to industrialize, several conditions stand out as constants. Specifically, two external conditioning factors characterize Mexico's attempts to industrialize since about 1940: a chronic deficit in the balance of payments, and a continuing, if changing, reliance on foreign direct investment.

That servicing Mexico's debt will place a burden on the balance of payments in the near and medium term is a valid concern. But although the composition of the deficit has changed, with debt service being the most recent source of an external deficit, the balance of payments has long been an important constraint on development. Indeed, the balance of merchandise and services was positive in only one year between 1950 and 1980. Moreover, the ratio of the deficit to total exports (that is, a comparison of the shortfall with the ability to pay) has gotten larger, on average, in each succeeding decade in that period. In part, this was due to the contradictions of import-substituting industrialization. Consumer goods had in fact declined as a proportion
of all imports, but capital-goods imports were an increasing share of a much higher import bill. And imports were not the only source of foreign exchange outflows; the other major source was remittances to foreign capital, and especially to foreign investment.5

The second constant in Mexico's development strategies in the postwar period has been a reliance on foreign direct investment. Beginning about a decade ago, loans became the major source of external capital for development.6 During the 1970s, the value of external loans skyrocketed; loans expanded at a much faster rate than foreign direct investment, which declined to only 10.5 percent of all external capital in Mexico in 1977. However, it would be a mistake to generalize from this low point to predict that commercial banks have permanently replaced foreign investors as a source of capital.

First, the major shift throughout the region has been the replacement of bilateral and multilateral capital with private capital of all kinds. Official capital to Latin America from all sources (bilateral and multilateral) declined from 62 percent in 1961 to 35 percent in 1970, 23 percent in 1975, and only 16 percent in 1981. Private capital has increased its share fairly steadily from 38 percent in 1961 to 84 percent in 1981. Second, within the category of private capital, foreign direct investment has not experienced a secular decline. Although direct investment was only 9.3 percent of the total external capital to Latin America in 1976, the 20-year record shows a fluctuation in share, with 22.4 percent in 1961, a high of 41.5 percent in 1969, and shares from 9 to 37 percent during the 1970s. The 1981 share of 24.6 percent was typical of the last 10 years and only slightly lower than the norm for the 'sixties.

In Mexico, the pattern was similar, although the average share of foreign direct investment was higher and the variation wider: foreign direct investment as a share of external capital


6. This increase in loan capital, as well as the continuing importance of foreign direct investment described below, were similar for Mexico and for Latin America as a whole. See Inter-American Development Bank, External Financing of the Latin American Countries: Statistical Abstract (Washington, D.C., 1982), tables 4 and 138.
constituted 34 percent in 1961, 60 percent in 1966, 48 percent in 1971, 11 percent in 1976, and 29 percent in 1980. Over a twenty-year period, foreign investment has most frequently constituted between 20 and 40 percent of all external financing, and it is likely that it will continue to fall in that range in most years.

Third, it is unlikely that commercial banks will be willing to continue to lend at the volume necessary to make bank capital the major net source of external financing. Between 1972 and 1981, the average maturity for all loans to Mexico (public and private creditors) dropped from 13.7 to 7.7 years, while the interest rate rose from 6.9 percent to 15.0 percent on average. Variable interest rate loans increased from 24.1 to 75 percent of the total. Interest payments alone grew from 259 million to 4.7 billion in the same 10-year period. Much of this loan capital was available because of the unusual influx of capital into international financial markets from the OPEC countries, and because of slack demand in the industrialized countries. As these conditions change, less money will be available to lend to Mexico and other LDC debtors, and more of the loans that do come in will be needed to cover interest and principal payments on existing loans that are quickly coming to maturity. These factors will reduce the net contribution of loan capital to the total net inflow of external capital.

A final factor is that many transnational corporations are already active in Mexico, and have continued to invest to maintain their competitive position in one of the largest developing countries. In short, a chronic shortfall in the balance of payments and a steady reliance on foreign direct investment represent long-term continuities in Mexico's strategies for industrialization.

Still, important discontinuities mark the current period, and pose special problems for continued industrialization (to which I will return in the conclusion). In the wake of the debt crisis that peaked (not, perhaps, for the last time) in August 1982, three historic discontinuities stand out in the short run: zero growth, massive increases in remitted factor payments (interest and profits), and a temporarily positive balance of trade (though the net balance of payments remains negative).


8. Not only is new foreign direct investment coming into Mexico, but the Director of the Office of Technology Transfer reports that new proposals are coming into his office regularly, which he argues reflects confidence in the long-term health of the economy. Personal communication with Lic. Jaime Alvarez Soberanis, June 1983.
The zero growth rate in GNP marks a sharp break with the record of dynamic growth of the postwar period until 1981. For decades, the process known as the "Mexican miracle" was remarkable by world standards. Despite some cyclical problems in the 1970s, growth of the economy averaged 5.8 percent in 1971-1977. As oil revenues began to expand in the latter part of the decade, growth was even more rapid: 8.5 percent per annum in 1978-1981. The cost of this growth, however, was an unsustainable reliance on both money and goods from abroad. Expanding government expenditures pushed the growth cycle, but oil exports did not pay the bill; indeed, investments in the oil industry absorbed large quantities of state investment, with foreign loans providing the capital. An overvalued exchange rate encouraged imports, including some for industrial expansion: whereas exports rose by 9 percent annually in real terms in 1978-81 (6.7 percent in 1971-76), imports grew by 24 percent annually, four times higher than in 1971-76. In sum, government expenditures financed abroad and an exchange rate biased to favor imports contributed to a sharp decline in growth: from 8.3 percent in 1980 to 7.9 in 1981 to -0.2 percent in 1982.

The 1982 debt crisis resulted in a forced improvement in the balance of payments, but it did not eliminate the deficit (for 1980-82, -6.7 billion, -12.5 billion, and -2.7 billion respectively). For the first time in years, the balance of trade was positive, a net $6 billion dollars in 1982, compared to -4.1 and -5.6 billion dollars in the preceding two years. Although the decline in world oil prices is often blamed for the failure of Mexican growth projections, in fact oil exports generated $9.4 billion of export earnings in 1980, $13.3 billion in 1981, and $15.6 billion in 1982. It was the rate of growth of oil export earnings that declined so dramatically (from 150 to 44 to 17 percent per annum), not oil export earnings themselves.

The improvement in the balance of trade is worth a brief comment. It was due not so much to an expansion of oil or other exports as to a massive cut in imports mandated by the stabilization program. Imports fell from $19 billion in 1980 and $25 billion in 1981 to $15 billion in 1982. Such a drastic measure was in essence a reduction of consumption (including consumption of intermediate and capital goods) to pay the interest on previous loans.


11. David Collier brought this to my attention.
The major new drain on foreign exchange earnings was factor payments: profit remittances, private interest payments, and especially interest payments on the external public debt. These factor payments alone increased from $6 billion in 1980 to $9 billion in 1981 and $11.5 billion in 1982. The yearly increase in these payments was over 45 percent in 1980, 50 percent in 1981, and 27 percent in 1982. The increase in oil export earnings and even a positive balance of trade did not suffice to eliminate the chronic balance-of-payments deficit.\textsuperscript{12} I will return to the consequences of austerity as the major instrument of adjustment in the conclusion.

**Development Strategies and Bargains**

Mexico has come to rank among the most industrialized of the developing countries, and the state has been an active promoter of that industrial growth.\textsuperscript{13} The relatively high level of industrialization has come gradually. State industrialization policies have variously entailed: 1) the export of primary commodities, with the development of associated infrastructure; 2) the substitution of imports by local manufacture and assembly of all or part of products destined for the domestic market; and 3) the promotion of exports to the world market, especially manufactured exports (sometimes termed "non-traditional" exports). These categories represent three stages of industrial development, each emphasizing different sectors of the economy. They constitute the historical sequence of development in Mexico.

Industrialization based on primary exports began during the Porfiriato, with the development of mining, petroleum exploitation, and railroads. After the Mexican Revolution, Mexico was the largest foreign producer of petroleum for the United States, and not incidentally the largest single host of U.S. foreign direct investment.


During the interwar years, the economy began to include more manufacturing enterprises producing goods for the local market that previously had been imported, but import substitution industrialization did not take off until after the Second World War, when the government adopted the 1955 Law on New and Necessary Industries. Direct foreign investment (DFI) was welcomed as part of the strategy of import substitution industrialization (ISI), but the later reaction seems to indicate that the extent of foreign investment in manufacturing industries was unanticipated. Indeed, the pattern became one of import substitution industrialization through direct foreign investment: ISI through DFI.

If reliance on foreign direct investment to replace imports with local manufactures was only partly a conscious strategy, there was no such ambiguity about the use of foreign firms to promote manufactured exports. In 1965, the year after the termination of the Bracero Program for migrant workers, and just as the negative consequences of import substitution were beginning to be felt, a special program was set up to entice foreign producers to use Mexican labor for the labor-intensive part of their operations. As electronic equipment has become one of the fastest-growing industries in the United States, the “in-bond” and “production-sharing” arrangements on the border have grown as well. Moreover, while the Mexican government has increased restrictions on existing foreign investors, it has exempted the Border Industrialization Program.

Though the three patterns of industrialization were introduced to Mexico in historical sequence, they now coexist. Mexico exports oil, encourages the replacement of imports in more and more areas, and promotes the export of manufactures. But the role of foreign direct investment is different in each of these sectors of the economy, and the role of the state varies from owner to regulator to promoter (see table 1). In each case, foreign direct investment has been an important part of the strategy, the state has intervened in the process of development, and market characteristics of the sector in question have influenced the bargaining power of the state. Let us consider each of these relationships in turn.

The Obsolescing Bargain

Foreign direct investment first came to Mexico in large quantities before the revolution, as Mexico was in the process of modernizing and as U.S. enterprises were just beginning to expand abroad. Investments were concentrated in mining, in agriculture, in railroads, and in petroleum. Over time, the power of the state has grown, reducing or eliminating foreign direct investment in each of these sectors. The nationalization of the
<table>
<thead>
<tr>
<th>Bargaining Relationship</th>
<th>Ownership</th>
<th>Technology</th>
<th>Local Content (raw materials, inputs)</th>
<th>Role of the State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials and infrastructure: Obsolescing Bargain</td>
<td>100 percent national (oil, railroads)</td>
<td>Largely national</td>
<td>Very high</td>
<td>Owner</td>
</tr>
<tr>
<td>Import Substitution Industries: Renewable Bargain</td>
<td>Preexisting (before 1973) or 51 percent national (autos, chemicals, food)</td>
<td>Mixed national and foreign</td>
<td>Mixed</td>
<td>Regulator</td>
</tr>
<tr>
<td>In-Bond Manufactured Exports: Transnational Bargain</td>
<td>100 percent foreign (electronics, textiles in border program)</td>
<td>100 percent</td>
<td>1-2 percent</td>
<td>Promoter</td>
</tr>
</tbody>
</table>
railroads began even before the Mexican Revolution. The administration of Lázaro Cárdenas (1934-1940) extended the power of the state over the railroads and took over the oil industry in 1938. The trend continued in subsequent administrations: electric power was nationalized in 1960 under the administration of López Mateos (see table 2).

As table 2 shows, there has been an easily discernible shift over time in the sectoral locus of foreign direct investment, at the same time as the total volume of investment grew (with the exception of the 1930s). The gradual shift out of railroads, oil, mining, and utilities was accompanied by an expansion of the role of the state as owner and manager of those same sectors. PEMEX (oil) and CFE (the Federal Electricity Commission) are the two largest state-owned enterprises in Mexico; the state owns the railroads and is a majority owner of most of the mines in the country. The model of the obsolescing bargain fits these industries well. As indicated by Raymond Vernon's general argument, by Theodore Moran's study of copper in Chile, and by Franklin Tugwell's study of oil in Venezuela, the original deals between foreign enterprises and the state in natural resources and basic infrastructure industries became obsolete, with the power of the state increasing. As they also point out, the shift was not a rapid one. Only gradually did the state move up the "learning curve" (to use Moran's phrase) and take over complete control. Under the Mexican regulations summarized in the 1973 Law on Foreign Investment, only the state may engage in productive activities in petroleum, basic petrochemicals, nuclear energy, electricity, railways, and radio and telegraph communications. Only Mexican nationals (private or state) may be active in radio and television, transportation, forestry, or gas distribution. The sphere of action of the state is circumscribed but extensive.

In each of these activities, access to the land or natural resources of the nation has been crucial for the success of the enterprise. Although state enterprises in these sectors have continued to rely on imports for intermediate and capital goods, large enterprises such as PEMEX or the Federal Electricity Commission have increasingly become more self-sufficient in

technology and either have owned or obtained locally the important inputs for the industry. Because of sectoral characteristics of the investments and because of the strategic importance to the state, the relationship of investors to the state is well described in this sector as an "obsolescent" or "obsolescing" bargain: the power of the state has increased over time and foreign ownership has been phased out.\(^\text{15}\)

**The Renewable Bargain**

The decline of foreign investment in industries oriented to the export of primary materials was more than offset by the expansion of industries designed to satisfy the domestic consumer market. Import substitution industrialization relied heavily on foreign direct investors, who took up the implied invitation of high tariffs to invest in the most dynamic industries in Mexican manufacturing: automobiles, chemicals and pharmaceuticals, electrical equipment, and food processing.

Raymond Vernon has held that the obsolescing bargain holds for manufacturing industries as well as for raw materials industries (although he concedes that the fit may be somewhat tighter in the latter). Vernon described the thesis in 1971:

> There is a basis for picturing the development of overseas manufacturing facilities in the following terms: To begin with, U.S.-controlled enterprises generate new products and processes in response to the high per-capita income and the relative availability of factors in the United States; they introduce these new products or processes abroad through exports; when their export position is threatened they establish overseas subsidiaries to exploit what remains of their advantage for a period of time, then lose it as the basis for the original lead is completely eroded.\(^\text{16}\)

15. Merrie G. Klapp makes the argument that state power is likely to increase in the oil industry in developing countries in "The State: Landlord or Entrepreneur?" *International Organization* 36:3 (summer 1982), pp. 575-608. Michael Shafer challenges the thesis for the copper industry in Zaire and Zambia in "Capturing the Mineral Multinationals: Advantage or Disadvantage?" *International Organization* 37:1 (winter 1983), pp. 93-120, but he focuses on two weak states and, more importantly, fails to consider the time dimension that is essential to the "learning curve" element of the obsolescing bargain argument.

16. Raymond Vernon, *Sovereignty at Bay*, p. 66. He maintained the thesis with respect to manufacturing firms in his *Storm over the Multinationals*, note 2. And for "Vernon on Vernon," claiming the obsolescing
<table>
<thead>
<tr>
<th>Year</th>
<th>Total*</th>
<th>%</th>
<th>Manufacturing</th>
<th>Mining</th>
<th>Petroleum</th>
<th>RR's</th>
<th>Utilities</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1897</td>
<td>200</td>
<td>100</td>
<td>---</td>
<td>34.0</td>
<td>0.5</td>
<td>55.5</td>
<td>3.0</td>
<td>7.0</td>
</tr>
<tr>
<td>1908</td>
<td>416</td>
<td>100</td>
<td>2.4</td>
<td>56.2</td>
<td>12.0</td>
<td>13.7</td>
<td>5.3</td>
<td>10.4</td>
</tr>
<tr>
<td>1914</td>
<td>587</td>
<td>100</td>
<td>1.7</td>
<td>51.4</td>
<td>14.5</td>
<td>18.7</td>
<td>5.6</td>
<td>8.1</td>
</tr>
<tr>
<td>1919</td>
<td>644</td>
<td>100</td>
<td>1.2</td>
<td>34.5</td>
<td>31.0</td>
<td>19.1</td>
<td>4.9</td>
<td>9.3</td>
</tr>
<tr>
<td>1929</td>
<td>709</td>
<td>100</td>
<td>0.8</td>
<td>35.0</td>
<td>29.0</td>
<td>11.6</td>
<td>12.7</td>
<td>10.9</td>
</tr>
<tr>
<td>1940</td>
<td>357</td>
<td>100</td>
<td>2.8</td>
<td>47.0</td>
<td>11.8</td>
<td>**</td>
<td>32.5</td>
<td>5.9</td>
</tr>
<tr>
<td>1946</td>
<td>316</td>
<td>100</td>
<td>21.0</td>
<td>35.0</td>
<td>2.0</td>
<td>**</td>
<td>35.0</td>
<td>6.0</td>
</tr>
<tr>
<td>1950</td>
<td>415</td>
<td>100</td>
<td>32.0</td>
<td>29.0</td>
<td>3.0</td>
<td>**</td>
<td>26.0</td>
<td>10.0</td>
</tr>
<tr>
<td>1960</td>
<td>795</td>
<td>100</td>
<td>49.0</td>
<td>16.0</td>
<td>4.0</td>
<td>**</td>
<td>15.0</td>
<td>16.0</td>
</tr>
<tr>
<td>1966</td>
<td>1248</td>
<td>100</td>
<td>64.0</td>
<td>9.0</td>
<td>3.0</td>
<td>**</td>
<td>2.0</td>
<td>21.0</td>
</tr>
<tr>
<td>Year</td>
<td>Investment</td>
<td>Owned</td>
<td>Direct</td>
<td>Indirect</td>
<td>Committed</td>
<td>Total</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>-------</td>
<td>--------</td>
<td>----------</td>
<td>-----------</td>
<td>-------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>1786</td>
<td>100</td>
<td>67.0</td>
<td>9.0</td>
<td>2.0</td>
<td>***</td>
<td>22.0</td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>2025</td>
<td>100</td>
<td>69.0</td>
<td>6.0</td>
<td>2.0</td>
<td>***</td>
<td>23.0</td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td>3712</td>
<td>100</td>
<td>74.0</td>
<td>3.0</td>
<td>1.0</td>
<td>***</td>
<td>22.0</td>
<td></td>
</tr>
</tbody>
</table>


*Total in millions of U.S. dollars.
**Railroads and utilities combined after 1940.
***Railroads, utilities, and other combined after 1970.
Given the continued and expanding presence of foreign investors in manufacturing industries producing for the domestic market, I argue that the relationship in manufacturing for the domestic market is better characterized as a "renewable" bargain. What are the characteristics of the renewable bargain? It is most appropriate for an understanding of the industries in the manufacturing sector. It is particularly appropriate in industries that produce consumer goods, whether those are consumer durables like automobiles, or non-durables like food products. According to the renewable bargain, firms enter a new market in a relatively weak position, since their established clientele is small. If there is little competition the firm may rapidly establish a strong position in the market; if many other firms also produce the same product, the firm will have to work harder to establish

bargain as one of the most enduring insights of his earlier book, see "Sovereignty at Bay: Ten Years After," International Organization, 35:3 (summer 1981), pp. 517-529.

17. Arguments supporting the renewable bargain thesis include: Gary Gereffi and Richard N. Newfarmer, "The State and International Oligopolies"; Douglas Bennett and Kenneth Sharpe, "Agenda Setting and Bargaining Power: The Mexican State versus Transnational Automobile Corporations," World Politics 32:1 (Oct. 1979), pp. 57-89; Van R. Whiting, Jr., "Transnational Enterprise and the State"; Lynn Mytelka, Regional Development in a Global Economy (New Haven, Conn., 1979); Thomas J. Biersteker, "The Illusion of State Power: Transnational Corporations and the Neutralization of Host-Country Legislation," Journal of Peace Research 17:3 (1980), pp. 207-221. For arguments against, see Vernon, Storm over the Multinationals note 2, and Joseph M. Grieco, "Between Dependency and Autonomy: India's Experience with the International Computer Industry," International Organization 36:3 (summer 1982), pp. 57-89. Vernon's argument seems to fly in the face of the evidence unless a much restricted definition of the obsolescing bargain is adopted, stopping far short of state ownership. Grieco's argument suggests that it is appropriate to consider entry and participation in an industry at an intermediate stage between high and low bargaining power. He points out that India's bargaining power came largely from changes in the structure of the international industry, an argument that is compatible with my emphasis on structural characteristics. He also acknowledges the importance of India's size; the attractiveness of the Indian market increased India's leverage. The "renewable bargain" implies that bargaining takes place, but stops short of fade-out.

18. I first raised the issue of a renewable bargain that operated differently from the "obsolescing bargain" when I presented my research proposal to the Working Group on Transnational Corporations of the Social Science Research Council in New Haven in November 1976. The notion is stated in skeletal form in my paper presented to the World Congress of the International Political Science Association in August 1979: "Politics and the Regulation of Transnational Corporations in Mexico."
the prestige of its products and to assure its share of the market. It is for this reason that many firms are willing to establish a base in the country that represents an attractive market potential, even though the firm may absorb some losses for many years.

State regulatory potential is likely to be greatest on the entry of firms into the market. At that point firms are anxious to establish a foothold and to begin to create goodwill for their products. However, precisely because the market is undeveloped and the new producers promise to produce goods that were not previously available or were previously imported, the state is not likely to restrict entry. Once transnational enterprises in the consumer goods industries are well established, and particularly if the market for specific goods can be characterized as an oligopoly in which trademarks and product differentiation serve as major barriers to the entry of new firms, displacement of the industry leaders by competition or by state action is difficult. New firms must compete for the attention and product loyalty of consumers whose preferences already have been influenced, and there are strong international norms against limitations or nationalization of trademarks and the goodwill they represent. Unlike cases of investment in raw materials, where the value of the initial investment declines over time, the value of goodwill as an asset tends to increase over time. Because trademarks in every country are indefinitely renewable, there is no reason to expect firm power to decline. Enterprises in the food processing industry, for example, often favor contracts for technology and trademarks for which the term is indefinite. This suggests that in some cases the renewable bargain may even become a self-renewing bargain.

The renewable bargain is consistent with the transnational enterprise behavior described as "oligopolistic reaction." Consumer goods producers will be anxious to get established in large markets, and if one firm threatens to establish a large market share or to increase its share, other transnational enterprises will want to establish themselves as well, in order to stabilize market shares within the oligopoly. Work by Thomas Horts has shown that firms for which trademarks and advertising expenditures are important are among those industries in the manufacturing sector most likely to invest abroad.

Bennett and Sharpe have suggested that the renewable bargain functions in the automobile industry; other studies indicate results compatible with this model for the pharmaceutical industry and for the tobacco industry. Bennett and Sharpe

conclude their study of the automobile industry in Mexico as follows:

In a high-technology, consumer-goods manufacturing sector, such as the automobile industry, the situation (of the obsolescing bargain) is often reversed. Access to the domestic market is the state's principal basis of bargaining power, and can be used most effectively at the point of initial investment. After that, the firms are entrenched in the host country through their relationships with suppliers, distributors, labor and consumers. Because such manufacturing enterprises are integrated in the local economy to a far higher degree than resource extractors, they establish relationships within the host country which significantly enhance their bargaining power, both by reinforcing the host country's needs for their kind of production and their products and by being able to mobilize domestic allies, and so long as the industry is dependent upon external sources of technology, the possibility of nationalization by the host country is not a credible threat.  

Though Bennett and Sharpe point to consumer loyalty as an element of the strength of transnational enterprises in consumer goods manufacturing, their primary emphasis is on technology. Evidence from the food industry indicates however that the role of technology is overemphasized. The food processing industry is not a high technology industry. If technology were the crucial variable, transnational enterprises producing food products would have been displaced long ago. Both the obsolescing bargain model and Bennett and Sharpe's model emphasizing technology predict that producers of canned fruits and vegetables, canned milk products, breakfast cereals, or pasta products would have been displaced from the Mexican market. They have not been displaced: Del Monte, Carnation, Kellogg's, and Anderson Clayton all continue to prosper in Mexico and in many other developing markets.

The state has become more active in its regulation of foreign manufacturers, especially by establishing Mexicanization as the norm for new investments after 1973 and by reviewing and negotiating contracts for foreign technology. The Law on Technology Transfer, adopted a few months before the Law on Foreign Investment, did indeed increase the intervention of the state: agreements that previously had been two-party

transactions between private firms were now three-party transactions involving the state. For the first time, contracts were required to be filed with a state agency, and state approval was required. But the state intervened only after a contractual agreement had been drawn up; it was thus most effective in reducing the payments abroad by local licensees for certain services (such as trademarks or technical assistance), or in eliminating clauses containing some standard restrictive business practices. The regulation was not designed to create an effective national technological search capacity, let alone to replace foreign technology with national or state-generated technology. The role of the state in this area was clearly regulatory, not competitive.

In the regulation of foreign direct investment in manufacturing, the regulatory pattern also differs from the pattern of nationalization found in raw materials and exports. For example, the commission charged with regulating foreign direct investment did push for majority Mexican ownership for new enterprises. And its record was credible: of 1,554 new foreign enterprises approved between the adoption of the law in 1973 and the end of 1980, 86.2 percent were enterprises in which foreign participation was less than 49 percent of ownership. Another 2.8 percent were owned in a greater percentage by foreigners, and an additional 171 enterprises (11 percent) were approved with 100-percent foreign ownership, as maquiladora or “in-bond” processing plants under the Border Industrialization Program (about which more below).

These figures do not reveal that the rule on Mexicanization was “grandfathered in.” Firms that had an investment in Mexico before passage of the law — and this included many of the most important international firms in manufacturing industries — were allowed to expand unimpeded as long as they did not open new establishments or enter entirely new lines of production. Extensions of existing product lines were permitted freely, and most requests to the Commission for new establishments from 1973 through 1980 were approved (94 of 140), as were a majority of requests for new product lines (18 of 31). Moreover, this includes only those firms that requested permission; other firms followed the strategy of expanding their production first and worrying about permission later. At the end of 1980, the Foreign Investment Commission reported 2,871 firms with foreign direct investment exceeding 49 percent, of a total of 5,431 firms with any foreign investment. These data clearly show that although

21. For an expanded discussion of technology transfer policy in Mexico, see Van R. Whiting, Jr., “The Politics of Technology Transfer in Mexico,” (La Jolla, Calif., 1983).

the state was exercising increased leverage, the outcome was
decidedly different from the pattern of nationalizations found in
the industries described under the "obsolescing bargain."

Few if any manufacturing firms have been required to pull
out due to these regulations. There has been some bargaining
over technology contracts and some increase in joint ventures,
but most foreign investors in the major manufacturing industries
aimed at the domestic market still are operating actively in Mex-
ico. The bargain may change at the margins, but it is renewed
and does not result in fade-out, as occurred in the raw materials
industries.

The Transnational Bargain

A completely different pattern obtains in the manufacturing
industries that are integrated into the international operations of
foreign firms. Most of these firms are in electronics or in textiles
and were set up as part of the "Border Industrialization Pro-
gram."23 The growth of these industries has been extraordinary
since 1965: from a dozen plants to over 600, and from 3,000
employees to more than 130,000 — mostly women (see table 3).

Since 1975, these in-bond assembly plants have produced
about 20 percent of the value of all Mexican manufactured
exports, and this rose to almost 29 percent (and $982 million) in
1981. Special provisions of the U.S. tariff code (items 806.30
and 807) allow for the entry of goods assembled from com-
ponents originating in the United States, with tax only on the

23. One of the earliest full descriptions of the border program is Donald
W. Baerresen's, The Border Industrialization Program in Mexico (Lexing-
ton, Mass., 1973). For case material and critiques, see Peter Baird and
Ed McCaughan, Beyond the Border: Mexico and the U.S. Today (New
York, 1979); debate and conflicting perspectives can be found in Van R.
Whiting, Jr., ed., Proceedings: Workshop on Mexico's Border Industrializa-
tion Program (Berkeley, Calif., 1982). For the most current data, see
Manuel Martínez de Campo, "Ventajas e inconvenientes de la actividad
maquiladora en México: algunos aspectos de la subcontractación inter-
nacional," Comercio Exterior 33:2 (Feb. 1983), pp. 146-151. See also
Laurie Kassman García, "Border Industries: Something for Everyone," R&D
Caribbean Basin Initiative (CBI) encourages foreign direct investment in
offshore processing industries. For a debate on the CBI, see the various
authors in the section entitled "Caribbean Basin Initiative," Foreign Policy
47 (summer 1982), pp. 114-138. For an earlier article by one who later
went on to serve as Undersecretary of Commerce under de la Madrid, see
René Villarreal, "The Policy of Import Substituting Industrialization,
1929-1975," in José Luis Reyna and Richard S. Weinert, eds., Authoritari-
### TABLE 3
GENERAL DATA ON IN-BOND PROCESSING PLANTS IN MEXICO, 1965-1981

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Plants</th>
<th>Number of Workers</th>
<th>Workers per Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>12</td>
<td>3,000</td>
<td>250.0</td>
</tr>
<tr>
<td>1969</td>
<td>152</td>
<td>17,000</td>
<td>111.8</td>
</tr>
<tr>
<td>1970</td>
<td>120</td>
<td>20,327</td>
<td>169.4</td>
</tr>
<tr>
<td>1971</td>
<td>209</td>
<td>20,000</td>
<td>95.7</td>
</tr>
<tr>
<td>1972</td>
<td>339</td>
<td>48,060</td>
<td>141.8</td>
</tr>
<tr>
<td>1973</td>
<td>257</td>
<td>64,330</td>
<td>250.3</td>
</tr>
<tr>
<td>1974</td>
<td>455</td>
<td>75,977</td>
<td>167.0</td>
</tr>
<tr>
<td>1975</td>
<td>454</td>
<td>67,213</td>
<td>148.0</td>
</tr>
<tr>
<td>1976</td>
<td>448</td>
<td>74,496</td>
<td>166.3</td>
</tr>
<tr>
<td>1977</td>
<td>443</td>
<td>78,433</td>
<td>177.0</td>
</tr>
<tr>
<td>1978</td>
<td>457</td>
<td>90,704</td>
<td>198.5</td>
</tr>
<tr>
<td>1979</td>
<td>540</td>
<td>111,365</td>
<td>206.2</td>
</tr>
<tr>
<td>1980</td>
<td>620</td>
<td>119,546</td>
<td>192.8</td>
</tr>
<tr>
<td>1981</td>
<td>605</td>
<td>130,973</td>
<td>216.5</td>
</tr>
</tbody>
</table>

*a* Other official figures are 108 plants and 15,858 workers.

*b* Other figures are 251 plants and 29,214 workers.

*c* Data for 1981 are from the American Chamber of Commerce of Mexico. All other data are from the Ministry of Planning and Budget and the Ministry of Patrimony and Industrial Development.


value added abroad. Mexico is the primary beneficiary of these provisions, followed by the Asian “gang of four”: Taiwan, Singapore, Hong Kong, and South Korea, in decreasing order. In 1980, almost three-quarters of the value added was in the electrical and electronic products area (and within this, televisions and television parts were most important). Following far behind in terms of dutiable value added were automotive products, office machines, apparel, and toys and games.24

24. See the presentation by Richard Bolin, one of the founders of the Border Industrialization Program in Mexico, summarized in Van R. Whiting, Jr., ed., *Proceedings*, especially pp. 6-9.
In this industry, production is geared to exports, and the Mexican government benefits by having increased foreign exchange. But little of the process is controlled by Mexico. Under the special regulations that govern this sector, foreign ownership of 100 percent is allowed. Most of the technology is foreign, since the processes are integrated into home company operations. And few of the inputs are produced locally: only one or two percent. The relationship is indeed a "transnational" bargain: the production process is integrated, production is shared, and the industry as a whole is accurately described as transnational.

Conclusion

Mexico is unlikely to discourage foreign direct investors in the future. Indeed, after a temporary decline in the mid-1970s, direct investment is again on the rise. Mexico needs foreign capital, and foreign firms want to invest in Mexico. Foreign investment will continue to be economically important, and it will continue to be a politically volatile issue. However, the outcomes are not well predicted by the "obsolescing bargain" thesis: state power is not likely to increase across the board. Rather, different patterns can be distinguished in different industrial sectors.

In short, the basic relationships between foreign investors and the Mexican state tend to fall into three patterns, reflecting characteristics of the respective markets. However, these patterns do evolve over time, and the financial crisis and balance-of-payments needs may modify the pattern to some extent.

There are only so many ways to increase the available foreign exchange that Mexico so critically needs: 1) reduce demand through forced austerity, limiting imports of goods and services, reducing government expenditures, and maintaining an undervalued peso; 2) attract additional international loans, from private or public sources; 3) attract more foreign direct investment; and 4) increase exports. Of course, options 2 and 3 represent capital flows, and so are not long-term solutions to the problem, except to the extent that the investments either reduce imports or increase exports. In the aftermath of the 1982 financial crisis, the Mexican government (under agreement with the International Monetary Fund) has relied most heavily on a strict austerity program. But this alone does not represent a long-term strategy to cope with the balance-of-payments problem. What are the strategies that Mexico is following, what is the role of foreign investment in each, and what is the likely effect of the austerity program on each?

Since 1977, Mexico has returned strongly to the export of raw materials, especially oil, and the development of
infrastructure needed to support those exports. As a result, exports of hydrocarbons accounted in 1982 for over half of all exports (goods, services, and factor payments) and over three-fourths of all exports of merchandise. Much of the public investment of the late 1970s went directly or indirectly into the expansion of hydrocarbon production capacity. Foreign direct investment is not directly allowed in the oil industry, but foreign expertise has played an important role in engineering, consulting, and related services.25 Mexico will need to continue to rely in part on a strategy of raw material exports. But many of the goods and services needed for the expansion of the industry, from specialty steels to pollution specialists, must be imported. Although some of these areas provide new opportunities for import substitution, in other areas local substitutes are far in the future. In the meantime, the extreme austerity is hindering the development of a viable export sector.

As the foregoing suggests, the strategy of import substitution is changing as well. In particular, Mexico undertook major studies in the last administration (jointly sponsored by Nacional Financiera and the United Nations Industrial Development Organization) to develop import substitution industries in capital goods. Mexico needs to make the shift to more advanced import substitution industries. This is already beginning to occur, and as in the past, foreign investors are playing a role. Ford is a minority partner in a major new tractor plant; Mexicana de Cobre has found a Japanese partner, Marubeni, for a new copper refining plant. If you believe that “necessity is the mother of invention,” you may share a certain optimism: the recession and the crisis could in fact stimulate local industrialization, producing products that are no longer available abroad due to shortages of foreign exchange. But even this requires some imports. Even import-substituting industries can be held up by bottlenecks of foreign inputs or components.

The state is actively promoting the production of manufactured goods for export. Whether part of the Border Program or not, exceptions to the ownership regulations can be had for enterprising exporters. Hewlett-Packard will be opening a fully foreign-owned minicomputer manufacturing plant in Guadalajara; Yazaki Corporation (Japan) is planning a production-sharing facility in Juárez (Mexico) and El Paso (U.S.) to produce automobile wiring. Ford Motor Company will be exporting four-cylinder automobile engines. Mexico promotes tourism (in a sense,

25. Foreign direct investment in the service industries (advertising, engineering, consulting, etc.) is likely the next area in which state regulation will expand in Mexico. These industries have not been regulated or Mexicanized in the way that manufacturing industries have: their bargains are ripe for renewal.
exporting quality of life): Sheraton will expand its hotels in Mexico from six to eleven. The austerity program has helped control the “leakages” from shared production facilities on the border: as long as the peso is undervalued, workers are less likely to spend their earnings on the U.S. side of the border (and the wealthy are less likely to send their money abroad). But any leverage that Mexico might have had to increase local content or working conditions has evaporated with the crisis, and for the moment Mexico is playing the role of promoter of export industries to the hilt.

The long-term solution to the Mexican balance-of-payments problem (of which debt service is now the biggest part) must rely on all three strategies of industrialization: expanding the capacity for raw material exports; “deepening” import substitution industries; and promoting exports. Foreign technology and foreign investment will play a role in each. But the short-term crisis first must be overcome. The reliance on government austerity and drastic restrictions on imports helped create a trade surplus in 1982. But such a severe austerity program is serving as a bottleneck for the long-term strategies.

Mexico is facing some strategic choices. The state will continue to act as owner, as regulator, and as promoter, and these roles will roughly correspond to the three sectors of raw material exports, import substituting industries, and manufactures for export. But the state cannot afford to expand in all areas at once. As the country looks ahead, the focus of debate will shift once again from lending to foreign investment, as structural rather than financial concerns become dominant.

26. Examples above are from IL&T-Mexico (New York, Apr. 1983). My thanks to the editor for providing me with a timely copy of this edition.

27. Much Mexican flight capital is already abroad, however, and the process of attracting it back home is similar to the process of promoting foreign direct investment — except that foreign investors will probably regain their confidence first.

28. The government, however, has not abandoned any of the regulations of foreign investment, as some had hoped, even though it may interpret them more flexibly. And a revision of the technology transfer law in early 1982 — before the crisis — brought contracts in the border industries under the coverage of the law.