Megaurbanization and Industrial Relocation in Mexico's Central Region

Adrian Guillermo Aguilar

To cite this article: Adrian Guillermo Aguilar (2002) Megaurbanization and Industrial Relocation in Mexico's Central Region, Urban Geography, 23:7, 649-673, DOI: 10.2747/0272-3638.23.7.649

To link to this article: http://dx.doi.org/10.2747/0272-3638.23.7.649

Published online: 16 May 2013.

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MEGAURBANIZATION AND INDUSTRIAL RELOCATION IN MEXICO’S CENTRAL REGION

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Institute of Geography
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Abstract: Recent changes involving Mexico City, the main metropolis in Mexico and one of the world’s largest megacities, are a slowing demographic growth and the relocation of industrial activities from the city proper to other cities in the Central Region. One of the important features of this process is the extension of existing location economies for manufacturing industries from the strictly urban, or metropolitan scale, to a somewhat more regional level. This paper argues that this territorial restructuring is highly influenced by four main processes: (1) a spatially selective industrialization where a few cities, rural areas and economic corridors are emerging as industrial locations; (2) accessibility and transaction flows where the main road network and commodity flows determine the primary urban structure and the formation of economic corridors; (3) a concentrated pattern of foreign investment that shows a marked preference for the urban “core” and which reinforces its economic importance; (4) a territorial industrial specialization pattern whose main feature is a mixture of dispersion and concentration trends according to the type of manufacturing industry. Territorial restructuring in this region is an excellent example of an emerging spatial order associated to megurbanization, with a rapid growth of nearby cities, a polycentric urban pattern, and the arrival of manufacturing industry in selective sites. However, this process seems to reinforce current intraregional inequalities, as the places with the best economic advantages tend to receive larger investments. [Key words: Mexico City, megurbanization, industrial location, territorial restructuring.]

MEGACITIES AND THE FORMATION OF A NEW URBAN AND REGIONAL ORDER

One distinguishing feature of world urbanization in recent decades is the growth and physical expansion of the largest cities, the so-called megacities. A megacity is usually associated with a large urban concentration of between five and eight million inhabitants. Although such large centers have been emerging in developed and developing countries for several decades, a more comparative and systematic study of these cities, and particularly the use of the term megacities or regions, is comparatively new and has generated a

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1The author gratefully acknowledges the collaboration of Clemencia Santos and Josefina Hernandez in data analysis, maps, and figures.
2Correspondence concerning this article should be addressed to Adrian Guillermo Aguilar, Institute of Geography, National University of México (UNAM), Mexico D.F., 04510; telephone: +52-5-622-4330; fax +52-5-616-2145; e-mail: adrian@servidor.unam.mx
3There is no clear agreement about the population threshold for defining a megacity; Gilbert (1996, pp. 2–4) has adopted the figure of eight million inhabitants in the absence of a more adequate definition, and, after revising criteria that vary from four to ten million people. Yu-ping Chen and Heligman (1994, p.18) also adopt eight million as a criterion for world comparisons.

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large body of research (see Oberai, 1993; Fuchs et al., 1994; McGee and Robinson, 1995; Gilbert, 1996; Forbes, 1997; Pick and Butler, 1997; Lo and Yeung, 1998). In the early 1990s the number of megacities in the world reached 20, with six in the more developed countries and 14 in the developing countries. From the latter, four are in Latin America (Mexico City, Sao Paulo, Buenos Aires, and Rio de Janeiro), nine are in Asia (Shanghai, Calcutta, Bombay, Beijing, Jakarta, Delhi, Tianjin, Seoul and Manila), and one is in Africa (Cairo) (see Yu-Ping Chen and Heligman, 1994, Table 1).

There are at least four reasons for focusing attention on megacities. The first is their large numbers of inhabitants. Second, in many regions of the world these cities are the global economic poles that concentrate top-level functions in terms of corporative management and decision-making, political power, and mass media headquarters, which is why they are also linked to the concept of “world cities”\(^4\) (see Lo and Yeung, 1996; Borja and Castells, 1997). Third, these large cities demonstrate many of the worst symptoms of urbanization including rapid demographic growth, high levels of poverty, traffic congestion, air pollution and other forms of environmental contamination, inefficient urban management and a lack of a single metropolitan authority (on this particular issue see Ward, 1996, p. 62–63),\(^5\) and urban expansion beyond the city and metropolitan limits. And, fourth, the spatial pattern associated to these cities is changing in the regions they serve.

In regard to the fourth factor, evidence from studies done elsewhere suggests that a common feature of megacity development is the emergence of a new territorial order. Studies

\(^4\)Includes temporal imports by maquiladora plants.

\(^5\)Foreign investment data from 1994 onward is not comparable with previous years because of the divergent methodologies used to calculate the corresponding amounts. Thus, it is not valid to sum up data before and after 1994 (See SECOFI, 1997).

By Sector (Percentage)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>61</td>
<td>32</td>
<td>39</td>
<td>32</td>
<td>26</td>
<td>30</td>
<td>47</td>
<td>58</td>
<td>57</td>
<td>58</td>
<td>62</td>
</tr>
<tr>
<td>Services</td>
<td>37</td>
<td>59</td>
<td>29</td>
<td>54</td>
<td>49</td>
<td>26</td>
<td>20</td>
<td>26</td>
<td>30</td>
<td>31</td>
<td>18</td>
</tr>
<tr>
<td>Commerce</td>
<td>–1</td>
<td>8</td>
<td>15</td>
<td>5</td>
<td>11</td>
<td>21</td>
<td>15</td>
<td>12</td>
<td>12</td>
<td>10</td>
<td>20</td>
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<tr>
<td>Others</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Accumulated Balance(^c)</td>
<td>20,930</td>
<td>24,087</td>
<td>26,587</td>
<td>30,310</td>
<td>33,875</td>
<td>35,369</td>
<td>40,270</td>
<td>10,209</td>
<td>17,929</td>
<td>24,527</td>
<td>32,507</td>
</tr>
</tbody>
</table>

\(^a\)Includes temporal imports by maquiladora plants.

\(^b\)Foreign investment data from 1994 onward is not comparable with previous years because of the divergent methodologies used to calculate the corresponding amounts. Thus, it is not valid to sum up data before and after 1994 (See SECOFI, 1997).

\(^c\)U.S. dollar amount.

Source: Calculated from Salomon (1998, Tables 1 and 2).

\(^4\)However, megacities in the developing world are more linked to a massive and rapid process of urbanization and hardly classify as primary world cities which represent the key nodes for the control and coordination of global finance and producer and business services (see Friedmann, 1995).

\(^5\)For the case of Mexico City on this particular aspect, see Ward (1998).
MEGAURBANIZATION AND INDUSTRIAL RELOCATION

MEGAURBANIZATION AND INDUSTRIAL RELOCATION

from South East Asia and other parts of Latin America are highly revealing (see McGee and Robinson, 1995; Gilbert, 1993, 1998; Aguilar, 1999). Furthermore, the 1996 United Nations Report emphasizes the case of the world’s largest cities as an important urban trend, with the heavy concentration of productive activities and of urban population in a few “core regions” that contain the largest cities or metropolitan areas, particularly in developing countries (United Nations Centre for Human Settlements, 1996, pp. 19, 51–52).

At least three main processes can be identified in relation to this spatial order. The first is the breaking-down of the clear distinction between rural and urban activities. The second is the considerable advances in transportation technologies that facilitate the circulation of commodities, people and capital and are essential for the creation of megaurban regions. The third is the internationalization of the world economy that focuses mainly on the megaurban regions and their peripheral spaces, and the corresponding concentration of foreign capital and productive activities. The following description (McGee and Robinson, 1995, pp. ix–x) of megaurbanization in Southeast Asia is representative:

Extended metropolitan development tends to produce an amorphous and amoebic-like spatial form, with no set boundaries or geographic extent and long regional peripheries, their radii sometimes stretching 75 km to 100 km from the urban core. The entire territory—comprising the central city, the developments within the transportation corridors, the satellite towns and other projects in the peri-urban fringe, and the outer zones—is emerging as a single, economically integrated “megaurban region,” or “extended metropolitan region.” Within this territory are a large number of individual jurisdictions, both urban and rural, each with its own administrative machinery, laws, and regulations. No single authority is responsible for overall planning or management.

The emerging territorial order of megaurbanization basically implies a major rearrangement in terms of population and production within large metropolitan areas and their wider city region. There has been a rapid growth of population and production just outside the boundaries of the largest cities of many of the developing countries, and much of this production is closely connected to enterprises still located within the city limits. All major cities undergo a process of population and production decentralization as they grow, but the speed of these trends and their spatial configurations vary greatly from city to city, as well as over time.

What is less well documented in developing countries is the process of population and production decentralization away from the central or main city that is accompanied by continued or increased concentration of population and production within the wider or “core” region (United Nations Center for Human Settlements, 1996, pp. 19–20). To put it another way, megaurbanization can be described as regionally-based rather than city-based urbanization. This can be observed in: the concentration of enterprises along the major highways, the rapid growth of smaller cities, the arrival of manufacturing activities in poorer peripheral areas, and the good quality infrastructure and skilled labor in differ-

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6In his study about Southeast Asia, McGee (1995, p. 10) sustains that “…rather than drawing a population from rural areas to a city, region-based urbanization utilizes an in situ population in the extended metropolitan region as well as drawing migrants from other rural areas.”
ent cities of the megaurban region. In short, the spatial dimension of this process and the emerging urban forms need to be recognized and understood in different national contexts, particularly in those countries, usually the developing ones, where the process of urban concentration in megacities is more accelerated.

One important issue for megaregions in developing countries is to explore all the specific impacts of the internationalization of capital in the recent formation of those city-regions. Especially, the spatial pattern that has emerged with recent industrial location, the arrival of foreign investment, and the role of intermediate cities in the fragmentation of productive processes.

*Industrial Location and the New Territorial Order*

The expansion of flexible production systems and the internationalization of capital in developing countries have had significant repercussions on the prosperity and decline of economic sectors in large metropolitan regions. But, at the same time, this very process also shows symptoms of aggravating spatial inequalities in the interiors of those regions.

The vertical disintegration of the production process, which was partly a consequence of lower transport costs and advances in information technology, went hand in hand with the decline of large agglomerations and the dispersion of industrial activities. To some extent macroeconomic conditions precipitated the processes of economic restructuring and decentralization. It is also true, however, that the largest cities have continued to grow and expand in the context of the dispersion of some activities and the concentration of others (Scott, 1994).

The recent consolidation of megaurbanization trends in some particular Latin American megacities is associated with the arrival and relocation of manufacturing activities at regional level. This dispersion of industrial activities has been combined with changes in the wider economic environment where structural adjustment measures were taken and a new export-oriented model of development was adopted. Trade liberalization policies allowed foreign manufacturers to compete in previously protected markets, which badly affected domestic industry as the small and medium size firms that were unable to compete with their foreign counterparts went out of business, and large numbers of manufacturing jobs were lost in the main cities (Gilbert, 1996).

The declining employment opportunities in the old-import substitution industries that were concentrated in large cities, combined with the arrival of new manufacturing activities, led to new migration patterns and the rapid growth of several secondary cities and some regional metropoles. This was one of the factors that resulted in lower population growth rates in major cities and an emerging polycentric urban pattern in the “core region.”

The importance of this process is that the locational economies of the existing manufacturing system are being extended from a strictly urban or metropolitan scale, to a regional level (Storper, 1991). From this point of view, a region\(^7\) falls under the influence

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\(^7\)Scott (1998, p. 1) defines region as a geographic area characterized by some minimal level of metropolitan development together with an associated tract of hinterland; an area that functions as the common spatial framework of daily life for a definite group of people, and that contains a dense mix of socio-economic activities subject to centripetal or polarization forces.
MEGAURBANIZATION AND INDUSTRIAL RELOCATION

of one or more important metropolitan centers that contain a significant group of economic activities. In their study on the Caribbean Basin, Portes et al. (1994, p. 7) argued that “the greater the shift from import substitution toward an export-oriented model of development, the greater the probability of growth in secondary cities and a corresponding decline in urban primacy.”

Arguments that support recent regionally based development indicate that the pace of economic globalization is high and diminishes geographic barriers to the flow of goods, services, and investment. As a result, a number of new industrial spaces are becoming prominent in former peripheral areas. These are now beginning to function as new engines of the national-global economy. In this context, major metropolitan areas are increasingly involved in the expansive spatial division of labor as expressed in part by the formation of intraregional productive chains that build localized competitive advantages which serve the specific needs of individual regions (Scott, 1998).

Although it is true that large metropolitan areas have begun to break their traditional pattern of monocentric growth, there are indications that economic globalization and industrial capital in developing countries show a strong preference for particular urban locations and manufacturing subsectors. New regional deconcentration trends and polycentric patterns are imposed upon the former spatial structure and this tends to reinforce regional inequalities in “core regions.” To a great extent, this territorial order can best be envisaged as an intensification of the process of industrial relocation or an expansion of the industrial core into a wider functional region. In this respect it is crucial to know if the new processes are fostering an urban-region integration (a real regional development) or are just creating a more decentralized structure (a polycentric urban-based development).

Evidently, growth occurs more intensely in some places than in others, and this is primarily, though not exclusively, an urban phenomenon that reaffirms the view that cities are a critical and indispensable part of the process. The widespread shift in the country’s development strategy, which is now oriented toward exports, is apparently reinforcing the foundations of local production systems and ensuring their competitive advantages in relation to other parts of the country. One worrying result is the trend toward the formation of production complexes in certain privileged areas (“core regions”). These areas have the capacity to develop in the future and to grow into territorial entities with strong endogenous forces of metropolitan origin.

From the point-of-view of the spatial strategy of firms, industrial decentralization tends to favors urban locations for three reasons: first, at the urban level, certain kinds of agglomeration economies are possibly now more regional than local, and therefore city-based firms tend to develop linkages at metropolitan and regional level rather than relying on locally based links. Second, some of these relocation processes may be operating at the urban system level, where linkages become established between agglomerations (urban centers) at considerable distance from each other. And third, some firms seek to relocate to the secondary urban centers or to less populated areas in a reduced number of small

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9 This point is made by Gwynne (1990, p. 173) quoted by Gilbert (1993, p. 731).
10 Storper (1997, pp. 299–300) points out these two main trends of industrial decentralization at regional level.
towns and rural areas. Therefore, it is more likely that globalization will reinforce geographic clusters of production and this process leads to regional economic specialization. Direct foreign investment seeks out such centers of expertise by following domestic investment as part of a global location strategy (Cooke, 1996). Although the region will become stronger as an economic entity, this very process seems to reinforce current intraregional inequalities as the places with the best economic advantages tend to receive larger investments; this reproduces core-periphery situations in the main urban regions of developing countries.

In sum, spatial forms have changed but not enough to support claims for a new post-Fordist or megaurban spatiality. New urban-regional forces have impacts on spatial forms but to a great extent they intensify concentration in “core” areas (mainly cities), or to expand their size and influence due to their strong international linkages. Thus, we see a more complex territorial pattern of old and new, of continuing trends and new forces. The past is transformed not obliterated. “Old” and persistent spatial inequalities exist in a “new” territorial order.

For the purpose of the present analysis the following questions are relevant. What are the new spatial patterns that emerge with territorial restructuring in megaurban regions? To what extent are the “core regions” the main recipients of economic globalization? What are the recent industrial relocation trends in the “core region”? What are the implications for regional development and inequality?

RECENT CHANGES IN MEXICO’S DEVELOPMENT STRATEGY AND INDUSTRIAL RESTRUCTURING

In 1982, Mexico entered its most serious economic crisis since World War II. This crisis represented the collapse of the import sustitution industrialization (ISI) development model, which had been followed during the previous four decades; but the discovery of huge oil reserves at the end of the 1970s, together with easy access to international credit markets, permitted the Mexican government to disregard the need for structural changes in the industrial sector and particularly the need to expand manufactured exports (see United Nations, 1992; Aguilar and Rodriguez, 1995).

The exhaustion of the ISI phase was illustrated by the country’s lack of capacity to expand the industrialization process into the capital goods sector and the production of some intermediate products where imports put pressure on the country’s trade balance as the industrial sector grew. The manufacturing sector lacked linkages with other sectors and was unable to incorporate technological innovations—hence the lack of efficiency and international competitiveness (United Nations, 1992).

During the first half of the 1980s Mexico negotiated an adjustment program with the International Monetary Fund (IMF), and received support from the World Bank for the application of structural changes towards an “export-oriented” development model. After joining the GATT in 1986, Mexico signed the North American Free Trade Agree-

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11The neoliberal project rested on four main points: (1) low inflation rates, (2) a drastic reduction in public spending and the public debt, (3) the privatization of state-owned industries, and (4) the promotion of non-oil exports, particularly in the manufacturing sector.
MEGAURBANIZATION AND INDUSTRIAL RELOCATION 655

ment (NAFTA) with the United States and Canada, which came into effect in 1994 (see Dussel and Kim, 1993; Aguilar, 1997a).

Direct foreign investment (DFI) has been assigned a major role in the restructuring of Mexico’s manufacturing sector. The government has aimed at promoting this investment in selective industries that have high investment requirements, including high-technology activities and industries primarily oriented toward exports. The administration of Salinas de Gortari (1988-1994) was determined to give favorable treatment to foreign capital. In this respect, the National Development Plan, 1989–1994 stated clearly that DFI is expected to create employment, supply the country with fresh financial resources (both new investments and the restructuring of indebted enterprises), provide modern technology, and increase manufactured exports (Secretaría de Programación y Presupuesto, 1989).

However, the export-oriented model made the country more vulnerable to foreign penetration. Foreign investments reinforced the subordination of manufacturing production to multinational corporations and the United States economy. From 1980 to 1994 Mexico received slightly more than $40 billion in foreign investment, 60% of which came from the United States. The main sectoral recipients by 1994 were manufacturing, with 58%; services, with 26%; and commerce with 12% of total investment (Table 1).

Some critics of the country’s industrialization process questioned the new development model adopted by the country. Three of the points they raised are particularly relevant to this analysis as they have territorial implications: (1) the trend towards the consolidation of foreign investment in manufacturing, (2) the predominance of an import-oriented industrialization rather than export-oriented, and (3) a reduction in manufacturing employment and an increase in flexible labor practices in industry.

Consolidation of Foreign Investment in Manufacturing

After a reduction in foreign investment during 1987-1991 due to the uncertainty surrounding the new economic model, direct foreign investment in manufacturing gradually increased from 47% in 1993 to 62% in 1997 (Table 1). In the years when the importance of the manufacturing sector declined, the service and commerce sectors increased their participation from 37% in 1987 to 60% in 1991. During this period foreign capital grew significantly in absolute terms and has diversified to other more productive sectors such as services and commerce.

Data tend to indicate that foreign capital has opted for selective industrial investment either in terms of manufacturing industrial sectors or in relation to the location of new investments. There seems to be a trend to seek locations that have the best comparative advantages, such as the main metropolis (Mexico City) and other locations not far from it, such as regional metropolises and medium-size cities. This trend apparently formed a territorial specialization in regional terms that remains to be analyzed. According to the observed trends, the manufacturing sector seems to be the main recipient of direct foreign investment, particularly in high technology industries and the production of some consumer goods, which received above average foreign investment in the period 1994–1997. Three subsectors concentrated 82% of the investment in manufacturing: metal products (40.6%); food products (29.4%); and the chemicals (11.9%) (Table 2).
An Import-Oriented Industrialization

The neo-liberal strategy led to increased imports of manufactured goods, which in turn meant a recurrent trade deficit, and may be contributing to a process of deindustrialization in which only the largest firms survive. As a consequence, a contradictory situation has developed in which the export-oriented model induced import-oriented industrialization. From the territorial point of view, the principal negative impact is the breaking-up of productive chains and the lack of incentives for their strengthening (Dussel Peters, 1997). Instead of looking for domestic inputs from other industrial units, thus promoting regional development, the large- and medium-sized firms have resorted to imported inputs that are generally cheaper and of better quality. Figure 1 clearly shows a marked difference in the industrial sector. From the mid-1980s onward exports from the assembly plants known as “maquiladoras” increased and showed a positive trade balance. Manufacturing plants, however, have lost their export capacity and in recent years have registered a negative trade balance.

A Reduction of Manufacturing Employment

The increase in manufacturing imports, the weak formation of productive chains among firms, and the closing of small and medium-sized firms due to the country’s financial crisis,12 led to a reduction in industrial employment. With declining domestic demand, the manufacturing industry reduced production since its market was to a great extent oriented toward the domestic market, some industries underwent technological change, such as automation, to increase their competitiveness, and the reduction of state participation led to a closure of some firms and major layoffs in others. The contraction in manufacturing employment was influenced by the sectoral shift in employment that

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12For example, in the period 1982–1997 the number of small- and medium-size firms reduced in the Federal District from 3751 to 3629, and from 510 to 499 respectively (Alvarado, 1999, p. 83).

### Table 2.—Direct Foreign Investment in Manufacturing by Industrial Subsectors, 1994–1997 (in Billions of U.S. Dollars)

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Total value</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food products</td>
<td>5.599</td>
<td>29.4</td>
</tr>
<tr>
<td>Textiles and leather</td>
<td>.76</td>
<td>3.5</td>
</tr>
<tr>
<td>Paper manufacturing and printing</td>
<td>.440</td>
<td>2.3</td>
</tr>
<tr>
<td>Chemical products</td>
<td>2.267</td>
<td>11.9</td>
</tr>
<tr>
<td>Basic metallic industry</td>
<td>1.888</td>
<td>9.9</td>
</tr>
<tr>
<td>Metal products</td>
<td>7.741</td>
<td>40.6</td>
</tr>
<tr>
<td>Others</td>
<td>.433</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19.044</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Source: Calculated from Salomon (1998, Table 3).*
benefited the service and commerce sectors and intensified the tertiarization of the urban economy; in the period 1980–1989 the tertiary sector was responsible for generating about 75% of new jobs in the country (Aguilar, 1997a).

This trend, however, meant a significant change from more-to-less stable jobs, particularly informal and less productive occupations in personal services, retail, services in hotels and restaurants, and food preparation. Furthermore, the informal sector within the industrial sector has grown in the form of microenterprises, and the role of labor unions has been reduced in new labor contracts granting management greater flexibility in assigning workers to meet changing production requirements (Shaiken, 1994). In spatial terms, this process has mainly happened in the main metropolis of the country, including Mexico City, Guadalajara, Monterrey, and Puebla, where the informal sector has proliferated and there are clear trends of polarization and increased instability of the labor force (Aguilar, 1997b).

MEXICO’S CENTRAL REGION AND TERRITORIAL RESTRUCTURING

The Central Region covers an area of 97,964 square kilometers, a 5% of the country’s territory. Here, 30.5 million people or 33.4% of Mexico’s total population was concentrated in 1995. The Region is made up of seven of the 32 states in the country: the Federal District and the states of Mexico (the Mexico City Metropolitan Area), Hidalgo, Morelos, Puebla, Queretaro, and Tlaxcala. Mexico City is a geographical center of the region and is by far the largest and most important urban center. With a population of 16.5 million inhabitants in 1995 it has 58% of the Region’s population and 60% of its industrial employment (Figure 2).

The Central Region is served by an extensive and modern highway network radiating from Mexico City and connecting the main regional metropolises that are the essential

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14 A typical example is the automobile industry where new plants have moved to the northern region in an effort to secure lower wages, greater workplace flexibility, and more compliant unions than those in central Mexico (see Shaiken, 1994, p. 56–57).
components of its urban system. This includes Puebla and Tlaxcala to the east, Cuernavaca and Cuautla to the south, and Toluca to the west. Furthermore, there is a group of medium-sized cities—those with more than 100,000 inhabitants—that are important in terms of their size and position in the urban hierarchy, rapid growth, and concentration of economic activities. The cities of Queretaro and San Juan del Rio to the north; Atlixco and Tehuacan to the southeast, and Pachuca to the northeast, fall into this category.

Between 1970 and 1990, Mexico City accounted for 50% of all the urban population growth in the region. At the same time, however, its proportion of the regional population fell from 57% to 54%, and the population growth rate in Mexico City was lower than the Central Region as a whole. According to urban population growth, “the region appears to have been undergoing a process of polarization reversal during 1970–1990 particularly towards the big urban centers that are the state capitals” (Aguilar, 1999, p. 400).

In economic terms, the Central Region is the productive engine of the country. In 1994, it contained 33% of all firms, and 39% of employment in all economic sectors at national level (Table 3). The labor force in manufacturing is particularly concentrated. During 1994, the Central Region contained 31% of industrial units and 39% of the corresponding employment (Table 4). Similar proportions can be found for sectors such as commerce and services.

The underlying processes of economic, social and technological change that are leading to the accelerated growth of large urban regions are complex and highly interrelated. For convenience this study emphasizes four points: (1) industrial concentration, (2)
MEGAURBANIZATION AND INDUSTRIAL RELOCATION

TABLE 3.—THE CENTRAL REGION: ECONOMIC UNITS AND WORKERS ECONOMIC SECTORS, 1994

<table>
<thead>
<tr>
<th>Economic sector</th>
<th>Economic units</th>
<th>%</th>
<th>Workers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>104,095</td>
<td>31.15</td>
<td>1,345,514</td>
<td>39.06</td>
</tr>
<tr>
<td>Commerce</td>
<td>487,588</td>
<td>34.37</td>
<td>1,292,474</td>
<td>36.02</td>
</tr>
<tr>
<td>Services</td>
<td>321,219</td>
<td>32.30</td>
<td>2,765,737</td>
<td>40.46</td>
</tr>
<tr>
<td>Private</td>
<td>262,726</td>
<td>34.64</td>
<td>1,203,930</td>
<td>41.06</td>
</tr>
<tr>
<td>Financial</td>
<td>–</td>
<td>–</td>
<td>134,274</td>
<td>50.85</td>
</tr>
<tr>
<td>Transport and communications</td>
<td>7,018</td>
<td>0.97</td>
<td>215,056</td>
<td>42.05</td>
</tr>
<tr>
<td>Othersa</td>
<td>1,503</td>
<td>45.88</td>
<td>66,902</td>
<td>31.79</td>
</tr>
<tr>
<td>Country total</td>
<td>2,750,413</td>
<td>100.00</td>
<td>14,079,541</td>
<td>100.00</td>
</tr>
<tr>
<td>Central Region total</td>
<td>914,445</td>
<td>33.25</td>
<td>5,470,627</td>
<td>38.86</td>
</tr>
</tbody>
</table>

*aIncludes electricity, mining and oil extraction.

TABLE 4.—THE CENTRAL REGION: ECONOMIC UNITS AND WORKERS IN MANUFACTURING ACTIVITIES BY STATE, 1994

<table>
<thead>
<tr>
<th>State</th>
<th>Economic units</th>
<th>%</th>
<th>Workers</th>
<th>%</th>
<th>Workers per economic unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal District</td>
<td>29,203</td>
<td>28.1</td>
<td>528,570</td>
<td>39.3</td>
<td>18.1</td>
</tr>
<tr>
<td>Hidalgo</td>
<td>6,712</td>
<td>6.4</td>
<td>59,558</td>
<td>4.4</td>
<td>8.9</td>
</tr>
<tr>
<td>Mexico</td>
<td>25,549</td>
<td>24.5</td>
<td>445,319</td>
<td>33.1</td>
<td>17.4</td>
</tr>
<tr>
<td>Morelos</td>
<td>4,913</td>
<td>4.7</td>
<td>41,589</td>
<td>3.1</td>
<td>8.5</td>
</tr>
<tr>
<td>Puebla</td>
<td>29,838</td>
<td>28.7</td>
<td>171,215</td>
<td>12.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Queretaro</td>
<td>3,861</td>
<td>3.7</td>
<td>63,845</td>
<td>4.7</td>
<td>16.5</td>
</tr>
<tr>
<td>Tlaxcala</td>
<td>4,019</td>
<td>3.9</td>
<td>35,418</td>
<td>2.6</td>
<td>8.8</td>
</tr>
<tr>
<td>Country total</td>
<td>334,133</td>
<td>100.00</td>
<td>3,444,518</td>
<td>100.00</td>
<td>10.3</td>
</tr>
<tr>
<td>Central Region total</td>
<td>104,095</td>
<td>31.2</td>
<td>1,345,514</td>
<td>39.1</td>
<td>12.9</td>
</tr>
</tbody>
</table>

*Source: Author’s calculations using data from INEGI (1995) Economic Census, Mexico.*

commodity flows, (3) the pattern of foreign investment, and (4) spatially selective industrialization.

**Industrial Concentration**

Recent trends in industrial location do not necessarily coincide with dispersed urban growth. Although the population is dispersing throughout the urban hierarchy, industrial
concentration has occurred in more selective locations. Between 1970 and 1995, urban expansion within the Central Region has been characterized by a redistribution of population to the smaller- and intermediate-sized urban centers; concentration in the primary city was reduced. In fact, Mexico City was the only metropolitan center that lost relative importance in terms of population. Most of the cities registered population growth rates above the regional average, particularly large urban centers (more than 500,000 inhabitants), which increased their proportion of urban population from 11% to 14% during the same period (Table 5). The cities of Queretaro, San Juan del Rio, Cuernavaca, Cuautla, and Tehuacan grew by more than 4% during the period.

Although data show the relocation of industries from the urban “core” to other metropolises and intermediate cities during the past decade, the fact remains that Mexico City still contains most of the manufacturing employment in the region, with about 50% of firms and 70% of the industrial labor force in 1994. These figures inform of regional restructuring. First, a massive regional relocation of firms from Mexico City has clearly not happened. Second, although some firms have moved their plants or some of their productive processes to other locations in the Central Region, or elsewhere, this has been a selective movement of a relatively small proportion of firms. Third, the appearance of manufacturing firms in new locations is not entirely a result of deconcentration from Mexico City. Such new firms prefer nontraditional locations with new competitive advantages and new productive networks and agglomerations. This process has a multiplying effect on the number of industrial spaces.

From the point of view of manufacturing activities in the Central Region the tendency seems to indicate that some privileged territories are attracting additional industrial activities and are inducing new productive linkages, and these activities have a strong socioeconomic impact on their respective territories. It is, therefore, important to identify four of the seven states, in the Central Region where industry is concentrating. They are: the Federal District, and the states of Mexico, Puebla, and Querétaro. Together these states contain 90% of the manufacturing labor force and 85% of firms. In this context, there are signs that large firms have tended to locate away from Mexico City to the north to the cities of Queretaro and San Juan del Rio where 9,116 manufacturing jobs could be found in 1994 (Table 5). There has also been a multiplication of industrial firms to the east of the Central Region in the Puebla-Tlaxcala and Tehuacan corridors, which accounted for 25,832 and 7,646 jobs, respectively, in 1994. The generation of industrial employment in the remaining urban centers was low. One possible implication of this distribution is that, those territories (four states and their corresponding cities) with the highest industrial concentrations are privileged spaces and the preferred locations of leader industries and large foreign-owned and export-oriented firms. This hypothesis clearly requires further analysis at local level.

15I discuss urban growth trends in the Central Region in more detail in Aguilar (1999).
16In the state of Queretaro the average size of firm is 16.5 workers per unit, which is similar to the Federal District and the State of Mexico; the average size in the status of Hidalgo, Morelos, Puebla, and Tlaxcala is between six to nine workers per unit.
Basic to the process of megaurbanization is the constant flow of transactions throughout the Central Region, which includes people, commodities, capital and information. Commodity flows are particularly important for industrial location and are affected by new developments in transportation, leading to new configurations in urban systems that

### Table 5.—The Central Region: Urban Population and Manufacturing Employment Growth

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage of population</th>
<th>Annual growth rate</th>
<th>Manufacturing 1986–1994</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico Cityª</td>
<td>56.52</td>
<td>53.71</td>
<td>2.60</td>
</tr>
<tr>
<td>Urban centers (&gt;500,000 inhabitants)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puebla-Tlaxcala</td>
<td>10.69</td>
<td>14.05</td>
<td>3.86</td>
</tr>
<tr>
<td>Toluca</td>
<td>5.80</td>
<td>6.75</td>
<td>3.39</td>
</tr>
<tr>
<td>Cuernavaca</td>
<td>2.34</td>
<td>3.25</td>
<td>4.06</td>
</tr>
<tr>
<td>Querétaro</td>
<td>1.25</td>
<td>1.82</td>
<td>4.16</td>
</tr>
<tr>
<td>Urban centers (100,000–500,000 inhabitants)</td>
<td>2.24</td>
<td>2.94</td>
<td>3.69</td>
</tr>
<tr>
<td>Cuaautla</td>
<td>0.60</td>
<td>0.73</td>
<td>3.21</td>
</tr>
<tr>
<td>Tehuacán</td>
<td>0.43</td>
<td>0.62</td>
<td>4.20</td>
</tr>
<tr>
<td>Pachuca</td>
<td>0.57</td>
<td>0.72</td>
<td>3.46</td>
</tr>
<tr>
<td>Tulancingo</td>
<td>0.29</td>
<td>0.36</td>
<td>3.48</td>
</tr>
<tr>
<td>San Juan del Río</td>
<td>0.34</td>
<td>0.51</td>
<td>4.36</td>
</tr>
<tr>
<td>Urban municipalitiesb</td>
<td>5.65</td>
<td>6.01</td>
<td>2.95</td>
</tr>
<tr>
<td>High growth (24)</td>
<td>3.61</td>
<td>4.21</td>
<td>3.26</td>
</tr>
<tr>
<td>Low growth (11)</td>
<td>2.04</td>
<td>1.80</td>
<td>2.34</td>
</tr>
<tr>
<td>Remainder of Central Region (rural periphery)</td>
<td>24.90</td>
<td>23.29</td>
<td>2.13</td>
</tr>
<tr>
<td>Central Region</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15,931,701</td>
<td>30,510,871</td>
<td>2.69</td>
</tr>
<tr>
<td>Urban centers</td>
<td>75.10</td>
<td>76.71</td>
<td>2.86</td>
</tr>
</tbody>
</table>


ªReferring to the entire Metropolitan Area.

bHigh growth municipalities = higher than 2.5%; low growth municipalities = lower than 2.4%.

**Commodity Flows**

Basic to the process of megaurbanization is the constant flow of transactions throughout the Central Region, which includes people, commodities, capital and information. Commodity flows are particularly important for industrial location and are affected by new developments in transportation, leading to new configurations in urban systems that
may take the form of isolated pockets of urbanization in predominantly rural areas or urban corridors.\textsuperscript{17}

In order to investigate the trends of territorial restructuring in the Central Region, the daily average flow of trucks on the main roads in the region were analyzed and the results can be seen in Figure 3. Cargo flows were selected for analysis because of their close relation to the exchange of commodities between productive activities. Improvements in the highway network throughout the Central Region have affected urban growth and industrial relocation in the region’s periphery. Most of the transport routes form a radial pattern from Mexico City in the center and lead to the capital cities of the surrounding states.

The most important economic corridors in the Central Region can be identified by the analysis of cargo transport flows on its main highways (Fig. 3). The corridor that runs from Mexico City to Puebla (including free and toll roads) predominates with more than 19,000 cargo vehicles per day; and with subregional extensions to the cities of Tlaxcala and Tehuacan, and its continuation to the port of Veracruz. The second most important corridor runs between Mexico City and the city of Queretaro, with almost 10,000 cargo

\textsuperscript{17}These urban forms have been reported for the megaurban regions in the Southeast Asian Nations (see McGee, 1995, p. 17).

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure3.png}
\caption{Daily average flow of trucks in the Central Region of Mexico, 1995. \textit{Source:} Chias, 1999. Reproduced by permission.}
\end{figure}
MEGAURBANIZATION AND INDUSTRIAL RELOCATION

vehicles per day over a distance of about 200 kilometers. High rates of urban and industrial growth were registered in these latter two cities between 1987 and 1994. On a lower scale are three other corridors that cover shorter distances. The first is between Mexico City and the city of Pachuca, which includes Teotihuacan. The second is between Mexico City and the city of Toluca. The third is between Mexico City and Cuernavaca, which included free and toll roads.

In short, the consolidation of the road network in the Central Region has increased the movement of population and goods, has stimulated the dispersal of industrial firms, and has contributed to the formation of economic corridors. These corridors have increased the penetration of manufacturing into rural areas. The most intensive cargo vehicle flows are influenced by two main factors: (1) existing main concentrations and the recent growth of industrial activities in new areas, and (2) the polarization of activities from the main urban areas.

The Concentration of Foreign Investment

The territorial destiny of foreign investment is an important indicator of the degree of internationalization of economic activity and its effect on the economic spatial configuration. Analysis of the relevant data shows that foreign investment continues to concentrate in the main economic and urban agglomerations.

The Central Region attracted 71% of Mexico’s total foreign investment between 1994 and 1997, with a marked concentration of investment in two federal areas that make up Mexico City: the Federal District and the State of Mexico, comprising 97% of total foreign investment in the Central Region (Table 6). Despite the important economic base found in the other states of the Region, foreign capital shows a clear preference for the regional urban “core.” However, the data refer to the locations of foreign capital by company headquarters which does not necessarily mean that the associated productive units are located in the urban “core,” but that only the decision-making administrative and directive offices are thus located. This, though, does not affect the fact that Mexico City, by far the largest city in the Central Region, has more foreign investment and is more closely integrated into the global economy than other cities in the Region, and therefore, plays a prominent role in the transnationalization process. In the year 2000, of the 100 most important (in terms of sales volumes) multinational firms in Mexico, 67 of them were located in the Federal District (Mendiola, 2000).

Almost half of total foreign investment in the Central Region (49%) was to the manufacturing sector, of which 95% was located in the Federal District and the state of Mexico. The other important recipients of foreign investment were commerce and financial services, with 18% and 16% respectively. Data show that the apparent “deindustrialization” that affected the largest metropolis in the region reflects a gradual transnationalization of industry; a dispersed pattern of manufacturing activities mainly controlled from the urban “core”; and the rapid tertiarization of its economy. If we refer to the 500 most important firms (by sales) in Mexico’s tertiary sector, their sales increased from 36% of the total in 1992 to 52% in the year 2000 (Expansion, 1992 and 2000). Thus, manufacturing maintained its importance in terms of foreign investment, indicating that the traditional locations are more productive and competitive. The new locations such as Puebla and Queretaro (that registered the highest number of firms with foreign capital) are becoming
# Table 6. — The Central Region: Foreign Investment and Number of Firms by Economic Sector, 1994–1997<sup>a</sup>

*(In thousands of U.S. dollars)*

<table>
<thead>
<tr>
<th>State</th>
<th>Manufacturing</th>
<th>Commerce</th>
<th>Transport and communications</th>
<th>Financial services</th>
<th>Other sectors&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment</td>
<td>Firms</td>
<td>Investment</td>
<td>Firms</td>
<td>Investment</td>
<td>Firms</td>
</tr>
<tr>
<td>State of Mexico</td>
<td>907,067.7</td>
<td>597</td>
<td>151,416.6</td>
<td>286</td>
<td>187,186.3</td>
<td>6</td>
</tr>
<tr>
<td>Hidalgo</td>
<td>201,509.8</td>
<td>21</td>
<td>3,339.1</td>
<td>5</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Morelos</td>
<td>33,743.4</td>
<td>46</td>
<td>88,279.7</td>
<td>28</td>
<td>71.5</td>
<td>1</td>
</tr>
<tr>
<td>Puebla</td>
<td>8,674.3</td>
<td>104</td>
<td>29.6</td>
<td>38</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Queretaro</td>
<td>237,642.3</td>
<td>106</td>
<td>5,295.4</td>
<td>29</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Tlaxcala</td>
<td>41,015.7</td>
<td>28</td>
<td>16.3</td>
<td>2</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Central Region</td>
<td>11,390,292.8</td>
<td>2,517</td>
<td>4,180,262.0</td>
<td>2,235</td>
<td>1,683,680.2</td>
<td>133</td>
</tr>
<tr>
<td>Federal District</td>
<td>9,960,639.6</td>
<td>1,615</td>
<td>3,931,885.3</td>
<td>1,847</td>
<td>1,496,422.4</td>
<td>124</td>
</tr>
</tbody>
</table>

<sup>a</sup>Data on foreign investment does not include profits reinvestment or investment in the Central Region by firms with headquarters located outside region limits.

<sup>b</sup><sup>1/</sup> Includes agriculture and livestock, extractive industry, electricity and water, construction, and consumer, social, and professional services.

MEGAURBANIZATION AND INDUSTRIAL RELOCATION

the dominant and privileged territories in terms of the internationalization of the economy (Table 6).

One implication of this investment pattern is that the urban core reinforces its economic position in the Central Region and reinforces its character as a global space. A second implication is that foreign capital is now an important agent in the Central Region in terms of the creation of job and the establishment of industrial firms. Between 1994 and 1997 foreign capital led to the establishment of 2,517 manufacturing units out of a total of 8,123 units in all economic sectors. Thus, the deindustrialization process in the Region’s core has affected medium and small firms that have closed because of neoliberal policies, while larger firms have maintained a strong position in the economic structure and are linked to foreign capital, and are probably export-oriented. A third implication is the concentration of foreign investment in a few urban or subregional territories, which represents an uneven spatial development which favors the principal urban and industrial areas and may even lead to the economic resurgence of some locations which are favored for their better transport and communication systems, infrastructure, and access to key amenities, such as schools, hospitals, and leisure facilities.

Industrial Location and Regional Specialization

The degree of industrial specialization among municipalities in the Central Region can be seen by comparing the locational quotient\(^{18}\) totals for manufacturing employment at regional and national level. The results are shown in Figure 4 and indicate that of 531 municipalities in the Central Region only 211 (40%) registered locational quotients greater than 1.0. Of these, 21% (44) are found in metropolitan areas, 6% (13) are urban, and 73% (154) are in rural areas. This spatial distribution appears to be influenced principally by three factors:

(1) Polarization has affected metropolitan areas. The presence of large cities has been fundamental for attracting manufacturing industry to the Central Region, and the peripheral municipalities that have benefited most are found first in Mexico City, where the northern part of the metropolitan area registers a strong manufacturing specialization, followed by Puebla-Tlaxcala to the east and Toluca-Lerma to the west.

(2) Accessibility has shown improvement among urban centers. As has been pointed out previously, the principal road network connecting metropolitan and urban centers has facilitated not only increased transactions but also the location of firms along the main roads. In some cases, these form economic corridors, and the Mexico City-Queretaro and Mexico City-Puebla highways are good examples, and, to a lesser extent, sections of the Puebla-Tehuacan road to the southeast and Pachuca-Tulancingo-Huauchinango to the northeast.

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\(^{18}\)The locational quotient is a measure to know the degree of specialization of a territorial unit with respect to a larger one, for example, a state unit with respect to the national territory. It is calculated with the following formula: \(LQ = \frac{(E_{ij}/E_j)}{(E_i/E_t)}\). Where \(E_{ij}\) = Employment in spatial unit \(j\) in sector \(i\); \(E_j\) = Total employment in spatial unit \(j\); \(E_i\) = National employment in sector \(i\); \(E_t\) = Total national employment. See Figure 4.
(3) Rural industrialization has been a problem. Although the Central Region as a whole is characterized by high levels of socioeconomic development, it also contains some of the most depressed rural areas. These areas are relatively far from main urban centers and are territories with difficult access problems and low-productivity agriculture or mining. In order to activate these backward areas, local policies are trying to attract industrial capital for the location of firms or assembly plants, to take advantage of their inexpensive labor and some basic services. These areas, which can be identified in Figure 4, are found particularly in the northern regions of the states of Mexico, Tlaxcala and Puebla, in municipalities such as Aculco, Tlaxco, and Pantepec, which are located in semiarid or hilly zones, and in the southern parts of the states of Mexico and Puebla in municipalities such as Almoloya and Petlalcingo. Although some industries have been developed in these regions, they include traditional handcrafts. The new industrialization is based on simple assembly tasks in textile activities and other industries.

It is important to explore possible territorial specialization patterns within the specific manufacturing sector activities. The central premise is that locational patterns emerge in accordance with the technology content and the level of specialization of particular activities. Disaggregated data are useful for pointing out the territorial trends of manufacturing and the specialization of particular areas in the Central Region. Whereas some activities
tend to relocate toward the regional periphery, others concentrate in the larger cities in which most of the new jobs are created.

In 1994, the bulk of the industrial labor force (79%) in the Central Region was concentrated in four main activities: food products (18%), textiles and leather (19%), chemicals (16%) and metal products and precision instruments (26%). The main locational factor for the food and textile and leather industries is their proximity to major consumer markets. During the period between 1986 and 1994, employment fell in the chemical and metal products industries in the Central Region, where these industries are known for their high technology component and production of specialized goods (e.g., petrochemical and pharmaceutical products, plastics, electric and electronic equipment and vehicles). The locational requirements of these industries are highly selective, as they seek competitive advantages and a high-quality urban infrastructure.

All the municipalities that registered locational quotients greater than 1.0 (Fig. 4) were selected in order to compare the locational trends by industry. The net differences in employment were calculated for the period 1986–1994 and corresponding maps were drawn for each of the four main industries (Fig. 5). The maps present only positive net differences in employment and reflect specialized industrial territories in the region. These four industries represent not only greater than average regional industrial concentrations, or “winners” spaces in terms of new jobs, but also they indicate recent locational trends. The four subsectors can be divided in two groups according to the type of products manufactured and their distribution pattern.

The Consumer Goods Industries. These industries include the manufacture of food and textile and leather products. Those territories with small gains (less than 50 workers) show a dispersed distributional pattern throughout the Central Region and include industries that are dominated by small- and medium-sized firms in traditional products such as milk, bread, sugar, and beverages which are often located in rural areas. The important gains in these industries (more than 500 workers) are found in the urban or metropolitan areas of Mexico City, Toluca, and Puebla, as well as in the Queretaro-San Juan del Rio corridor. The textile industry includes garment manufacturing and all types of leather and shoe making. Their locational pattern of employment gain is more concentrated than that for food products, and is largely found in urban centers and other territories where there has been a tradition of manufacturing the same goods. Therefore, employment gains are concentrated in the main metropolitan areas and in cities such as Tehuacan and Teziutlan in the state of Puebla, and in those well-known municipalities where these goods have traditionally have been produced (e.g., Atenco, Chiconcuac, Santa Ana Chiautempan, and Tulancingo). There is evidence that in Chiautempan (state of Tlaxcala) and in Tehuacan (state of Puebla) there are networks of the garment industry that supply the market of Mexico City and export to the United States (Rosales, 2000, p. 175–180).

The High Technology Industries—This category comprises the chemical, metal products, and precision instruments industries. There is a clearly concentrated pattern of employment gain in the chemical industry (Figure 5C). But a large number of municipalities do not have any manufacturing industries of this type. The employment gains are particularly great with firms that show a marked preference for metropolitan and urban locations in the larger cities of the Central Region, such as Mexico City, Cuernavaca, Puebla, Queretaro-San Juan del Rio and Toluca-Lerma. In contrast, there is a notable absence of these activities far from the major urban centers in the rural periphery. One
possible reason is the overriding influence of the road system as employment gains are located along the road network.

The pattern of employment gains in the metal products industry is more concentrated, located in a few urban areas in the Puebla-Tlaxcala axis and the metropolitan peripheries of Mexico City and Toluca, and the Mexico City-San Juan del Rio corridor. This concentration may be explained by the composition of the industry in which some of its components require high-technology inputs, as with electronics, precision instruments, information processing, and vehicle manufacturing; all of which are usually found in urban locations. Other, more traditional branch industries, for example, the manufacturing of machinery and tools, transport equipment maintenance, electric appliances and agricultural machinery, have a lower technology and investment content. These industries are likely to be located in less urban, or even rural locations with small- and medium-sized firms. In both cases, the metal products and precision instruments industries have declined in the Central Region as a whole and employment gains were highly selective and concentrated.

**Fig. 5.** The Central Region of Mexico: Municipalities with employment gains in the manufacturing sector, by metropolitan, urban, and rural areas, 1986–1994. A = Food Products; B = Textiles; C = Chemicals; D = Metal Products. *Source: Economic National Census, 1994, INEGI, Mexico.*
In terms of territorial specialization, recent distribution patterns in the four industries show that: (1) the larger metropolitan areas, and to a lesser extent selected urban centers, are the main locations for the new manufacturing industries, (2) although there is a marked trend toward dispersion for some industries, the emerging territories are often extensions from the urban centers and corridors as a result of their proximity to them, and (3) the absence of important manufacturing agglomerations on the regional rural periphery tends to reinforce intraregional disparities within the Central Region.

CONCLUSIONS

Mexico City is a representative example of a megacity in a large developing country where new and old territorial orders collide. This metropolitan complex is characterized by dynamic processes that tend to break down the differences between rural and urban activities; intensify the circulation of commodities, people, and capital among the main urban components; concentrate agents of the global economy such as foreign capital; and conform to a polycentric pattern that functions as an urban subsystem under the predominance of the primary metropolis. However, there are signs that economic globalization and industrial capital reinforce the foundations of the local production systems, which tends to reinforce spatial inequalities at the interior of the “core” region in Mexico.

This paper has shown that the Central Region of Mexico has recently undergone a process of territorial restructuring that is highly influenced by the internationalization of the economy and which leads to new industrial dispersion and reconcentration patterns, increasing the competitive advantages of the larger urban locations. The process of mega-urbanization, with Mexico City at the urban core, reflects the emergence of a new territorial order with old and persistent spatial inequalities. In this process Mexico City plays a fundamental role, and, although it registered a slower population growth and the relocation of some manufacturing industries to nearby cities over the last decade, it remains the main national metropolis in terms of economic concentration. Moreover, the data show that Mexico City is the preferred location for many industries and for foreign investment.

The expanded urban system and an integrated road network have stimulated transport flows and spatial relations between urban and rural areas, with Mexico City as the main node in the Central Region. This, and the search for new competitive advantages for industrial capital, has led to changes in the region. This paper argues for the need to adopt a regional approach that incorporates the analysis of urban centers and rural areas and interactions between them with the aim of visualizing the totality of the territorial changes and inequalities in this core region of the country.

Data for the manufacturing industries show that territorial restructuring in the Central Region is related to three principal processes. The first is a spatially selective industrialization where the location of manufacturing in the region is due either to firms moving out from Mexico City or new arrivals to selected locations having notable competitive advantages. In this process some privileged territories are the main points of attraction, as in the case of the Federal District and the states of Mexico, Puebla, and Queretaro, where leader industries and large foreign-owned and export-oriented firms locate. This agglomeration is mainly influenced by the three factors: the metropolitan expansion of larger cities; improved accessibility leading to the formation of economic corridors; and the reactivation of depressed areas through “rural industrialization.”
Second, a concentrated pattern of foreign investment in the urban core has been identified which reinforces the core’s economic position in the Central Region and its global character. The majority of foreign capital in the industrial sector shows a preference for Mexico City’s Federal District and adjoining municipalities in the state of Mexico. This investment has stimulated reindustrialization, job creation, and the reagglomeration of foreign-owned industries.

Third, the trends for industrial territorial specialization are complex and particular to specific industries. In the case of consumer goods such as the food products, textiles and leather industries, employment gains were concentrated in urban and metropolitan locations in the larger cities, but some employment generation took place in some rural locations as well. The latter trends are related to productive complexes in specialized rural and urban territories that have a tradition in their respective industries. In the case of the high-technology industries, the chemical and metal products industries are highly concentrated in a few urban locations, particularly in the larger cities of the Central Region, such as Mexico City, Puebla, Toluca and the Mexico City-San Juan del Río-Queretaro corridor.

Megaurbanization and territorial restructuring in the Central Region show that cities are critical to the process, and the main metropolitan areas are increasingly involved in the division of labor in manufacturing. This is partly seen in the formation of intraregional productive chains resulting in localized competitive advantages, and in the reorganization of systems production and exchange. The shift in the country’s development strategy toward export orientation and the attraction of foreign investment is apparently reinforcing the foundations of the local production system relative to the rest of the country. In the process, the position of certain privileged locations (particularly cities and corridors) as production complexes is consolidated. From this point of view a process of uneven spatial development that favors metropolitan complexes may be reemerging. The productive territories have developed strong endogenous forces that are, to a great extent, of metropolitan origin and are leading to the emergence of new industrial spaces in peripheral areas that had earlier been ignored, forming a complex pattern of spatial linkages and specializations.

The superposition of new and old spatial forms around megacities demands the analysis of some new elements of the urban-regional order. In the first place are the spatial inequalities that new investments and industrial relocations are provoking. To what extent are external factors such as foreign investment reinforcing territorial disparities? Second, what are the new elements that are restructuring the megaregion basically urban corridors and urban sub-centers? What is the role of each of those in the periphery and in the whole region? Third is the functioning of the emerging polycentric pattern within the megacity. What is the division of labor among all the centers? Finally, what are the improvements in the social conditions in the core and peripheral zones of the largest city? What is the condition of service provisions and poverty improvements in central and peripheral locations of the megacity?

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