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**THE DIFFERENTIAL IMPACT OF INTERNATIONAL INTEGRATION
ON LOCAL ECONOMIES: HOW ARE LAGGING
MEXICAN REGIONS PERFORMING?**

Abstract

This study analyzes the impact of the process of economic integration between Mexico and its northern neighbors on the economic performance of one of Mexico's most lagging Southern State economies. Overall, the empirical results substantiate what so far had been no more than mere conjectures regarding the impact of NAFTA on the most lagging Mexican regions. The State of Oaxaca has been unable indeed to share Mexico's impressive export-growth performance and inflows of foreign direct investment (FDI) of the 1990s. Neither the insignificant amount of FDI received by Oaxaca nor the increase in its small export-value level can be attributed to opportunities created by NAFTA. Most of this state's export growth is accounted for by a primary commodity whose production has no participation of foreign investment. Also, most FDI in Oaxaca has been allocated to non-trading sectors. This local scenario is consistent with the observed concurrence of interregional divergence or polarization and the process of integration into the North American economic bloc.

Resumen

Este estudio analiza el desempeño económico de una de las economías estatales más rezagadas del Sur de México en el contexto del proceso de integración económica entre México y sus vecinos del Norte. En general, los resultados empíricos prueban y profundizan sobre lo que hasta ahora habían sido solo conjeturas sobre el impacto del TLCAN sobre las regiones más rezagadas. El Estado de Oaxaca, ciertamente, no ha sido capaz de participar en el impresionante desempeño del crecimiento exportador y flujo de inversión extranjera directa (IED) ocurridos en México durante los 1990s. Ni el insignificante monto de IED recibida en Oaxaca ni el incremento del pequeño nivel del valor de sus exportaciones pueden ser atribuidos a las oportunidades creadas por el TLCAN. La mayor parte del crecimiento de las exportaciones de este estado es determinado por un producto primario cuya producción no tiene participación de inversión extranjera. Asimismo, la mayor parte de la IED en Oaxaca se ha dirigido hacia sectores no comerciales o no exportadores. Este escenario local es coherente con la concurrencia observada de una divergencia o polarización interregional y el proceso de integración de México dentro del bloque económico de Norteamérica.

*Introduction**

In the early 1980s, Mexico's long-standing inward-looking development strategy began to be dramatically reversed. A far-reaching trade liberalization program was implemented comprising sharp reductions in the import value subject to licensing, quick removal of official import reference prices, and substantial reductions of import tariffs. Throughout the 1980s, Mexico's restrictive regulations on foreign direct investment (FDI) were also gradually liberalized. The chief official objectives were to eliminate the economy's anti-export bias created by the import-substitution protectionist development strategy and to improve its export performance. Thus, the liberalization was implicitly expected to drive the allocation of resources as well as industrial production processes towards efficiency, the so-called process of industrial restructuring, which would provide the very basis to compete internationally.¹

With the activation of the North American Free Trade Agreement (NAFTA) on January 1, 1994, Mexico's commitment to integrate into a regional economic bloc with the U.S., by far its main trading partner, and Canada was taken to the fullest extent. The expected gains for Mexico center on the attraction of new FDI, as the country will have guaranteed stable access to the large U.S. market. NAFTA was expected to further encourage the location of production in Mexico by important transnational firms, mainly U.S.-based, as such movement would improve the efficiency of their global and/or North American sourcing network. This corporate strategy in fact had been undertaken since the early-1980s by Mexican subsidiaries in the automotive and computer industries, which led to significant increases of trade. In general, NAFTA was expected to improve Mexico's business climate and attractiveness for international investment significantly *vis-à-vis* those of other newly industrialized countries. Moreover, NAFTA was the only relevant alternative to attract the kind of foreign capital that would enable Mexico to handle a balance of payments position (caused by the trade and exchange rate policies) otherwise unmanageable.

Mexico's non-oil exports, mainly manufactures, indeed recorded unprecedented growth since the mid-1980s. Between 1985 and 1993 they increased almost fourfold, from \$12.2 to 44.5 billion,² and more than doubled during 1994-

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¹ Ros (1993) and UNCTC (1992) evaluate the economic impact of the reforms to trade and foreign investment regimes and of the implementation of sectoral programs during the 1980s. Tybout and Westbrook (1992) using plant-level data examine the productivity gains derived from trade liberalization.

² There is indication that during the late 1980s, trade liberalization was not the main factor behind the export performance. The faster and/or most important export-growth originated in industries still protected under specific programs (automobile and computer industries) as well as in

1998 reaching \$110.4 billion in the last year. Concurrently, there was a structural change as the share of non-oil exports in total exports increased from 45 to 86 percent during 1985-1993, and to 95 percent in 1998. Also there can be no doubt that NAFTA triggered FDI inflows into Mexico. During the first five years of operation of NAFTA (1994-1998), Mexico was the destination of \$53 billion invested in productive activities, which represents almost a threefold increase compared with the five years previous to the activation of the agreement. Recently, the one hundred largest planned investments for 1999 by Mexican subsidiaries of transnational corporations were officially announced. They amount to \$12 billion, of which 47 percent is accounted for by automobiles, energy (12%), food & beverages (8%) and textile (5%). Reportedly, U.S.-based firms account for 58 percent of the total planned amount (Expansión 1999).

Research on the *spatial or interregional* impact of the economic integration in Mexico so far has not gone beyond non-academic analysis. It is not rare to find newspaper and magazine reports showing the superior ability of Northern localities *vis-à-vis* Southern areas to capture most of the benefits of NAFTA. These reports invariably rely on a few interviews with firm managers, and always select some of the most dynamic Northern areas. There are also a good number of pseudoacademic essays dominated by pessimistic, rather dogmatic opinions regarding the effect of NAFTA on Mexico's interregional contrasts, which, however, offer no substantiation for their assertions. Invariably, the explanations of the superior performance of Northern states/cities found in these types of work emphasize advantages derived from proximity to the U.S. market or the fact that these areas host most of the maquiladora industry, traditional and high-tech,³ which accounts for a large part of Mexico's exports (41 percent of total exports and 48 percent of manufacturing exports in 1997). Notwithstanding the fairness of these general arguments, there is a

the maquiladora industry which has been traditionally under a free trade regime (Ros 1992, pp, 22-25). Nevertheless, excluding these two industry segments, the annual growth rate of non-oil exports during 1982-1988 declines only from 19.5 to 15.5 percent, which still is impressive.

³ For the traditional maquiladoras, characterized by a low level of local integration, a Northern border location indeed implies savings in transportation costs and a faster supply chain upstream to twin plants and parent companies on the American side. Accordingly almost 90 percent of these plants are located in Northern border states (the number of maquiladoras increased from 760 in 1985 to 1,703 in 1990, and to 2,867 in 1997). The location of the industrial complexes integrated by large high-tech export-oriented automotive and electronics maquiladoras and their numerous suppliers, reveals a preference for North and Central-north states. The suppliers have followed and tended to locate in proximity to the leading plants, as required by the flexible systems and just-in-time techniques characterizing the production organization of these recently developed industrial complexes. The other internationally competitive and export-oriented sector comprises the most prominent Mexican holdings, which concentrate in the cement, steel and glass industries. They export directly as well as indirectly as suppliers of the major carmakers and other maquiladoras. It seems that the organization of production of these multidivisional, vertically integrated holdings involves a network of suppliers much larger than that of the flexible complexes. See Ramírez (1998) for a detailed differentiation of the industrial organization frameworks applied by the most prominent export-oriented sectors of the Mexican manufacturing industry, and how these frameworks influence location.

possibility that although Northern areas actually are the chief beneficiaries of economic integration, in terms of absolute additional output and exports, it is not to the detriment of the relative performance of the backward regions of the South. It is also possible that while polarization tendencies in general have actually taken place, a *particular* backward area, contrary to conventional expectations, is not experiencing a below-average output and export growth performance due to its specific economic environment and characteristics. There is empirical evidence supporting the plausibility of these outcomes (Martin 1991, and Peschel 1982).

Hence, without *a priori* expectations, the objective of this study is to evaluate the economic performance of one of Mexico's most lagging Southern state economies, Oaxaca, amidst the process of economic integration between Mexico and its Northern neighbors. That is, the impact on Mexico's backward regions resulting from the process of economic integration will be approached through the experience of the State of Oaxaca. A full transference of findings for this State to the rest of Mexico's Southern region is not inappropriate. Nevertheless, to the extent that the characteristics of Oaxaca's economy are quite similar to those of other Southern states, the results may provide a close idea of the effect economic integration has had on other lagging Southern areas. This exercise is intended as a first modest step to further encourage more formal and general empirical analysis, which however still is constrained by the lack of relevant regional data.

It was found that amidst Mexico's impressive export-growth performance and sizable inflows of foreign direct investment (FDI) during the 1990s, Oaxaca's economy has been unable to share these NAFTA-related benefits. First, the FDI received by Oaxaca has been insignificant and most of it cannot be attributed to the trade opportunities or advantages created for Mexico by the economic integration. Second, the close-to-average increase in Oaxaca's small export-value level has been largely accounted for by a primary commodity (green coffee) whose production has no participation of foreign investors. And on the other hand, the increase in coffee exports cannot be attributed to NAFTA. In short, it seems that Oaxaca's ability to materialize the opportunities that the economic integration indeed has opened for Mexico as a whole is impaired.

The net gains accruing to a national economy as a consequence of engaging in a process of economic integration with other nations are not likely to be evenly distributed across its sub-national regions. It is often assumed, for instance, that within the integrating national economies, backward regions would suffer a setback, whereas the most industrialized regions would be further stimulated. Arguably, absolute advantages conferred to the traditionally industrial regions by their accumulated agglomeration economies enable them to capture most of the benefits, e.g., foreign investment flows and increasing net exports. Thus, an intensification of polarization tendencies is a likely outcome.

Another important factor influencing regional performance is the extent to which the regional industrial mix matches the nation's specialization and change in trading patterns that follows integration, which in turn are defined, once the pressure

of international competition increases, by the nation's comparative advantages. Thus, those regions specializing in industries favored by the nation's comparative advantages are expected to flourish, whereas those with a high share in industries where imports would make substantial inroads are likely to suffer. It should be noted though that a nation's largest industrial agglomerations do not necessarily exhibit a favorable specialization.

The long-run performance of a region will also depend on the ability of local firms to undertake survival or rationalization measures (e.g., technology improvements, organizational restructuring, product specialization, new products, and new markets). A mix of under- and over-performing firms and a continuous firm-rotation are likely to be found in most industries whether or not they are favored by the nation's comparative advantages. For a particular region, then it is possible that new entries and the growth of existing firms more than offset losses (decline and disappearance of firms), even in those industries not favored by the nation's ongoing specialization. This would reflect, in part, the local economic environment, a region-specific set of factors, which also condition the ability of firms to adjust to the conditions imposed by economic integration.

Last, but not least, there is a distance impact reflecting transportation costs and hence market access, which is expected to confer advantages to regions located closer to the center of the enlarged market resulting from the integration. A role is also assigned to the degree in which production is already oriented toward export markets at the outset of the integration. For a particular region, the greater the export-orientation of its productive structure the greater its ability to capture the benefits of integration.

Once the channels through which international economic integration can affect the performance of sub-national regions have been defined, the strategy to carry out this study is as follows. First, the conformation of Mexico's historical pattern of location of economic activity and population and underlying factors is briefly described, so as to give an idea of the interregional differentials in economic potential at the outset of the process of integration; the so-called initial conditions. Second, the evolution of Mexico's interregional (inter-state) differentials in both absolute output and output per capita, as a proxy of income, over a period previous to and concurrent with the process of economic integration, is analyzed. These inter-state convergent/divergent trends provide the context for an assessment of the relative economic development performance of the State of Oaxaca. Careful attention is paid to the emergence of turning points in the local and inter-state trends once the process of economic integration set in. Fourth, the export performance and FDI inflows over a relevant period for both Mexico and the State of Oaxaca is analyzed, so as to determine whether there were substantive changes in trends before and after NAFTA. The aim is to assess Oaxaca's relative performance and determine whether it is associated with NAFTA. Finally, some inferences are drawn regarding the association of FDI inflows and export performance with economic growth for both Oaxaca and Mexico as a whole.

The Historical Pattern of Regional Economic Growth⁴

The range of potential location alternatives that businesses/economic activity may consider is severely constrained by the inertia of the historical pattern of urban-industrialization. As empirically shown by Friedmann (1966, Ch. 6) the urban/regional hierarchy, which exhibits a remarkable stability over time, is largely determined by (1) physiographic features, which influence the early regional distribution of industry and population, (2) the functional role of the main urban centers in national development, and (3) the much faster rate of expansion of urban areas relative to rural ones.⁵ Moreover, despite the development of communication and transport infrastructure, and interregional economic linkages as the process of national development proceeds, the initial pattern of urban-industrialization and the nature of the urban-rural relationship do not change significantly. That is, once the urban-industrial hierarchy is established, it tends to be perpetuated and significant modifications can be achieved only over rather long periods. Arguably, such a hierarchy, which reflects the interregional differentials in economic potential, will constrain the ability of lagging regions to capture the opportunities derived from economic integration.

In the last quarter of the nineteenth century, Mexico City, Mexico's largest urban concentration, had already a population four times as large as that of the second largest city, Guadalajara (Central-west), and benefited from the most sophisticated urban infrastructure (Hernández 1985, p. 65). Hence, most of the incipient industrial development was also concentrated in Mexico City. The exceptions were limited to the development of primary produce industries (i.e., first-processing of mining and agricultural commodities) in a reduced number of Central-region and Northern locations, and the relative importance achieved by the basic metals industry in the City of Monterrey (Northeast), and by consumer goods industries in Guadalajara (Central-west).

As the industrialization stage of national development proceeded throughout the 1940-1970 period, the tendency of economic activity to concentrate in the Metro Area of Mexico City (MAMC) and, to a lesser extent, in Guadalajara and Monterrey (Mexico's second and third largest cities) became stronger.⁶ Economic activity elsewhere remained rather limited, except for a third-tier group of cities with a long

⁴ This section draws heavily on Tamayo (1997), pp. 11-17.

⁵ Friedmann reaches that conclusion through the analysis of Venezuela's case. A generalization of conclusions is possible, to the extent that Venezuela's pattern of urbanization and industrialization and its determinants resembles closely those observed in most Latin American economies. That study, a classic of regional planning, focuses on the relationship between the pattern of spatial integration of the national economy and the "take-off" stage of national development—i.e., the process of urbanization, the consolidation of Caracas as the central location, and the eventual emergence of secondary clusters of cities in the vicinity of both Caracas and the seaport of Maracaibo (West).

⁶ The share of Mexico City in manufacturing value added increased from 32.8 percent in 1945 to 48.6 percent in 1970. In absolute terms, Mexico City's real manufacturing value added increased from 1,049 to 18,287 million pesos between 1940 and 1970 (Garza 1983).

industrial tradition such as Puebla (Central region), León (Central-west), and the seaports of Veracruz (Gulf-east) and Tampico-Madero (Gulf-northeast). In the 1960s, industrial growth accelerated in a number of mid-sized cities located in the immediate area of influence of the MAMC, as well as in some Northern cities bordering the U.S.⁷ This regional pattern of industrial growth, with remarkable interregional disparities was strongly shaped by the spatial configuration of the national transportation network, which in turn responded to the objective of strengthening the linkages between the leading industries and their domestic and external markets.⁸ The MAMC became the hub of a northward oriented transportation network. Connection to regions south of the MAMC traditionally has remained rather underdeveloped, except for very recent visible improvements in highways. This was the prime basis for the consolidation of the urban-industrial hierarchy characterized by an overwhelming domination of the MAMC, and sizable population and production gaps between the MAMC and a reduced number of secondary cities, as well as between the latter and a much larger number of small cities.

There are other compounding factors though. During the industrialization stage, driven by the objectives of national aggregated growth and efficiency, the spatial allocation of public investment in urban infrastructure tended to favor the few pre-eminent urban-industrial areas. Palacios (1989) shows that between 1970 and 1982 the inter-state distribution of public investment in economic and social infrastructure still showed a high positive correlation with the inter-state distribution of GDP. No significant changes to that pattern occurred throughout the 1980s and

⁷ Between 1930 and 1950, the share of Mexico City in national manufacturing output value remained stable around 30 percent. It was distantly followed by the states of Veracruz (Gulf-east) and Nuevo León (Northeast), whose shares during the same period leveled-off around 10 and 8 percent, respectively. The vast region of the Northern states bordering Texas, as a whole, had achieved some importance since the late 1930s. In 1945 and 1950, the border states of Nuevo León, Coahuila, Chihuahua and Tamaulipas altogether accounted for more than 20 percent of national manufacturing output value. Their individual shares ranked within the top ten in these census years (López Malo 1960). It should be noted that manufacturing activities within the quite extensive territory have traditionally been concentrated in a few urban areas. Other states with a somewhat important manufacturing activity were Mexico and Puebla (within the immediate area of influence of Mexico City) as well as Jalisco (Central-west), whose individual shares in output value also ranked within the top ten (López Malo 1960).

⁸ Most of the railroad network that exists today was developed during the pre-revolution period 1875-1910. It was oriented to connect Mexico City with the primary produce industry located in some Central-region and Northern locations, and reached the Northern border cities as primary commodities were largely exported to the U.S. In contrast, the railroad connection to the South remained rather underdeveloped, arguably because of this region's lack of mineral resources, mountainous topography, and remoteness from the U.S. market. Since the early 1930s, the development of the national highway system took priority over the railroad and followed the same northward orientation. The highway connection to regions south of the MAMC remained until very recently rather limited. Important urban centers declined economically while other cities acquired economic momentum depending on whether or not they were connected through the transport network. Hence the composition of the group of the twenty five largest cities experienced great changes between 1875 and 1910, whereas it had remained virtually unchanged between 1910 and 1970 (Hernández 1985, p. 63, citing World Bank sources).

during the early 1990s (Katz 1998, Ch. V, Tamayo 1996, Ch. 6). Likewise, the development of the production-distribution system of crude and fuel-oil, started in the late 1930s, was oriented to supply the few largest industrial agglomerations in which the demand was heavily concentrated. The production of crude-oil of course had to be established in the oil-rich region (Gulf of Mexico), but the largest storage capacity and volume handled was to be found in Mexico City and its conurbated area, by far the main consumption center. The storage and refining center of Monterrey with connection to the nearby Saltillo, was the second most important. By the early 1960s, there was only one other important extension of the network—a storage and refining center in Salamanca connecting to Guadalajara (Central-west), and Aguascalientes (Central-north). Today, many mid-sized cities still are not supplied directly.

Here, the point to emphasize is that Mexico's historical pattern of concentration of industrialization and urbanization still imposes severe constraints on the ability of many regions all over the country to overcome the critical threshold at which conditions favorable for a dynamic development of economic activity would originate. Such inability is particularly notorious and widespread in the South wherein the State of Oaxaca is located (see Figure 1). Under these circumstances the process of economic integration with the U.S. and Canada, in general, can be expected to result in increasing interregional economic disparities.

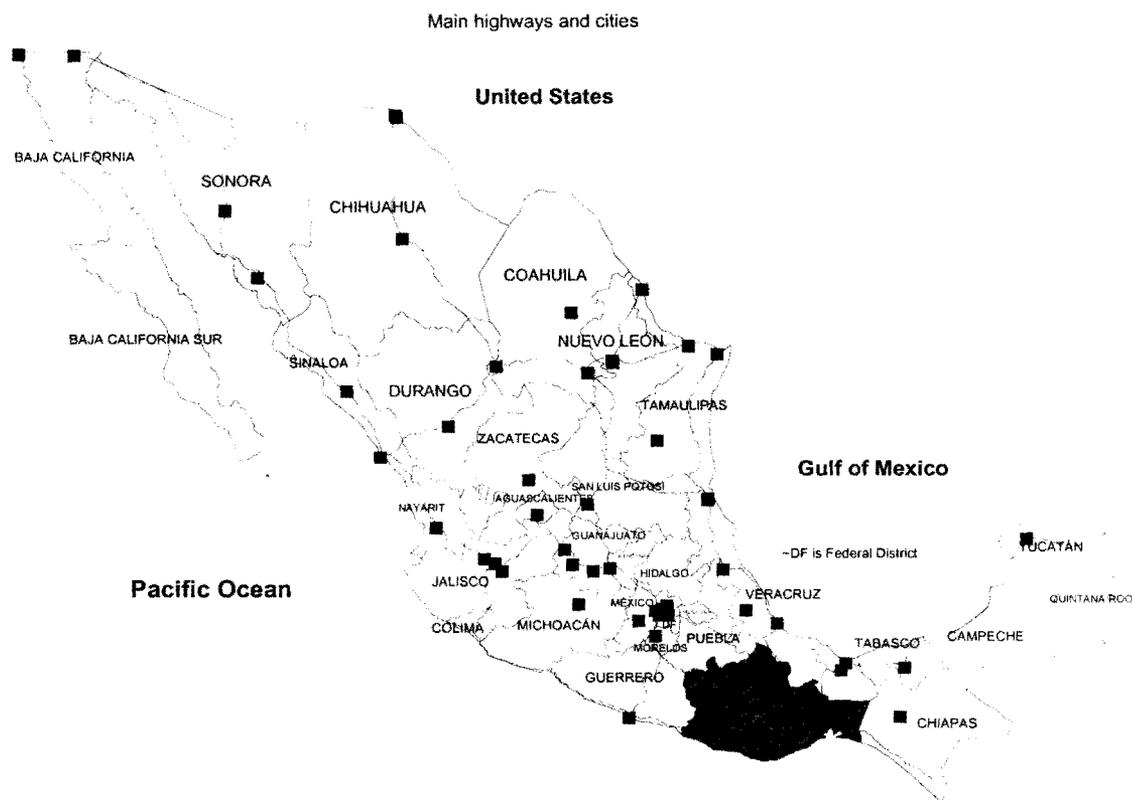
Interregional Economic Disparities: 1970-1996

Mexico's territorial concentration of economic activity

As shown in Table 1, Mexico's traditional pattern of high regional economic concentration, as described in the preceding section, overall has remained fairly stable through the mid-1990s. Between 1970 and 1996 the share of the five most economically prominent states in national GDP decreased slightly from 55.7 to 50.8 percent. Likewise, the participation of Mexico City (Federal District, hereafter), Mexico's economic core, declined from 27.6 to 22.8 percent only, whereas that of the 15 most economically lagging states, which includes Oaxaca, increased from 12.6 to 16.4 percent.

Two different phases can be clearly identified within the period. One characterized by a deconcentration trend, modest during 1970-1980 yet becoming somewhat important during the early 1980s, and the other showing, overall, the abatement of such a trend from 1985 to 1996. Economic activity shifted away from the Federal District during the deconcentration phase, 1970-1985, although it was not until the early 1980s that the relative decline of Mexico's economic core became particularly visible. It should be noted, however, that there was also a visible shift toward the State of Mexico, the nation's second largest economic center. As is well

Figure 1: Mexico's Territory and the Location of the State of Oaxaca



known, the shift toward the State of Mexico, which largely took place during 1970-1980, concentrated in its area conurbated with the Federal District. Thus, the deconcentration to some extent was just from the inner city to its suburbs. Nevertheless, there was a more sizable shift of economic activity toward most of the 15 most lagging states, including Oaxaca. Particularly notorious were the relative gains of Tabasco during 1970-1980, and Campeche during 1980-1985, which are accounted for by the rapid development of the oil industry by the Federal Government. Both states are located in the Southern part of the Gulf of Mexico.

Table 1
Evolution of the Regional Distribution of GDP by States 1970-1996^a
(percent shares)

States	1970	1980	1985	1988	1993	1996
<i>Top-five States in 1970</i>						
Federal District (C)	27.56	25.15	20.96	21.35	23.93	22.76
Mexico (C)	8.62	10.94	11.10	11.40	10.34	10.35
Jalisco (CW)	7.13	6.57	6.66	6.68	6.56	6.40
Veracruz (SE)	6.46	5.81	5.69	5.68	4.56	4.70
Nuevo Leon (N)	5.88	5.90	5.97	6.33	6.41	6.61
	<u>55.65</u>	<u>54.37</u>	<u>50.38</u>	<u>51.44</u>	<u>51.80</u>	<u>50.82</u>
<i>Bottom-fifteen states in 1970</i>						
Oaxaca (S)	1.48	1.41	1.77	1.71	1.67	1.60
Durango (CN)	1.40	1.27	1.48	1.32	1.30	1.34
Hidalgo (CT)	1.34	1.51	1.54	1.70	1.51	1.38
Tabasco (SE)	1.16	3.97	2.72	1.86	1.29	1.28
Yucatan (Y)	1.13	1.14	1.11	1.17	1.30	1.26
Morelos (CT)	1.08	1.08	1.19	1.28	1.49	1.32
Zacatecas (CN)	1.02	0.80	0.93	1.03	0.84	0.82
Nayarit (CW)	0.86	0.77	0.80	0.73	0.66	0.56
Queretaro (CT)	0.80	0.95	1.25	1.31	1.40	1.64
Aguascalientes (CN)	0.56	0.61	0.68	0.73	0.97	1.10
Campeche (Y)	0.44	0.48	3.94	2.23	1.19	1.31
Colima (CW)	0.43	0.47	0.54	0.53	0.55	0.53
Tlaxcala (CT)	0.40	0.46	0.64	0.57	0.51	0.52
Baja California Sur (NW)	0.37	0.41	0.40	0.47	0.53	0.54
Quintana Roo (Y)	0.18	0.40	0.51	0.72	1.29	1.21
	<u>12.65</u>	<u>15.73</u>	<u>19.50</u>	<u>17.33</u>	<u>16.50</u>	<u>16.41</u>

Source: Adapted from INEGI (1996 and 1999)

a) Ranked by states' GDP shares in 1970. There are 32 states.

(N) Northern border, (NW) Northwest-Pacific, (C) Capital region, (CT) Central, (CW) Central-west, (CN) Central-north, (S) Southern, (SE) Southeast, (Y) Yucatan Peninsula.

Conversely, between 1985 and 1996 the moderate overall deconcentration trend abated. The shares of the Federal District and Nuevo Leon in national GDP even increased during that period, whereas that of the 15 most lagging states altogether declined, particularly in the oil-producers. It should be noted though that despite the decline of the lagging states during 1985-1996, their share in 1996 still was visibly higher than in 1970 (see Table 1).

Within this traditional context of high regional economic concentration, the size of Oaxaca's economy has remained quite modest—its share in the national GDP during the whole period did not even reach two percent. This state fits indeed the general growth trends shown by the lagging state economies as a whole. Thus,

Oaxaca's small participation in national GDP, overall, exhibited an increasing trend during 1970-1985, which however was reversed thereafter. It is interesting that the abatement of the deconcentration trend coincides in time with the implementation of the dramatic trade and investment liberalization program. This may suggest that the opening of the Mexican economy has had a differential impact across regions/states, which to some extent has been to the detriment of the most lagging ones.

Mexico's interregional disparities in GDP per capita

Table 2 shows the traditional picture of remarkable interregional income disparities in Mexico. In 1970, the nation's largest economic center, the Federal District, also had the highest GDP per capita. Likewise, the GDP per capita of the second-tier yet relatively large state economies (i.e., Nuevo Leon, Mexico and Jalisco) together with that of all five Northern border states ranked within the top-ten. In contrast, within the bottom-ten rank, the GDP per capita of all three Southern states (i.e., Oaxaca, Chiapas and Guerrero) was particularly low (see Table 2).

Ignoring the atypical cases which became prominent since 1980 (i.e., Tabasco, Campeche and Quintana Roo),⁹ the Federal District retains the nation's highest GDP per capita throughout the 1970-1995 period, while Nuevo León ranks invariably in second place. Moreover, the states within the top-ten rank virtually are the same, although with some within-group ranking variations. The only notorious exceptions are the States of Mexico (Capital region) and Tamaulipas (Northern border) which fell out of the top-ten rank since 1985 and 1988, respectively. It is noticeable that the other five Northern border states remained within that group. Other important changes are the ascent of the States of Queretaro (Central region) and Colima (Central-west) to the top-ten rank since the mid-1980s and early 1990s, respectively. Even including the atypical cases, their GDP per capita ranked within the top-ten group (see Table 2).

The composition of the bottom-ten rank for the most presented no major changes persisting over time. The only notorious case is the State of San Luis Potosí whose improvement in the late 1980s has been sustained through the early 1990s. It actually overcame the bottom-ten rank barrier. The three Southern states (i.e., Oaxaca, Chiapas and Guerrero) remain for the most within the lower part of that rank. Moreover, the State of Oaxaca records the nation's lowest GDP per capita

⁹ Because of the national importance and high spatial concentration of the petroleum and petrochemical industries in the States of Tabasco and Campeche (located in the Southern part of the Gulf of Mexico) the inclusion of these industries tend to magnify inter-state income disparities as it yields quite high GDP per capita values for these states which otherwise would be classified as poor. Moreover, these industries generate a good deal of value added, while a high share of their revenues are used to finance federal government spending. The inclusion of tourism-related activities and construction of high importance and heavily concentrated in the State of Quintana Roo, produces a similar effect.

Table 2
Average Annual Growth Rate of Real Per Capita GDP and GDP-Index by States

States (Region)	1970		1970-1980		1980-1985		1985-1988		1988-1993			1995		
	Rank	Index ^b	Average Growth	1980		Average Growth	1985 Rank	Average Growth	1988 Rank	Average Growth	1993		Rank	Index ^b
				Rank	Index ^b						Rank	Index ^b		
<i>Top-Ten States in 1970^a</i>														
Federal District (C)	1°	194	3.02	2°	190	-0.14	2°	1.07	2°	5.36	2°	252	1°	249
Nuevo León (N)	2°	167	2.51	3°	157	0.95	4°	-0.40	3°	0.87	4°	168	4°	166
Baja California (N)	3°	146	1.84	4°	128	0.26	5°	-1.14	5°	-2.02	8°	112	8°	125
Sonora (N)	4°	139	0.59	8°	108	2.00	7°	0.08	8°	-0.28	5°	123	9°	122
Baja California Sur (NW)	5°	139	2.13	5°	126	-1.40	8°	0.98	7°	-0.68	10°	106	5°	136
Coahuila (N)	6°	120	2.62	7°	114	1.05	6°	0.25	6°	-0.66	6°	123	7°	128
Mexico (C)	7°	107	2.00	11°	96	0.50	15°	-1.96	15°	-1.83	17°	83	18°	79
Tamaulipas (N)	8°	106	2.88	9°	102	0.09	13°	-2.29	14°	-0.49	15°	89	13°	104
Jalisco (CW)	9°	104	2.78	10°	100	1.17	12°	-1.60	11°	0.09	12°	100	14°	97
Chihuahua (N)	10°	102	2.38	12°	94	1.67	14°	1.12	9°	-1.52	13°	99	6°	129
Queretaro (CT)						5.01	10°	-2.18	10°	0.84	9°	107	10°	110
Colima (CW)											7°	113	12°	106
Tabasco (SE)			16.71	1°	250	-7.89	3°	-15.15	12°	-4.78	16°	88	22°	70
Campeche (Y)						53.16	1°	-19.49	1°	-6.18	1°	338	2°	171
Quintana Roo (Y)			4.97	6°	119	-0.30	9°	3.55	4°	8.31	3°	203	3°	169
<i>Bottom-Ten States in 1970</i>														
Guanajuato (CW)	23°	72	2.14	26°	65	1.80	24°	-1.79	25°	1.70	22°	68	21°	71
Puebla (CT)	24°	62	3.56	25°	65	0.88	28°	-3.98	28°	1.45	26°	62	25°	62
San Luis Potosi (CN)	25°	59	3.08	27°	58	3.83	25°	1.38	20°	0.24	20°	73	20°	71
Hidalgo (CT)	26°	54	5.17	24°	65	1.13	26°	1.20	22°	-0.63	23°	68	26°	60
Michoacan (CW)	27°	53	3.67	28°	55	0.15	31°	0.39	30°	-0.81	30°	50	29°	59
Zacatecas (CN)	28°	52	2.17	31°	47	4.91	29°	1.80	26°	-2.85	29°	51	27°	60
Guerrero(S)	29°	52	3.37	30°	53	1.47	30°	0.26	29°	1.79	27°	59	28°	59
Chiapas (S)	30°	50	9.13	14°	87	-4.54	27°	-9.91	31°	-1.48	31°	43	31°	48
Tlaxcala (CT)	31°	46	5.08	29°	55	6.65	21°	-6.97	27°	-0.65	28°	57	30°	54
Oaxaca (S)	32°	36	4.37	32°	40	5.14	32°	-3.47	32°	1.17	32°	42	32°	47
México			3.14			0.96		-2.20		0.74				

Source: Average Annual Growth, adapted from Juan-Ramón and Rivera-Batiz (1996); Index ranking for 1985 and 1988, taken also from Juan-Ramón and Rivera-Batiz; GDP per capita indices, taken from INEGI (1985), OCDE (1998), and calculated from data in INEGI (1999 and 1996a).

a) States falling within this rank in any of the years considered are not excluded if they fall out of it thereafter. There are 32 states.

b) State GDP per capita indices (Nation = 100).

(N) Northern border, (NW) Northwest-Pacific, (C) Capital region, (CT) Central, (CW) Central-west, (CN) Central-north, (S) Southern, (SE) Southeast, (Y) Yucatan Peninsula.

throughout the whole period. Other states remaining among the poorest during the whole period are Tlaxcala (Central), Michoacan (Central-west) and Zacatecas (Central-north).

In short, all three Southern states have remained among the poorest, while the Federal District and the Northern border states have been able to preserve their position within the top-ten rank. On the other hand, a mix of poor and fairly rich states characterize in the Central, Central-north, and Central-west regions.

Convergence or divergence: what do we know?

Based on the behavior of the range between the states with the highest and lowest GDP per capita, it appears that between 1970 and 1985 the magnitude of the disparities narrowed. In 1970, the GDP per capita of the richest state (Federal District) was 5.4 times that of the poorest state (Oaxaca); the ratio of second richest to second poorest (Nuevo Leon and Tlaxcala, respectively) was 3.6. Excluding the atypical State of Tabasco, in 1980 these ratios dropped to 4.8 and 3.3, which reflects the faster GDP per capita growth in the poorest states during 1970-1980. As Table 2 reveals, except for the atypical states of Tabasco and Quintana Roo, all other states within the top-ten rank experienced a below-average GDP per capita growth during 1970-1980, whereas most states within the bottom-ten rank performed above the average. Chiapas, and to a lesser extent Oaxaca, Tlaxcala and Hidalgo, showed particularly high growth rates. Between 1980 and 1985, amidst the severe economic recession *the overall pattern of interregional convergence continued*. Most states within the top-ten rank continued to experience below-average GDP per capita growth rates—some even had negative growth—whereas most of those in the bottom-ten rank over-performed. Again, the performance of some lagging states, Oaxaca and Tlaxcala among others, was very dynamic.

However, from 1985 to 1993, *the suggested pattern of convergence started to be reversed*. Between 1985 and 1988, nine of the top-ten states had above-average performance (in some cases it meant a less pronounced negative growth), whereas only six of the bottom-ten states performed better than the nation (see Table 2). Unlike the previous period, some of the poorest states had particularly notorious negative growth rates, notably Chiapas, Tlaxcala and Oaxaca. During 1988-1993, most of the states in both groups alike performed below average. Nevertheless, the superior performance of the Federal District is particularly notorious. Hence, by 1993 the GDP per capita of the richest state, the Federal District (excluding the atypical states), was 6 fold that of the poorest state, Oaxaca; the ratio of second richest to second poorest (Nuevo Leon and Chiapas, respectively) was 3.9, in both cases higher than in 1980. By 1995, these ratios however declined slightly, but still higher than in 1980.

In agreement with the analysis above, a study by the IMF found that between 1970 and 1985 there was convergence across the Mexican states, whereas in the period 1985-1993 cross-state divergence was observed. That pattern also holds for

Northern and central states, individually. For the Southern states the only difference is that convergence seems to have begun in the mid-1970s (Juan-Ramón and Rivera-Batiz 1996). These trends are also confirmed by another study, which reveals that inter-state economic growth disparities narrowed during 1980-1985, but widened between 1985 and 1993 (OCDE 1998, Ch. 2).¹⁰

Within this context of marked interregional income disparities, Oaxaca experienced an above-average GDP per capita growth throughout the period of convergence, notably between 1980 and 1985, and even during 1988-1995 amidst the divergence trends. In contrast, between 1985 and 1988 (within the period of divergence) Oaxaca, like the nation had a negative GDP per capita growth, but it was visibly higher in Oaxaca. Actually, Juan-Ramón and Rivera-Batiz report that for the whole period of divergence, 1985-1993, there was negative GDP per capita growth in Oaxaca (-0.70) which was higher than in the nation (-0.30). Then, at both levels negative growth in 1985-1988 more than offset positive growth in 1988-1993. Thus, the trend in Oaxaca which overall is very similar to that of the group of poor states is consistent with the convergence/divergence pattern.

Here, it is noticeable that the period in which the gap between rich and poor states widened (1985-1993), coincides with Mexico's far-reaching trade and investment liberalization, and advancement of the export-led development strategy. Notwithstanding, the slight decline in the richest/poorest ratios between 1993 and 1995, this may suggest that the most developed state economies have had a superior ability *vis-à-vis* the backward states to take advantage of the opportunities opened by the economic integration. It is indeed very likely that the most developed states, which are also the most dynamic, possess a favorable industrial specialization and relevant attributes for the location of businesses. These states may have, for instance, an important share in industries that benefit from the nation's comparative advantages and host important internationally competitive firms. They may possess handsome externalities derived from the agglomeration of particular industries in their territories. Some even have advantages derived from their proximity to the U.S. market and parent firms. Also, most of the few domestic firms that may have the means to successfully adjust to an increasing foreign competition and integrate into export-markets are likely to be located in developed states.

In the following sections an assessment is made of the State of Oaxaca's ability to materialize some of the potential benefits that economic integration brings about, such as increasing exports and inflows of FDI. Export performance and additional FDI inflows ultimately reflect the region's comparative advantages and particular economic environment. This exercise is intended to derive some

¹⁰ The IMF study analyzes the behavior of the average dispersion in real GDP per capita (RGDPpc) across states, as measured by its standard deviation, and the relation between average growth rates and levels of RGDPpc at the initial years using a logarithmic cross-section regression model. The OCDE study analyzes only percent changes of RGDPpc for five groups of states. These groups are defined not geographically but according to multiples of the standard deviation of RGDPpc. The States of Campeche and Tabasco were omitted as their GDPs oscillated notoriously, producing extreme values in the statistical analysis.

preliminary propositions regarding the association between the development performance of that lagging state economy, analyzed above, and the opening of the Mexican economy and further integration with the U.S. and Canada.

Export Performance

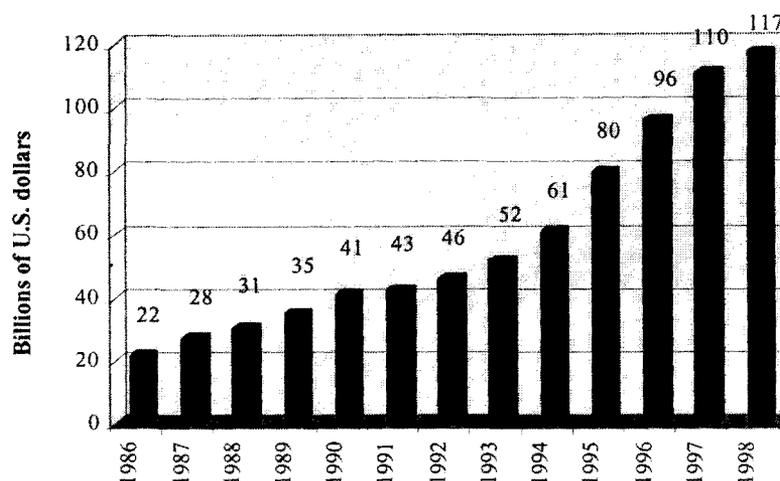
Between 1986 and 1993, before NAFTA went into effect, Mexico's annual exports rose from \$22 to \$52 billion, an average annual increase of 13 percent. By 1998, total export-value had increased to \$117 billion, which represent an annual average increment of 17.6 percent since 1994 (Graph 1). The upward trend in exports can be noticed even before the activation of the agreement (annual export growth averaged only 7 percent between 1981 and 1985), yet it seems that Mexico's export growth performance improved visibly after NAFTA. It is very likely though that the notorious growth of exports in 1995 and 1996 was importantly influenced by the sharp peso devaluation of the end of 1994. After all, the U.S. trade regime was already fairly open, except for some important non-tariff restrictions. Here, a key factor behind the export-performance was the increasing inflow of FDI after NAFTA went on effect, as will be seen in the following section.

There were some changes in the sectoral structure of exports between 1992 and 1997. The most prominent of these is that the share of manufacturing exports in total exports increased from 78 to 86 percent, largely at the expense of the contribution of mining exports, which decreased from 17 to 10 percent in that period (Table 3). The percent contribution of agricultural exports for the most part had no major changes although it declined in 1996 and 1997. In short, manufacturing exports, by far the most important, performed above the total average (total export-value grew at an annual average rate of 19 percent during 1992-97), whereas the opposite occurred with agricultural and mining exports over that period (Table 4).

Where does the State of Oaxaca stand within this context? Very much like its participation in national GDP, this Southern state's percent contribution to national export-value is minimal, never reaching two-tenths of a percentage point during the 1992-1997 period. Nonetheless, Oaxaca's total exports, on average, showed a steady increase from \$51 to 125 million over that period (Graph 2), which represent a performance close-to-average (Graph 3). Most of that growth is accounted for by agricultural exports, which increased from \$25 to \$100 million for the same period. However, as mentioned, the share of this small state economy in national export-value remained quite insignificant and virtually stagnant.

In contrast with the pre-eminence and increasing importance of manufacturing exports at the national level, within Oaxaca there was a striking shift from manufacturing to agricultural exports between 1992 and 1997. Agricultural export-value, on average, grew almost twice as fast as total export value and eight times faster than the value of manufacturing exports over that period (Table 5). Hence, as shown in Table 3, the share of the former declined pronouncedly from 48 to 17 percent, whereas that of the latter rose impressively from 49 to 80 percent.

Graph 1: Mexico's Export Growth 1986-1998



Source: Banco de México

Table 3
Distribution of Exports by sectors in Oaxaca and the Nation 1992-1997
(percentages)

Year	Manufactures		Agriculture		Mining		Others	
	Nation	Oaxaca	Nation	Oaxaca	Nation	Oaxaca	Nation	Oaxaca
1992	78.3	48.3	4.6	48.7	16.8	*	0.3	3.0
1993	81.9	39.0	4.8	58.4	13.0	0.0	0.2	2.6
1994	83.9	14.7	4.4	84.4	11.5	0.0	0.2	0.9
1995	84.7	18.4	5.0	79.9	10.0	0.2	0.2	1.4
1996	84.4	23.8	3.7	74.2	11.7	0.3	0.2	1.6
1997	86.5	16.7	3.5	80.3	9.8	0.3	0.2	2.7

Source: Based on data provided in Banco de México and Gobierno de Oaxaca (1998).

* Less than 0.1 percent

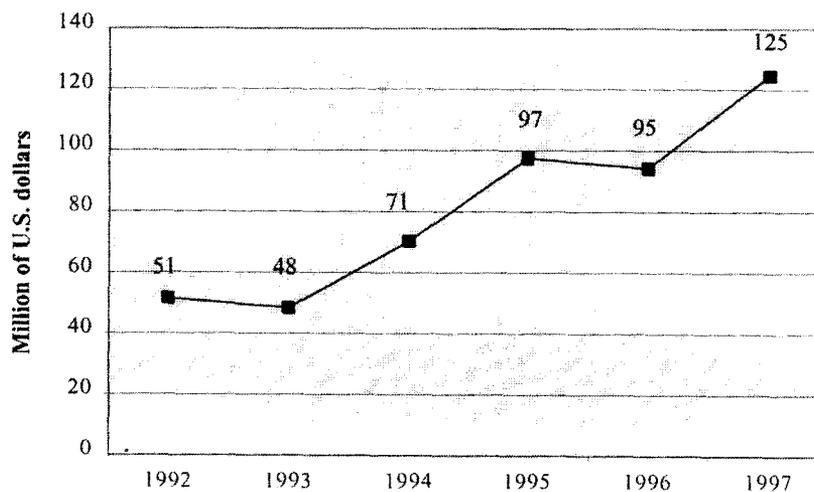
Table 4
Mexico's Export Growth by Sectors 1992-1997
 (billion U.S. dollars)

<i>Year</i>	<i>Manufactures</i>	<i>Agriculture</i>	<i>Mining</i>
1992	36.2	2.1	7.8
1993	42.5	2.5	6.7
1994	51.1	2.7	7.0
1995	67.4	4.0	8.0
1996	81.0	3.6	11.2
1997	95.5	3.9	10.8
Average Annual Growth Rate	21.4	14.6	8.4

Source: Based on data provided in Banco de México.

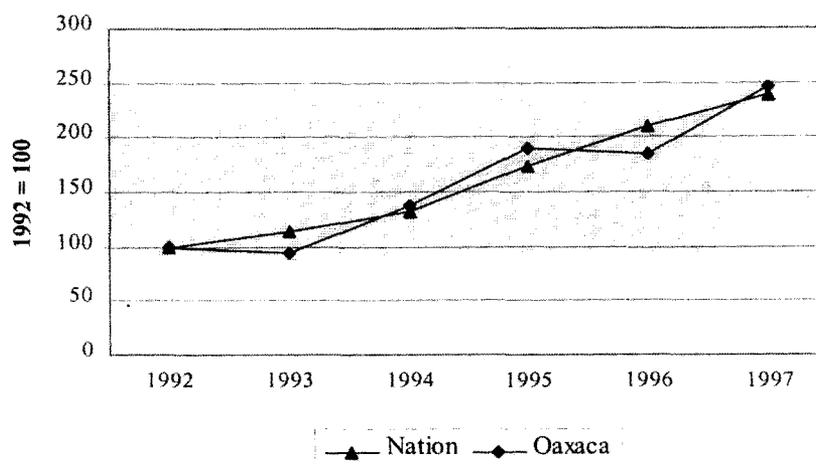
Note: The "other" category is not included because it is less than 1 billion in every year.

Graph 2: Oaxaca's Export Growth 1992-1997



Source: Based on data provided in Gobierno de Oaxaca (1998).

Graph 3: Export Trends in Oaxaca and the Nation
1992-1997



Source: Banco de México and Gobierno de Oaxaca (1998).

Actually, that inter-sectoral shift occurred between 1992 and 1994. Mining and other activity exports have remained insignificant.

It should be noted that exports of coffee have been determinant for Oaxaca's agricultural export performance. In that State the value of coffee-exports increased from \$16.6 billion in 1993 to \$47.3 billion in 1994 and to \$95.7 billion in 1997 (Gobierno de Oaxaca 1998). In 1992, these figures accounted for 66 and 32 percent of Oaxaca's agricultural and total export-value, respectively. By 1997, these shares rose to 95 and 77 percent. Thus, it seems that export increases of that commodity may be related to NAFTA. However, the visible upward trend in coffee export-value since 1994, to a significant degree, reflects the recovery of international prices since 1992, which followed a drastic plummeting in 1988-1989 due at least in part to the breakup of the International Coffee Organization. Price increases were particularly notable precisely in 1994 and 1997. In addition, even before NAFTA went into effect, imports of coffee by the U.S. already carried a zero percent tariff rate.

Oaxaca's maquiladora export-value, while remaining insignificant in relation to the nation, showed a dynamic pattern locally. In Oaxaca, exports by these plants increased from \$0.6 to 8.6 million between 1992 and 1997. Hence, maquiladoras' share in total exports increased from 1.2 to 6.9 percent over that period (that share peaked to 10.4 percent in 1996), and their share in the declining manufacturing export-value rose from 2.6 to 41 percent. However, in 1996 Oaxaca's maquiladora export-value only contributed three-tenths of a percentage point of Mexico's export-

Table 5
Oaxaca's Export Growth by Sectors 1992-1997
(millions of U.S. dollars)

Year	Manufactures	Agriculture	Mining	Others
1992	24.8	25.0	*	1.5
1993	18.9	28.3	0.0	1.3
1994	10.4	59.6	0.0	*
1995	17.9	77.7	*	1.4
1996	22.5	70.1	*	1.5
1997	20.8	100.0	*	3.4
Average Annual Growth Rate	4.3	37.4		

Source: Based on data provided in Gobierno de Oaxaca (1998).

* Less than 1 million

value by these plants. This again gives an idea of the minuscule economic dimension of this poor state.

Thus, a safe proposition is that Mexico's swift and far-reaching process of economic integration with its Northern neighbors, at least, has not been to the detriment of Oaxaca's relative export development. Yet the absolute increment of Oaxaca's exports has been rather small as compared with these of the most developed states. At this point it can also be asserted that in Oaxaca there has been concurrence of a slightly above-average growth performance in its GDP per capita, (combined however with an underperformance in its GDP growth) and an average performance of its traditionally minuscule exports, since the beginning of the 1990s. Two considerations are pertinent regarding the potential contribution of exports to economic growth in that state. First, local economic growth prospects would improve provided that the rising importance of the already predominant coffee-exports actually reflects an enhancement of this state's comparative advantages. It might be that free trade with the U.S. and Canada is prompting further specialization of Oaxaca in the production of coffee. The U.S. market has absorbed 73 percent of Mexico's exports of coffee during the last three production seasons (SAGAR 1999)¹¹, and Oaxaca is Mexico's second largest producer of this commodity. Its share has increased from 13 percent in 1969 to 20 percent in 1993. Presumably, Mexico's high level of coffee-exports to the U.S. has been driven by the commodity's internationally competitive quality and price, which has been taken into consideration by the U.S. large industrial consumers that are also the main source of

¹¹ Mexico is the world's fourth largest producer of coffee. Its annual average participation in world's supply was 4.85 percent between 1992 and 1997, following only Brazil (27.15%), Colombia (14%) and Indonesia (7.43%). Eighty percent of Mexico's production is exported (SAGAR 1999).

demand (SAGAR 1999). The low price elasticity of demand of coffee also enhances the commodity's potential contribution to economic growth in regions, which, like Oaxaca, are suited for its production.

Second, local economic growth will be enhanced if the increasing importance of maquiladora-exports in Oaxaca, amidst the absolute decline of manufacturing exports, is actually a sign of an increasing international orientation. (Due to the lack of output data at the state level it was not possible to measure the proportion of output that is exported.) The upward trend in maquiladora-exports offset the inability of the rest of the local manufacturing sector to adjust and hence take advantage of the new conditions. At the national level, maquiladora-related employment grew almost uninterruptedly between 1994 and 1996, despite the recession of 1995, and most important, it grew faster in plants located in *non-border states* than in those located in border states (OCDE 1998, Ch. 2). Overall, the impact of the recession on export-oriented manufacturing plants was insignificant. Hence, even in this lagging region a segment of the local industrial production seems to have been experiencing a shift toward export markets.

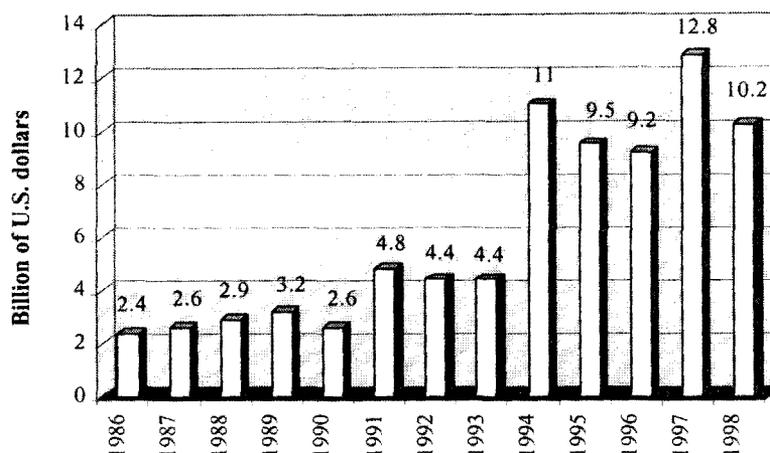
Attraction of Foreign Direct Investment

Between 1986 and 1993, before the activation of NAFTA, Mexico's foreign direct investment (FDI) increased by \$27.3 billion, an average annual increase of \$3.4 billion. During the first five years of operation of NAFTA (1994-1998), the amount of FDI received by Mexico was \$52.7 billion, an annual average amount of \$10.5 billion, which is three times higher (Graph 4). In 1997 the inflow reached a historic record of \$12.8 billion. Therefore, there can be little doubt that NAFTA triggered FDI inflows into Mexico, as international firms started to plan taking into account the advantage and potential profits of guaranteed stable access to the U.S. and Canadian markets. However, the upward trend of FDI inflows had started since the early 1990s, which suggests the influence of other factors.

For instance, Mexico's geographical proximity to the U.S., compounded by low wages and adequate labor force skills, provided a relevant alternative for U.S.-based firms to regain competitiveness in the North American market. The establishment of operations in Mexico became critical. The most prominent case of these corporate adjustments is represented by U.S. automobile firms, which since the early-1980s had initiated sizeable investment projects in Mexico to increase export capacity. But the electronics, computer and textile-apparel industries also had started to adjust their global sourcing strategies in similar way years before NAFTA went into effect. To a large extent that type of adjustment is reflected in the exploding growth experienced by the maquiladoras since the mid-1980s. Indeed, NAFTA came to consolidate and further promote these strategies.¹²

¹² For instance, the rules of origin have induced an increase in the number of Asian plants under the maquiladora regime and forced an increase in their North American inputs as it reduces the

Graph 4: Mexico's Foreign Direct Investment
1986-1998



Source: Banco de México.

Most recently, international investors started to acquire equity in large Mexican private holdings mainly as a strategy aimed at accessing Mexican markets with a high growth potential, notably in financial services, telecommunications and some activities within the food, beverage & tobacco industry. Notwithstanding the favorable environment provided by NAFTA, in this case, international investors were strongly encouraged by the asset depreciation resulting from the sharp peso devaluation of 1994, while the consequent crisis forced some prominent Mexican corporations to seek strategic alliances with foreign firms. Last but not least, the bold relaxation of the legal framework regulating the activities of foreign enterprises, and the privatization of large state-owned firms, have also been relevant factors.

tariffs applied to components produced outside of the NAFTA area. The regional content requirements have prompted auto-firms from outside the NAFTA area already established in Mexico to develop a network of local suppliers in order to have access to the U.S. market. European car-makers also decided to establish assembly plants, yet so far they are only supplying the Mexican market. Also, the ending of the textile agreement limiting exports in that industry prompted the relocation of numerous U.S. textile-apparel operations from Asia to Mexico. In fact Mexico has already overtaken China as the largest exporter of apparel to the U.S. market. Reportedly, these plants are larger in size and involve manufacturing processes well beyond assembling.

Table 6
Distribution of Foreign Direct Investment in Mexico by Main Sectors 1994-1998
(percent shares)^a

<i>Sector</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1994-1998</i>
Agriculture, livestock, fishing and forestry	*	*	*	*	*	*
Mining	*	1.0	1.1	1.0	*	1.0
Manufacturing	57.8	57.8	61.0	62.0	79.0	61.8
Electricity & Water	*	*	*	*	*	*
Construction	2.5	*	*	1.0	*	1.1
Trade	11.9	12.1	9.5	16.2	9.8	12.4
Transport & Comm.	6.8	10.7	5.5	6.2	3.0	6.7
Services	20.0	18.0	22.2	13.6	7.3	16.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Author, based on data provided in SECOFI (1999).

a) In these calculations total FDI does not include reinvested earnings nor infra-firm debt. It only includes new investment and importation of fixed assets by the maquiladoras. The reason is that reinvested earnings and infra-firm debt are not reported to the National Registry of Foreign Investment (RNIE). These two concepts are estimated by the Central Bank and the Secretariat of Trade (SECOFI) through a survey of firms, just for FDI as a whole.

* Less than 0.5 percent.

As regards the sectoral allocation of FDI in Mexico, Table 6 shows that between 1994 and 1998, 62 percent of the inflows were in the manufacturing sector. That share was stable on an annual basis, except in 1998. There is indication of an increasing predominance of manufacturing after NAFTA, as during the period 1981-1993 the average annual share of manufactures was 49 percent (CEPAL 1998). The services sector (finance-insurance-real estate and other services) attracted 17 percent of the total inflows over the period 1994-1998. In contrast, it is striking how insignificant have been the inflows allocated in the primary sectors (Table 6). Disaggregation by main activities reveals that 26.5 percent of FDI has been allocated in metallic products, machinery & equipment over the period 1994-1998, representing the single largest share, as shown in Table 7. It is well known that FDI within that activity has been largely related to export-capacity additions in the auto industry. The second largest allocation over this period corresponds to food, beverages & tobacco (15.4 percent). It was followed by the allocations to finance & insurance services (8.9 percent) and chemicals, petroleum and coal by-products, rubber & plastics (8.3 percent), among the most important (Table 7).

How did the State of Oaxaca perform amidst Mexico's high international attractiveness? The first fact that should be pointed out here is that the \$4.5 million of additional FDI received by Oaxaca during 1994-1998 represent only one-

Table 7
 Distribution of Foreign Direct Investment in Mexico by Main
 Manufacturing and Service Activities 1994-1998
 (percent shares)^a

<i>Sector/Activity</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1994-1998</i>
Manufacturing	57.8	57.8	61.0	62.0	79.0	61.8
Food, beverages, tobacco	16.8	7.5	6.7	26.7	13.3	15.4
Metallic prod., machinery & equipment	17.7	34.5	28.5	22.4	39.1	26.5
Chemicals, petroleum and coal by- products, rubber & plastic	5.9	6.9	15.1	5.9	10.8	8.3
Non-ferrous metal products	*	1.0	*	*	*	*
Basic metal industries	12.7	1.7	4.3	1.0	*	4.7
Other	4.2	6.2	5.9	6.0	14.7	6.5
Services	20.0	18.0	22.2	13.6	7.3	16.9
Real estate	2.2	*	*	*	*	*
Professional and specialized services	2.5	1.6	2.6	*	*	1.6
Finance & insurance	6.8	11.8	14.9	7.3	2.4	8.9
Restaurant-hotels	6.9	1.2	2.1	3.8	1.0	3.4
Other services ^b	1.6	2.5	1.7	1.7	3.3	2.0
Other sectors	22.2	24.2	16.8	24.4	13.7	21.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Author, based on data provided in SECOFI (1999).

a) See footnote (a) in table 6.

b) Community, social and personal services.

* Less than 1 percent.

hundredth of a percentage point of Mexico's total FDI inflows over that period. This state's participation is quite insignificant even considering the possibility that its FDI inflows are underestimated due to the method of FDI registration for the states (see note a in Table 6). Notwithstanding its irrelevance in the national context, let us examine briefly some of the main features of Oaxaca's FDI as exhibited in Table 8 and aided by additional statistical records provided in SECOFI (1999). First, unlike the nation, FDI inflows in Oaxaca show an erratic behavior, which is reflected in virtually all sectors and activities. Second, almost three-quarters of FDI inflows were

Table 8
Foreign Direct Investment in the State of Oaxaca by Main Sectors 1994-1998^{ab}
(percent shares)

Sector	1994	1995	1996	1997	1998	1994-1998
Mining	0.0	0.0	0.0	*	0.0	*
Manufacturing	0.0	6.6	*	*	20.7	4.0
Construction	0.0	0.0	0.0	97.8	0.0	131.1
Trade	26.8	0.0	22.7	*	0.0	2.8
Finance	*	8.2	0.0	0.0	6.7	4.1
Other Services	73.0	-114.8	76.7	1.5	72.6	-41.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Absolute Total ^c	120.2	-2,130.4	282	6,095.6	180.9	4,548.3

Source: Author, based on data provided in SECOFI (1999).

a) See footnote (a) in table 6.

b) In the official records by states, investments are assigned to the states where the headquarters of each firm is located, which in some cases does not coincide with the state where the investment actually takes place.

c) Thousand dollars.

* Less than 1.0 percent.

allocated in the category *other service activities*, except in 1995 and 1997 due to exceptional circumstances.¹³ Nevertheless, it is only in tourism-related activities (hotels-lodging and restaurant-night clubs) which account for most inflows in that category, that FDI inflows show some continuity over this five-year period. Third, in contrast with the nation, in Oaxaca the participation of FDI in manufacturing remains minimal although it rose visibly in 1998. Finally, the share of mining is much more insignificant and there is no FDI in agricultural activities, a pattern that at a much lower scale resembles the national one.

Despite the insignificant amounts of FDI allocated in the State of Oaxaca, its share in total FDI remained more or less stable, at a very low level though, since 1994. However, most of these FDI inflows can not be attributed to the international trade-related opportunities opened by NAFTA for tourism-related and construction activities are not international exporting sectors. Moreover, there was a relatively important sale of equity by foreigners in tourism-related activities. The sale of equity of prominent Mexican holdings to foreign firms has brought no visible benefit for

¹³ In 1995, the negative balance of FDI in the *other services* category resulted from the selling of equity by foreigners to Mexicans in firms within the hotel-lodging activity. This operation more than offset not only the FDI inflows in 1995 but also the whole *other services* category during the rest of the period. In 1997, there was a relatively large inflow within the construction sector (the single largest inflow for Oaxaca during 1994-1998), specifically in specialized construction activities, which apparently diminished the local relevance of the *other services* category. However, it did not show continuity over time.

Oaxaca either, as that state is not the seat of these operations.¹⁴ Hence, given the rather small amounts of FDI and its sectoral allocation it is safe to contend that Oaxaca has remained isolated or excluded from the impressive growth of FDI in Mexico resulting from the process of economic integration with the U.S. and Canada. There is no question that Oaxaca's lack of attractiveness for FDI derives, at least in part, from disadvantages related to its relative remoteness from the U.S. market. Its lack of any important urban-industrial center, industry-specific clusters and hence agglomeration economies and market potential also constrain the region's ability to attract FDI. In contrast, more than 90 percent of the FDI inflows during 1994-1998 were allocated among just nine states: those bordering the U.S. and those with the largest urban-industrial agglomerations (SECOFI 1999).

On Exports, FDI, and Economic Performance: Concluding Remarks

The two preceding sections substantiate a clear direct relationship between the growth of exports and the increasing FDI inflows at the national level since the mid-1980s. Reportedly, between 1993 and 1996, the contribution of foreign companies to Mexico's total exports increased from 47.8 to 56.2 percent, largely under maquiladora operations (CEPAL 1998, citing Dussel 1997). The number of maquiladora plants increased from 760 in 1985 to 1,703 in 1990 and to 2,867 in 1998. Accordingly, their participation in Mexico's total exports rose from 26 to 45 percent between 1986 and 1998. Moreover, the industries that received the most sizeable injections of FDI also showed the strongest growth. Thus, it is unambiguous that multinational corporations (MNCs) and related FDI inflows are the key factor promoting the integration of the Mexican economy into the North American trading bloc.

Obviously Oaxaca does not fit the national pattern. On one hand, the amount of FDI received by that State during 1994-1998 has been insignificant and most of it cannot be attributed to trade opportunities created by NAFTA. On the other hand, Oaxaca's total exports despite having increased at a close-to-average rate during 1992-1998 are still very small as a share of national exports. But most important, in this Southern State, agricultural exports account for a large part of total exports (80 percent in 1997), largely exports of coffee (95 percent in 1997), and there has been no allocation of FDI to agricultural activities. Indigenous, mostly small agricultural production units have thus sustained the export performance of Oaxaca—reportedly, 69 percent of Mexico's coffee growers own parcels smaller than 5 acres (SAGAR 1999). Moreover, the increase in the export-value of coffee cannot be attributed to NAFTA as the U.S. tariff for that commodity had been eliminated (0 percent tariff rate) years before the activation of the trade agreement.

¹⁴ According to government sources acquisition of equity in Mexican firms accounts for 55 percent of the total FDI inflows in 1997. Most of it concentrated in telecommunications (38%), beverages & tobacco (30%), trade (15%), and banking (6%) (CEPAL 1998).

Thus, unlike national trends, it seems that the bulk of the small FDI inflows and the close-to-average export growth in Oaxaca would have taken place anyway, regardless of NAFTA. In turn, export growth in Oaxaca and that State's potential integration into the North American trading block has been strongly restricted by a lack of FDI in trading sectors. Likewise, NAFTA has not contributed to the growth of this State's main indigenous export-crop of high local economic relevance. In conclusion, the economy of the Southern State of Oaxaca clearly has been impaired to materialize the opportunities that NAFTA has indeed opened for Mexico as a whole.

Consistently, in the first three years after NAFTA went into effect, the State of Oaxaca shows a moderate relative deterioration of GDP growth, whereas all northern border states experienced an improvement, notably Baja California and Coahuila. The states of Queretaro (Central) and Aguascalientes (Central-north), also exhibited a well above-average performance. Thus, it is safe to conclude that NAFTA has expanded the gap between Southern (Chiapas and Guerrero also show a declining GDP share in 1993-1996) and Northern states, to the extent that FDI inflows, exports and hence economic growth in the latter have been indeed further promoted by the process of economic integration. In other words, given that the inflows of FDI and export growth in Oaxaca would have taken place regardless of NAFTA, the economic gap (in terms of inter-state differentials in GDP shares) between Oaxaca and the northern states would have been smaller without NAFTA.

Inter-state differences in the arrival of FDI and hence export growth also can contribute importantly to inter-state differences in economic development, as measured by income per capita, via employment creation, higher wages, and subcontracting of local businesses.¹⁵ In Oaxaca, as well as in Chiapas and Guerrero, the other southern states, there was a slightly above-average growth performance in

¹⁵ Nearly one million jobs are attributed to NAFTA-related growth in international trade in Mexico. Furthermore, on average jobs in the export sector currently pay 30 percent more than non-exporting jobs—wages in firms exporting 80 percent of their sales are 60 percent higher than average (MB, April 1999). Consistently, a study based on a large sample of businesses showed that the average monthly wage in businesses with FDI was more than twice that of all businesses in 1989 and 1992 (STPS 1994). The differential was similar for manufacturing businesses and even higher in agriculture. In addition, the effect of FDI on the generation of regional income and local industrial capacity is enhanced through the subcontracting of domestic firms by MNCs. According to a recent survey of large Mexican subsidiaries of MNCs, 59 percent of the interviewed firms subcontract nationally, and almost 30 percent of them, all export-oriented and mostly in technology-intensive industries, subcontract more than 25 percent of their production value (UNCTC 1992, Ch. 3). It should be noted that the level of subcontracting by large MNCs is much higher, on average, than in the maquiladoras as a whole. The value of domestic inputs in maquiladora-production accounted for only 2 percent of total value of intermediate inputs in 1996, and for 1.7 percent on average for the period 1994-1996.

GDP per capita between 1993 and 1995¹⁶. A similar but less dynamic trend was recorded however in all northern border states. This result is puzzling since a large portion of the output and relatively high-wage jobs related to exporting operations and/or FDI have been originated in the latter as well as in the few largest urban areas. In part, the answer lies in the inter-state population growth differentials and the influence of inter-state migration flows. Between 1990 and 1997, the annual population growth rate in Oaxaca (1.12) was below average, as so were those of Chiapas (1.66) and Guerrero (1.77). In contrast, five of the six northern border states exhibited an above-average performance, ranging from 2.07 in Tamaulipas to 4.02 in Baja California which was the nation's second largest (INEGI 1999a). The nation's annual population growth rate during the mentioned period was 1.9. Likewise, between 1992 and 1997 there was a net migration rate of 4.38 (per thousand) for the northern border states as a whole, whereas that recorded in the southern region was -0.16 (per thousand) (CONAPO 1999). Here, it should be noted that the negative net migration rate of Oaxaca, Chiapas and Guerrero must have been much higher given CONAPO's definition of the Southern region which includes the State of Quintana Roo (and the other two three states within the Yucatan Peninsula) which has experienced by far the nation's highest immigration rate during the period. Thus Oaxaca's negative net migration rates which to some extent restrict its population growth rate actually contribute to that state's upward trend in GDP per capita.

In sum, Oaxaca's experience overall is consistent with conventional expectations regarding the relative performance of lagging regions in the face of economic integration given their disadvantages in terms of lacking the conditions for the attraction of investment at large scale, which in turn severely restricts the development of export capacity. It is also consistent with the role of initial specialization, for Oaxaca—a predominantly agricultural economy—certainly is not the seat of internationally competitive firms and/or industries with an expanding international demand. Further analysis is certainly needed in order to feel comfortable in transferring these results to the reality of the typical Mexican lagging state. The options are either to work on cases for a wider number of states or use statistical techniques and data for all the states to explore in a more precise way the differential economic impact of NAFTA for the typical lagging and advanced Mexican region. Nevertheless, it is very likely that the case of most other lagging Southern states, particularly Chiapas and Guerrero, would be highly consistent with Oaxaca's scenario.

¹⁶ However, it should be noted that if the period 1985-1993 is considered, which actually represents the stage of dramatic economic opening preceding and consolidated by NAFTA, Oaxaca's GDP per capita growth underperformed.

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