

A Review of Regional Development, Disparities, and Public Policies in Mexico: Reflections on an Environment of Strategic Reconfigurations



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Abstract Recent turbulent world dynamics with geopolitical change and the reversal of major trends appear to be underpinning a return to protectionism as a strategic political tool. In addition to political reconfiguration at the international level, Mexico is facing internal political rearrangement in which particular visions of the national model are being adopted. These national and international adjustments offer an opportunity for a broad discussion of the Mexican development paradigm and its regional impacts. This chapter contributes to the debate on regional economic development in Mexico and reflects on some of its main dilemmas. After a succinct review from a historical perspective, a more detailed account is provided of regional development and spatial disparities in the opening up and liberalization phase. I also discuss key elements in the evolution of planning and regional policy in the country throughout the twentieth century and to date. The work concludes with four reflections about Mexico's regional development perspectives and challenges.

Keywords Regional development · Regional disparities · Territorial policy · Trade · Mexico

1 Introduction

Recently the dynamics of world geopolitical change and the reversal of major trends appear to be underpinning a return to protectionism as a strategic political tool. Britain's exit from the European Union (Brexit) and the United States interest in reversing the North American Free Trade Agreement (NAFTA), the emergence of

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new macroregional spaces and trade blocs, and other international geo-economic adjustments to such factors as China's increasing significance in the global economy all contribute to this turmoil. In addition, the current speed of change seems to have no precedent. Whether the opening up model, based on the integration of regional blocks, is lapsing and what new (or old) models and organizational structures in countries' commercial relationships and internal economies will replace it are significant questions. The debate about how Mexico and the world should be restructured is therefore very much alive. Despite the speed at which events are occurring, it is essential to examine their effects and implications systematically and continuously.

More than 30 years ago Mexico, like many other developing countries, took a radical turn in its economic policy. The exhaustion of the import substitution model coupled with the problem of external debt, which had become a serious obstacle to the country's stability, led to the implementation of a new economic model. This consisted of a set of policies including trade liberalization, privatization, and deregulation (Trejo 2017). The emphasis was on shrinking the scope and size of the government and trusting in the efficiency of free-market processes and private-sector activities. The economic model was based on the premise that the external sector's dynamism would mobilize all sectors of the economy. The state simply had to focus on maintaining the stability of its key macroeconomic variables to be able to offer a favorable environment for investment. The opening up of the Mexican economy led to a radical suppression of barriers to international trade. The first stage of this process, in the 1980s, was based on far-reaching unilateral liberalization followed by multilateral liberalization within the framework of the General Agreement on Tariffs and Trade (GATT). Later, NAFTA coming into force in 1994 revealed Mexico's aspiration to integrate itself into the global economy via favorable positioning in North America (Cárdenas 2015).

Trade liberalization and integration with North America were presented as powerful tools for the expansion of trade and foreign investment, the greater mobility of productive factors between Mexico and its partners, and economic growth and diminishing inequalities within Mexico: in short, for greater prosperity (*ibid*). Over the years much discussion has revolved around the question of how NAFTA triggered any positive social, economic, and territorial change given the opportunities it offered, and the challenges and pressures imposed by the international economic order.

Despite the positive effect on trade flows and investment, Mexico's liberalization brought about heterogeneous effects. In particular, opening up the markets had asymmetric impacts on economic opportunities, productive capacity, and outcomes. The regional effects and impacts of liberalization and NAFTA have been an issue of particular interest (Chamboux-Leroux 2001; Sanchez-Reaza and Jordaan 2002; Corona Jiménez 2003; Decuir-Viruez 2003; Dussel Peters 2003; Rodríguez-Pose and Sánchez-Reaza 2003; Jordaan and Sanchez-Reaza 2004; Aroca et al. 2005; Diaz Bautista 2005). There is evidence that Mexico has historically been characterized by

important economic contrasts across its territory (Trejo Nieto 2020), and several authors have pointed out that these territorial imbalances persisted after the opening up of the economy and the country remained geographically fragmented in terms of its economic development (Mendoza-Velázquez et al. 2020; Díaz Dapena et al. 2017; Trejo 2017). Trejo (2017), for instance, points out that the geographic distribution of economic opportunities in recent decades has been irremediably linked to the export-oriented economic model. Initially, it gave rise to favorable conditions for the take-off or consolidation of industrial centers located mainly in the north of the country; subsequently, some economic de-concentration benefited cities and regions in the center-north and the Bajío, leaving the south of the country behind.

In addition to political reconfigurations at the international level, the country has recently been facing internal political rearrangement in which particular visions of the national model have been shifting (Villanueva Ulfgard and Villanueva 2020). Both national and international rearrangements have offered the possibility of a broad discussion about the Mexican development paradigm. For instance, the revision and renegotiation of NAFTA which began in 2017 presented the possibility of rethinking the opportunities and advantages that the agreement had offered as well as the difficulties inherent in the commercial and productive link between Mexico, the USA, and Canada. Perhaps without careful consideration of NAFTA's limitations and drawbacks, in June 2019 Mexico became the first country to ratify the US-Mexico-Canada Agreement (USMCA), a trade deal that replaced NAFTA but essentially remains with a few updates (Villarreal and Fergusson 2019). Meanwhile, a new national development program under a president who came to power in December 2018 has not defined a clear strategy for addressing regional development issues.

It is essential to continue the discussion and investigation of regional development processes and trajectories. A pending task is to accurately inform, from this debate, the necessary public action to be exercised regarding different programs and policies to close or reduce the gaps between the different areas of the country. This chapter adds to the debate on regional economic development in Mexico and reflects on its opportunities and challenges. The following section reviews regional development and disparities in Mexico from a historical perspective. Then I briefly outline the process of the liberalization of the Mexican economy, including the commercial integration of North America through the Free Trade Agreement that came into force in 1994 and was in a process of revision and renegotiation in 2018, suggesting some of its implications and results. Section 4 reviews regional development and spatial disparities in Mexico's opening up and liberalization phase. Then I discuss the evolution of planning and regional policy in Mexico throughout the twentieth century and to date. The work concludes with four reflections about the development perspectives of and challenges to Mexico's regions.

2 Regional Economic Disparities from a Historical Perspective

As discussed earlier, significant disparities are a historic feature of regional development in Mexico (Trejo Nieto 2020). The salient regional differences and socio-economic backwardness of large areas of the country date back to the territorial system under a colonial rule designed to exploit human, mineral, and agricultural resources for the benefit of the Crown and accelerate the flow of goods between the interior of the country, the capital, the port of Veracruz, and finally Spain (Ordóñez 2015). Mexico City, the capital of New Spain, located in the country's central region, became the dominant urban center. In addition to the capital of the viceroyalty the urban system included a variety of settlements: administrative and military cities (Guadalajara and Mérida), port cities (Veracruz, Acapulco, and Mazatlán), and mining centers (Guanajuato, Pachuca, Zacatecas, San Luis Potosí, and Taxco). The first decades of Mexico's return to independence saw a highly regionalized and weakly articulated urban system. The center of the country maintained its primacy due more to generalized weak economic and political power than to its dynamism. In subsequent decades the country saw few changes to its spatial organization apart from significant transformations in the delimitation of the national territory due to political conflict and internal and external disturbances: Mexico lost more than two million square kilometers in the north when Alta California, Texas, and Arizona were annexed to the USA (Kemper and Royce 1979). After several failed governmental attempts to alleviate the political and economic turmoil in the country, at the end of the nineteenth century the government of Porfirio Díaz sought to foster industrialization and promote urban development.¹ Although industrialization was in an incipient stage, it was strongly supported by foreign capital investment, mining exploitation, the construction of infrastructure—mainly a national railway system—and promotion of an exporting sector. Of these, the railway system was particularly relevant to territorial development and connection (ibid), improving access to markets by helping to reduce local and regional trade barriers (Unikel 1975). During this time public policy also addressed modernizing the legal framework for business and eliminating regional taxes on trade (Ordóñez 2015) such as the well-known *Alcabalas*.²

The rail network particularly benefited some areas of the country by connecting them to the national capital and the main ports. Mexico City, Guadalajara, Toluca, and Aguascalientes grew rapidly as commercial and industrial centers. Torreon underwent an outstanding transformation and became an important cotton production center due to the positive impact of the railroad, but Puebla, Morelia, Tlaxcala, Leon, and Guanajuato remained limited local or regional markets. The most prominent cities grew at twice the national rate, but Guadalajara, Monterrey, Merida, San

¹A period known as Porfiriato.

²A provincial sales tax that was an important in molding the shape of interregional exchange in both colonial and postcolonial Mexico.

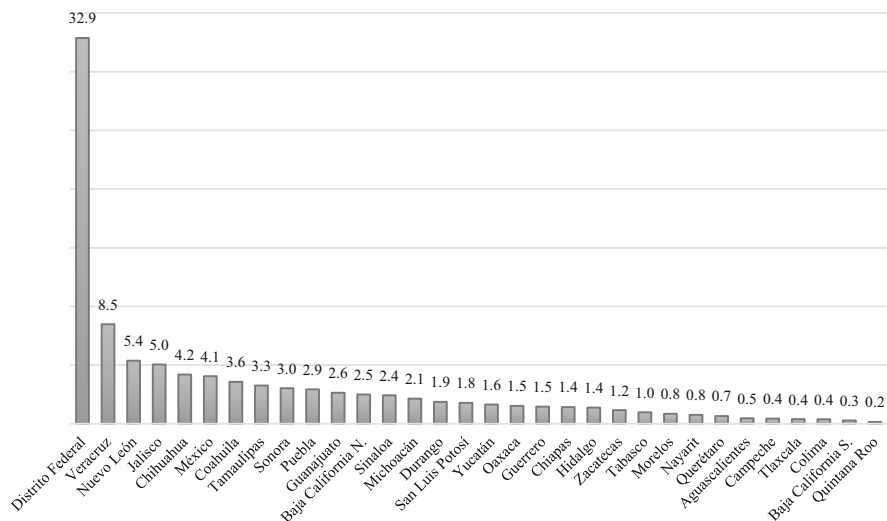
Luis Potosi, and Veracruz grew demographically faster than Mexico City and Monterrey became the chief industrial center (Kemper and Royce 1979).

Thus both in colonial Mexico and during the Porfiriato the center and north of the country and Veracruz became the main centers of economic activity. The revolution and post-revolution saw an era of armed conflict and rural and agrarian reform with strong economic and social differences between regions (Trejo 2017). Esquivel (1999) estimates that per capita income in Mexico City was approximately 9.4 times that in the state of Oaxaca. Beyond the legacies of colonial rule, the Porfiriato and the Revolution, contemporary territorial disparities were defined by factors related to the implementation of different industrialization models in the twentieth century.

The 1940s were a turning point in the process of industrialization and development. Like many developing countries, Mexico faced the problem of late industrialization as its economy was mainly based on processing and trading primary products. It implemented a protectionist import substitution strategy to promote the development of the domestic industrial sector, bringing about a sectoral shift from agriculture to manufacturing. Government measures in the industrialized closed economy model induced a strong transfer of resources to industrial activities, to the detriment of the primary sector, and public funds were channeled for the development of infrastructure favoring the main urban areas—Mexico City, Guadalajara, and Monterrey—and affecting economic and social development in the south of the country (Trejo 2017; BBVA Bancomer 2001).

A broad protectionist apparatus was instituted via a variety of commercial policy instruments to encourage national investment. Tariffs of up to 100% were imposed on several final consumption goods, especially durable consumption goods, and licensing requirements were established for more than two-thirds of total imports. With this commercial scheme underway the domestic market, which was concentrated in the center of the country, became the main destination for national production. In the 1960s the border industrialization program, a regional industrialization plan that used federal subsidies for the creation of infrastructure and industrial parks in different cities along the border with the USA, was established, activating the maquiladora program. The special tax regime for the maquiladoras allowed duty-free imports of the necessary machinery, parts, and raw materials from international outsourcing companies, mainly in the USA (Trejo 2017).

Rodríguez-Pose and Sánchez-Reaza (2003) identify a clear duality in the territorial pattern of the Mexican economy throughout the protected economy period. Economic activity was concentrated in the Federal District and the State of Mexico in the center of the country. Nuevo Leon and Jalisco were established as important economic poles. In the 1960s the maquiladora program entailed the establishment of industrial activity and some economic dynamism in several border cities. This resulted in two regional blocks: one prosperous, which included the center of the country and along the border with the USA, the other the periphery, which included the southern and southeastern states. These authors support the idea that the polarized geographical pattern of Mexico's economic development has a historical origin,



Based on German-Soto 2005

Fig. 1 Average State Contribution to National GDP, 1940–1970 (%)

and that the industrialization strategy activated mechanisms that aggravated the economic backwardness of the South and Southeast, whose economies had historically been based on exporting natural resources and primary products. Bassols (1993) perceives this duality as part of a very long and chaotic development pattern in which the primacy of the most developed region originated in the pre-colonial era.

Although concerns about the regional problem and development disparities arose in the first decades of the import substitution model, the primary objective in privileging national economic growth puts these issues in second place. In the 1960s the industrialization strategy revealed strongly centralizing effects, as reflected in the significant concentration of economic activity in Mexico City. In the 1970s explicit government attention was directed at the problem of the interregional imbalance (Janetti 1988). Figure 1 shows the average percentage of national Gross Domestic Product (GDP) across states between 1940 and 1970. Almost 33% of total GDP was concentrated in the Federal District, as Mexico City was previously called: almost four times more than in the second state. In 1960 the Federal District produced around 37% of the country's GDP.

There were dramatic differences between states' GDP per capita between 1940 and 1970, and these differences widened according to changes in the standard deviation. In 1940 the Federal District and Baja California had the highest per capita income, almost 20 times that of Oaxaca's. By 1970 there was a general increase in income per person, mainly in the states of Mexico, Jalisco, Nuevo León, and Sonora,

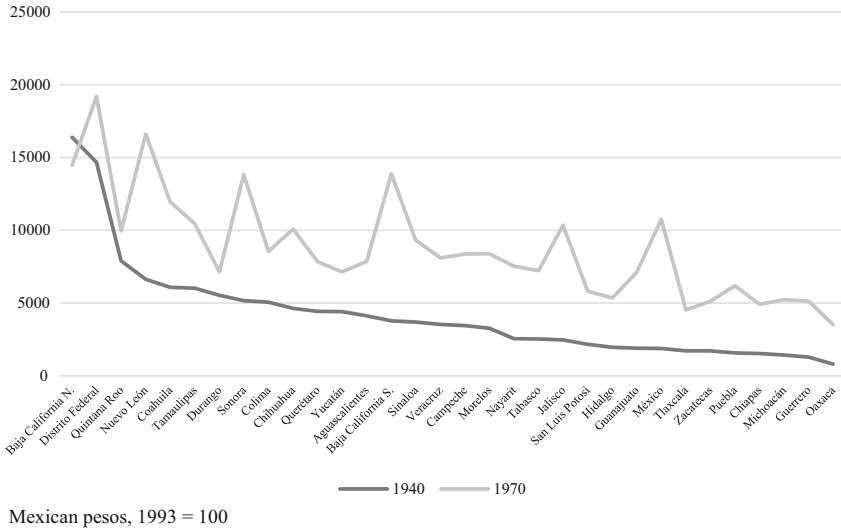


Fig. 2 GDP Per Capita by State in 1940 and 1970. (Based on German-Soto 2005)

leading to an important rearrangement in the ordering of the states according to GDP per capita, with Nuevo León second after the leading Federal District (Fig. 2).

Although the problem of regional disparities is long-standing, in the Mexican academic sector this strand of analysis underlining the problem of economic-spatial divergence started to gain relevance in the 1960s and 1970s. Unikel (1975, p. 143) states:

Territorially speaking, socioeconomic development does not occur uniformly; it occurs with greater intensity in some places than in others, which creates regional inequalities. It is a worldwide phenomenon; in fact, there is no country, whether industrialized or not, [...] that does not present regional disparities in per capita income, in the standard of living of the population, and, in general, in the distribution of national wealth.

Other efforts to address regional and urban problems and carry out territorial delimitations in the country go back to works such as those of Bataillon (1967), Barkin (1972), and Unikel et al. (1976). These contributions paved the way for research and analysis of the development issue from a territorial point of view, triggering not only research but also teaching on regional and urban issues and the generation and systematization of subnational data and indicators. This awareness involved several actors comprising mainly academics from different disciplines, the National Statistics Office, and to some extent governments and public policymakers. Research on regional development and socioeconomic disparities in Mexico has since expanded significantly.

3 Liberalization of the Mexican Economy in the Reformist Agenda

There is a broad consensus that the Mexican economy went through a relatively successful stage of economic growth and industrial transition between 1945 and 1960, although at the end of this period some serious structural problems came to light in the import substitution model (Trejo 2017). The 1970s represented an exceptional stage during which the economy experienced sustained economic growth, interrupted by the balance of payments crisis in 1976. This crisis was stimulated by both deficit spending and increasing external debt, with the oil boom multiplying the size of public and private spending and external debt. The oil boom in 1978–1981 saw the recovery of the economic growth rate to the rates of previous decades before a combination of factors led to a debt crisis in the first quarter of 1982. At that time the financing of external deficits ceased abruptly when foreign banks, private lenders, and international financial institutions refused to issue new loans (Cárdenas 2015).

The debt crisis is a key explanatory factor in Mexico's accelerated transit to a liberalized and globalized economy. Banks and lenders accepted the reestablishment of credit and the programming of a new debt schedule under the condition that the government followed a series of structural adjustment measures. The rescue package included a complete program of deregulation, privatization, and economic liberalization. Once the stabilization program was implemented the economy entered a deep recession in which consumption, investment, and economic activity slowed considerably. From 1982, the economic policy had to be reformulated in unstable conditions. It was up to the government of President Miguel de la Madrid to undertake this change in national policy. The 1983–1988 National Development Plan highlighted the need to promote structural reforms favoring export-orientated industrialization and sustained economic growth (Poder Ejecutivo 1983).

Mexico's formal commitment to the International Monetary Fund (IMF) to rationalize its excessive import protection was the starting point of the open economy scheme. Formal dismantlement of its protectionist apparatus began when Mexico acceded to the GATT in 1986. Subsequently the government promoted an export-oriented program of industrialization that included incentives for non-oil exports, the restructuring and simplification of administrative procedures, greater access to credit, and the reduction of restrictions on the use of export earnings. In 1987, export taxes and other export controls were reduced and the government abandoned its previous efforts to limit foreign direct investment (FDI). The liberalization program led to a radical lowering of trade barriers to facilitate trade and investment flows (Cárdenas 2015). Figure 3 illustrates the three stages of development restructuring.

Some of the results of the first stage of structural adjustment in the 1980s included macroeconomic stabilization; an increase in the value of total exports at an average annual rate of approximately 9% between 1983 and 1993; an increase in the share of non-oil exports from 28 to 86%; and an average annual growth in manufacturing

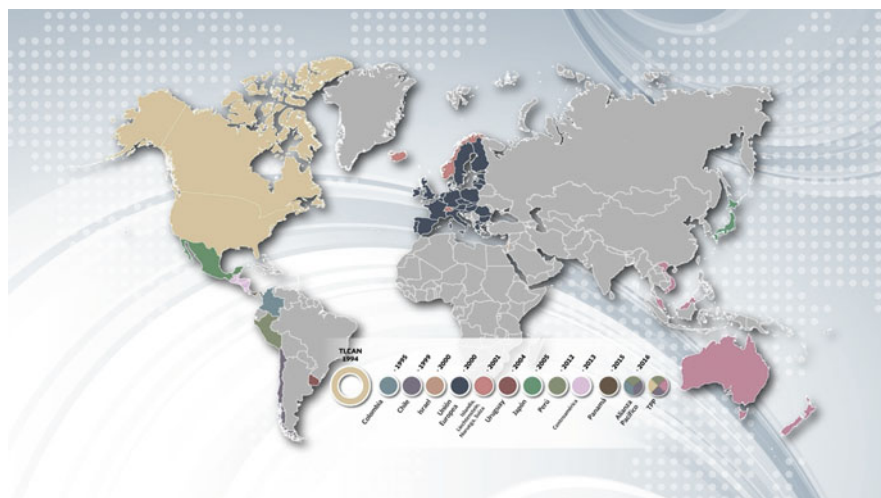
<h2 style="text-align: center;">Industrialization Models in Mexico</h2>		
<p><i>Import substitution</i></p> <p>(1940s-1970s)</p> <ul style="list-style-type: none"> • 1st stage: Substitution of final goods • Maquiladora program (1960s). Special custom regime and foreign investment without restrictions 	<p><i>Crisis</i></p> <p>1980-1982</p> <ul style="list-style-type: none"> • Debt crisis, structural adjustment and changes to the economic model according to IMF prescription 	<p><i>Export oriented industrialization</i></p> <p>(1980s-)</p> <ul style="list-style-type: none"> • Privatization, deregulation and liberalization • Generalized openness and promotion of foreign investment. Multilateral liberalization through GATT. Regional agreements, NAFTA. • 2012-2018 • A third wave of structural reforms

Fig. 3 Industrialization Strategies and Ruptures

exports of 25%. Manufacturing exports replaced oil as the main source of foreign exchange, and foreign direct investment grew substantially (Trejo 2017).

Structural reform intensified in the 1990s when Mexico signed NAFTA and reached free trade agreements with numerous countries to become one of the most open economies in the world (ibid). Tovar Landa (2016) points out that at the beginning of the liberalization stage based on trade agreements, the country eliminated the most favored nation tariffs on more than 1200 products. The simple average tariff remained at around 13%, but the weighted average tariff decreased from 7.8 to 2.7% in just 4 years between 1993 and 1997. Import permits were eliminated to be replaced by tariffs or quotas. By 2016 the country had signed 12 free trade agreements involving 46 countries (Fig. 4).

Trade reforms, and NAFTA in particular, were announced as powerful tools for the expansion of trade and investment, for the mobility of productive factors, for triggering economic growth, and for reducing inequalities (Trejo 2017). Trade and investment among NAFTA members became more dynamic. NAFTA also contributed to Mexico's recovery from the 1994 crisis and helped to generate conditions for macroeconomic stability over 20 years. Export growth accelerated and was sustained (Cárdenas 2015). However, the imported component in the total supply in the Mexican market also increased substantially. The significant burden of intermediate and capital goods within total imports was evidenced, demonstrating the structural



ProMexico, Secretaría de Economía 2015

Fig. 4 Map of Trade and Investment Agreements Signed by Mexico

deficiency in the production of such goods. Paradoxically, the countries that benefited from the expansion of Mexico's imports have been economies with which Mexico does not have trade agreements, such as China (Trejo 2017).

Over the decades numerous limitations to the development model emerged: low economic growth, enduring external dependence, continuous deficits in the trade account, and growing current account deficits (Cárdenas 2015). This was the obvious result of the abrupt opening up of the economy without the previous implementation of policies to help domestic companies overcome the initial disadvantages of exposure to international competition. Trade liberalization faced inefficient and non-competitive domestic producers that took advantage of privileged access to a captive national market against stronger foreign competition. The inability to operate under the new circumstances forced inefficient companies to close or reduce their operations. As the opening up of the Mexican economy resulted in unfavorable conditions for domestic companies a secondary export sector developed, characterized by fragility, dependence on maquiladora exports, and limited linkages with the rest of the economy. Exporting companies became dependent on the strategies of transnational corporations and the economic activity of the USA. At different times export dynamics responded to a greater extent to a weak domestic demand due to recessive processes and large devaluations of the Mexican currency. Although Mexico expanded its network of free trade and investment agreements it made no significant progress in export diversification. Instead, its success with the export-oriented model was limited to a small number of sectors, companies, and regions. In addition, structural dependence on intermediate and capital goods was not overcome (Trejo 2017).

4 The Regional Question and Spatial Disparities in the Openness and Trade Liberalization Era

As in other countries, globalization and its effects served as motivation for further research on regional development in Mexico. The country's problem was to reconcile a successful export-oriented development model with the wide economic and social imbalance between regions and between urban centers and to overcome the conditions of economic and demographic concentration that were preventing more balanced development during the import substitution industrialization. In the 1990s the export model affected urban-regional economic development by favoring certain sectors, cities, and regions of the country. Subsequent research agreed that opening up the economy had contributed to defining territorial patterns of economic location and regional growth causing significant uneven development. Some regions and cities became more dynamic and competitive, while others lagged.

Thus there is plenty of literature from various perspectives addressing Mexico's regional disparities and the impacts of globalization. Krugman and Livas (1996) discuss the effect of trade liberalization on Third World metropolises, focusing on Mexico and Mexico City. Hanson (1997, 1998) shows how trade reforms led to the rupture of the industrial nucleus in Mexico City and the relocation of manufacturing in states bordering the USA. Gamboa and Messmacher (2002), Rodríguez-Oreggia (2002), Sanchez-Reaza and Rodríguez-Pose (2002), Díaz Bautista (2003), Díaz Bautista and Mendoza (2004), Borraz and López-Córdova (2004), Rodríguez-Oreggia (2005) and Calderon and Tykhonenko (2006) analyze disparities in growth and income inequality. Others, for example, Díaz Bautista and Mendoza (2004), address differences in labor productivity and wage gaps. Decuir-Viruez (2003), Rodríguez-Pose and Sánchez-Reaza (2003), Aroca et al. (2005), and Diaz Bautista (2005) analyze the relationship between regional growth trends in Mexico and trade reforms and convergence, while Esquivel et al. (2002), Chamboux-Leroux (2001), Sanchez-Reaza and Jordaan (2002), Corona Jiménez (2003), Dussel Peters (2003), Garza (2003), and Jordaan and Sanchez-Reaza (2004) provide explanations and accounts of how trade liberalization and the relocation of economic activity are linked. These studies on regional disparities in Mexico in the 1990s and the first decade of the 2000s shed valuable light on the connection between economic globalization, regional development, and disparities.

After more than 12 years of not being a central concern in Mexico's public agenda, the NAFTA debate went from being a subject of primarily academic attention to, once again, the media headlines. The revived interest in NAFTA was brought about by its renegotiation, the process of which even raised the possibility of its termination. According to Dussel (2018), it was worrying that after almost 25 years of the agreement there had been no public evaluation of NAFTA. An essential area in these evaluations had to be its regional impact.

Some recent diagnoses of regional economic growth, the agglomeration of industrial activity, welfare and human development, poverty, productivity, inequality, and marginalization in Mexico such as those by BBVA Bancomer (2001),

Delgadillo et al. (2001), Meixueiro and Moreno (2012), Garduño (2014), Viesti (2015), López (2016), and Trejo (2017) show that regional development remains unequal and polarized due to the concentration of economic dynamics in specific areas of the country. Although the opening up of the economy generated some dynamism in new industrial locations in the north and the Bajío, it also increased the divergence concerning the south, resulting in a relative convergence between the north, the center, and the Bajío and their divergence from the South.

Figure 5 shows the distribution of the percentage of national GDP across states from 1993–2016. In 1993, Mexico City contributed almost 24%, followed by the states of Mexico, Jalisco, Nuevo León, Veracruz, Chihuahua, Guanajuato, and Puebla, which altogether made up 62% of total GDP. In 2016 the distribution among this group of states had changed relatively little. The most relevant changes included a drop of 3.7 percentage points in Mexico City, an increase of 1.2 percentage points in Nuevo León, and of almost 1 percentage point in Chihuahua and Guanajuato; together the eight states contributed 61% of national GDP. Relatively more substantial increases occurred in Querétaro, Aguascalientes, Sonora, Coahuila, and Baja California, while Campeche, Guerrero, Oaxaca, and Chiapas saw the biggest drops. Production experienced a relative de-concentration due to the emergence of export platforms in sectors located in medium and small cities in the west and the north. This outlined an exogenous territorial model because the dynamics of successful regional and urban spaces was subject to the behavior of the export sector, which in turn was largely based on foreign direct investment, forging a pattern of concentration in a few states.

Controlling for population size, GDP per capita by state shows the differences in average income per person. The disparities have been widening over time. In 1993 GDP per capita in Mexico City was 5.4 times that in Chiapas state, which had the lowest average GDP. In 2016 GDP per capita in Mexico City was seven times higher than in Chiapas. Aguascalientes, Queretaro, Chihuahua, Sonora, and Coahuila improved their relative position in terms of GDP per capita, whereas Campeche and Quintana Roo observed a significant fall. Chiapas and Tabasco remained at practically the same levels of GDP per inhabitant at the beginning and end of the period. Figure 6 shows the growing regional disparity throughout the period, measured by the standard deviation in GDP per capita.

A strand of the literature that analyzes regional disparities and convergence also deal with the question of whether regional imbalances expand or contract during the economic cycle based on whether the economy is expanding or declining (Petraokos et al. 2005). This question is strongly related to attempts to verify Williamson's hypothesis related to the correlation between the level of national income and the scale of regional disparities (Petraokos and Saratsis 2000; Petraokos et al. 2005; Smełkowski 2014) and to testing Berry's idea (cited in Petraokos and Saratsis 2000; Petraokos et al. 2005) that high rates of economic growth are linked to increasing regional disparities. Evidence of this relationship is mixed, with some studies finding that a positive relationship between economic growth and disparities means that regional inequalities have a pro-cyclical character, increasing in periods of economic expansion and decreasing in periods of economic recession (Petraokos and Saratsis

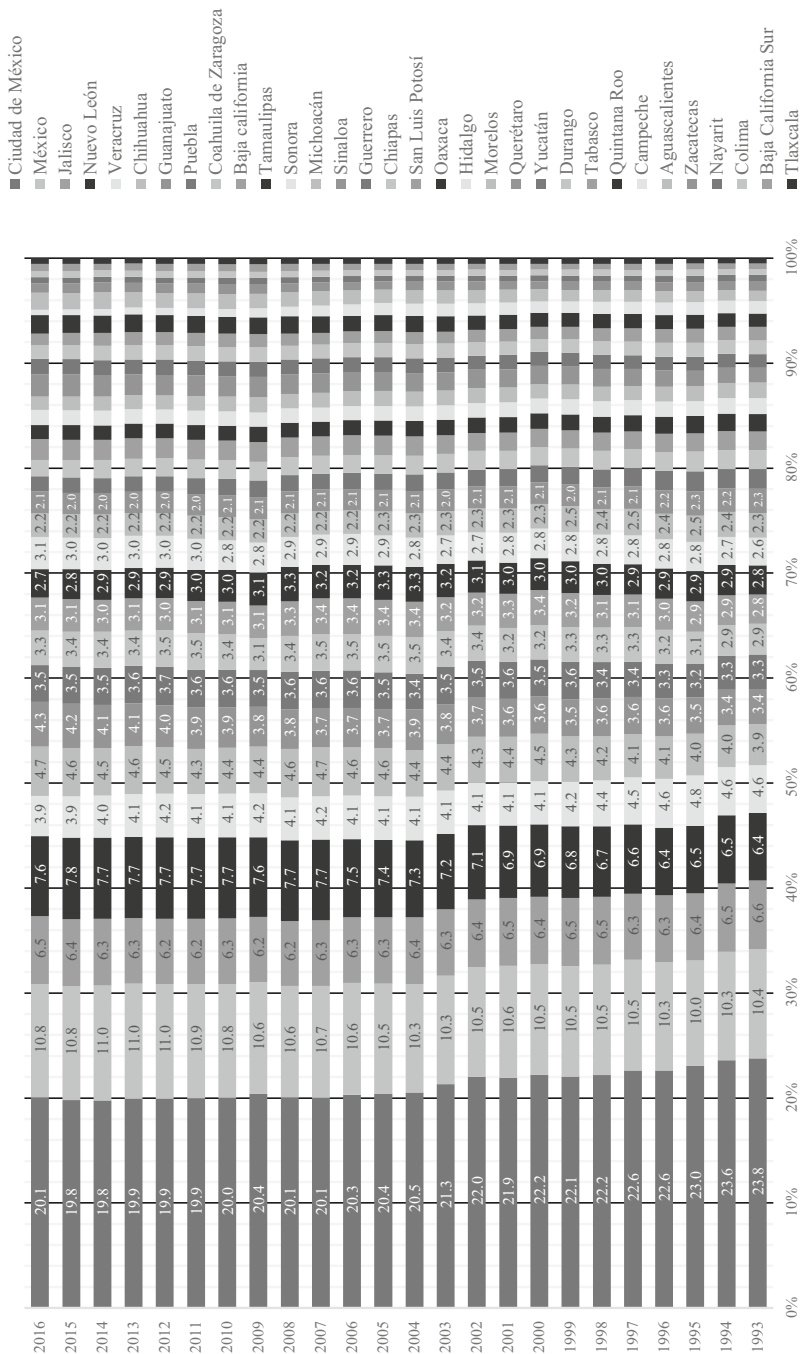
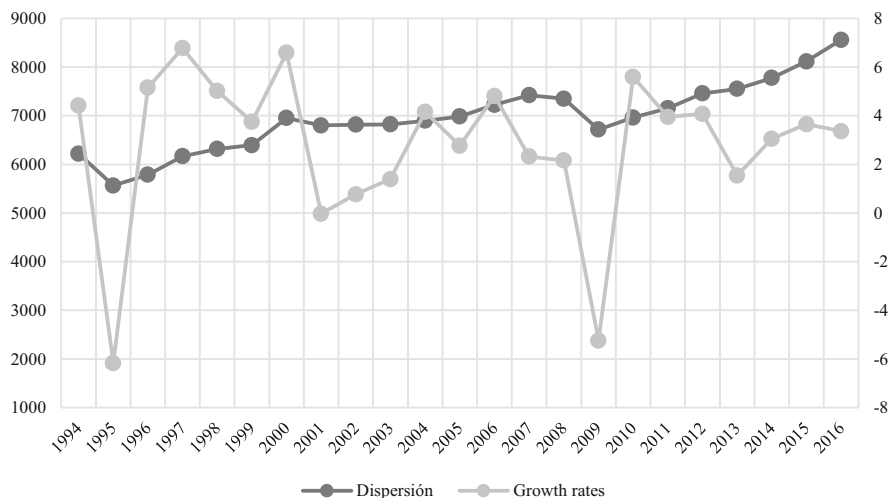


Fig. 5 Mexican States' Contribution to National GDP, 1993–2016 (%) (Based on German-Soto 2005)



Dispersion: Standard Deviation of per capita GDP

Growth rates (%)

Fig. 6 GDP Growth and Regional Disparities in Mexico, 1993–2016 (Based on German-Soto 2005)

2000; Petrakos et al. 2005) and others finding an inverse relationship, i.e. economic growth associated with convergence or decreasing regional imbalances (Aokić et al. 2016) or no evidence of correlation between the dynamics of disparities and the economic cycle (Smętkowski 2014). Figure 6 includes the national GDP growth rates in Mexico to show the relationship between the evolution of regional disparities and macroeconomic performance. It reveals that critical episodes of national economic crisis (1995) and international economic crisis and recession (2001 and 2008) are linked to decreases in regional disparities, in line with Berry's idea of a direct relationship between decreasing disparities in times of economic crisis. Even though the statistical correlation between the two variables over the period is weak, with a correlation coefficient of 0.2, the relationship is positive, suggesting a pro-cyclical evolution of disparities.

Petrakos and Saratsis (2000) argue that in periods of recession metropolitan regions in Greece have been hit harder than the remaining regions of the country, thus reducing inequalities. In a similar vein, although Smętkowski (2014) does not find a correlation between national GDP dynamics and regional disparities in Central and Eastern European (CEE) countries, he observes that capital city regions and other regions in their close vicinity are forming functional areas or metropolitan regions and concludes that although regional convergence and divergence processes do not depend on macroeconomic dynamics alone, metropolitanization processes play a significant role in driving development and disparities.

In Mexico the distribution of economic activity and growth occurring mostly in some of the largest metropolitan areas of the country has been strongly guided by the

location and operation strategies of exporting companies and FDI. The opening up of the economy and NAFTA engendered or reinforced international connections for some regions and cities following a logic primarily oriented towards trading with foreign markets. Led by its international trade, the country's regional structure became both more diverse and more polarized. While some regions emerged or consolidated as centers of economic development when inserted into export dynamics the traditionally most marginalized regions had access to fewer opportunities (Trejo 2017). Although it is simplistic to attribute any change in regional disparities exclusively to liberalization and NAFTA, it can be argued that regions that have successfully participated in the export activity have benefited from the economic dynamics produced by trade. In contrast, these regions have been more affected by the economic crisis which has produced a reduction in regional imbalances. Delgadillo et al. (2001) also suggest that although territorial imbalances in development reflect the presence of winning and losing regions in the opening process, they are also the result of accumulated advantages over time, as in the case of Mexico City. The possible advantages, of course, are diverse in nature, ranging from natural and geographical advantages to advantages built on the political, institutional, and social structures of each territory.

Trejo (2017) points out that not only variables related to the NAFTA (exports, FDI, and location close to the US border) have defined regional success in the country. Industrial and transport infrastructure, including that connecting production sites with internal markets; logistics, and transportation costs; public services; skilled labor; labor market stability; and local government incentives, e.g., employment programs and tax benefits, are all factors that encourage and attract economic activity to particular parts of the country. Viesti (2015) finds regional disparities to be closely related to differences in economic specialization; the size of the informal economy; the characteristics of local labor and human capital; the development of innovation; infrastructure; and physical geography. López (2016) highlights the importance of specialization and local public policy in triggering regional success. Meixueiro and Moreno (2012) identify transport infrastructure, the functioning of public services, regional development policy, human capital, and institutions as the main factors driving regional performance, and BBVA Bancomer (2001) refer to the limitations of regional development in terms of deficiencies in road infrastructure, regulatory barriers (transaction costs and business opening procedures), and gaps in the educational system.

The economic opening up, carried out primarily under the NAFTA framework, had unequal effects across Mexico to the extent that its benefits were concentrated in certain regions. However, internal structural factors have also fueled regional inequalities. Such factors include a deficient economic policy, particularly the abandonment of active industrial policy aimed at structural change in the manufacturing sector. Despite the acuteness of regional disparities, the State has continually abandoned its regionally-oriented policies. I discuss regional policy and planning in Mexico in next section.

5 Regional Planning and Policy in Mexico

Assessing the problems, challenges, and opportunities for regional development raises the unavoidable question of the role of the State and its public policies in fostering regional growth and competitiveness. Most of the regional development programs and policies implemented in Mexico have been motivated by the presence of the country's wide regional imbalances (Alba 1999). Yet throughout the twentieth century, regional policies were formulated and modified according to the priorities of industrial development and the specific circumstances of the moment. Firstly, the main objective was to equalize the uneven development of the regions, but globalization stimulated competition among territories to attract investment and increase international trade.

Post-revolutionary governments' efforts to achieve efficient planning and territorial ordering placed particular emphasis on the reorganization of agrarian space in a predominantly rural country. The Mexican State consolidated as the central governing organization for development, which was meant to be based on the industrialization and urbanization. Between the 1940s and the 1960s stimulating industrialization and national growth was considered the best mechanism for the automatic redistribution of benefits across economic sectors, regions, and the population (Trejo 2017). Development projects promoted in specific areas were seen as a catalyst of national growth. Among these projects were, for example, hydrological basins, irrigation works, and roads. In response to industrial concentration in the three main metropolitan areas of the country, in the 1960s and 1970s the development of industrial parks, industrial ports, and tourist centers became the predominant regional policy strategy (Alba 1999). Industrial parks were created in Ciudad Sahagun, Torreon, and Irapuato, and the Border Industrialization Program was established. Despite the apparently territorial emphasis of these policies, their implementation resulted in the creation of productive enclaves with little impact on regional development (Janetti 1988). Such initiatives took place within the framework of a decentralizing discourse to attain a more balanced regional system, but in practice the scope and achievements of regional development were limited due to the strong centralization that continued in practice. Given the persistent economic concentration in Mexico City, new programs tried to boost development in regions such as the Isthmus of Tehuantepec and Baja California. The stimulus to invest in preferential areas and industrial parks, the formulation of Public Investment Programs for Rural Development, the Committee for Economic Development, the National Commission for Regional and Urban Development, the General Coordination of the National Plan for Depressed Zones and Marginalized Groups, State Development Programs, and Comprehensive Rural Development Programs were part of the regional policy framework throughout the decade. However, the institutionalization of the territorial approach to development had few effective results (Alba 1999).

In the 1980s the State, under the so-called neoliberal model, dismantled all tools, programs, and structures linked to territorial planning. Paradoxically, the growing

importance of subnational regions in the face of globalization processes was accompanied in the 1990s by weakening regional policy. By rethinking its public policy and reducing its role as a planner, the State largely delegated the shaping of urban and regional development to market forces. Still, there were some attempts to develop a regional and active industrial policy aiming to promote structural changes in strategic sectors and regions (Trejo 2017).

Characteristics of the period were Development Agreements (CUD) and State Development Planning Committees (Coplades), which served in a collaborative federal and state government approach to defining states' development priorities and investment needs. Also, some regional programs were developed under the 1983–1988 National Development Plan (Alba 1999). The National Program for Industrial Development and Foreign Trade (PRONAFICE) enacted in 1984 strategies for strengthening the domestic market and increasing the integration and efficiency of national firms to cope with global economic competition. For its part, in 1985 the Program for the Integral Promotion of Exports (PROFIEEX) recommended specific policies for border areas and free zones to promote their integration with the rest of the country, although their full implementation was inhibited by limited financial resources. From then onwards industrial policy was reduced to action aimed at eliminating regulations, state monopolies, and tariffs within the framework of a free market and globally competitive economy. Under orthodox economic principles, a series of programs were formulated to strengthen FDI, some of which aimed to establish financial and fiscal incentives to promote the location of transnational companies in new or strategic sectors such as the automotive industry and the aeronautical industry, while others included measures to support other economic sectors such as electronics, software, and computing, and strategic industries such as electricity, telecommunications, oil, and natural gas. Also, cluster and pro-competitiveness policies were established. In general, however, active industrial policy ceased to be a central government priority (Trejo 2017).

Subsequent governmental programs did not have a comprehensive territorial and regional approach; isolated action has predominated, and policies have lacked continuity. Improvisation has been another characteristic of the regional policy process (Delgadillo et al. 2001), and regional development policy has been weakly articulated with economic policy. Figure 7 summarizes the main aspects of regional policy over the last five federal administrations.

Although industrial policies are normally seen as drivers of economic growth, they should also be viewed as tools for promoting structural and technological transformation and mechanisms for reducing inequality through public investment in infrastructure, education, and technology. Over recent decades regional development has demanded inclusive and efficient territorial and regional planning, but this has not been accompanied by strategic industrial policy to boost national economic growth, which has been minimal.

1988-1994: Reduced public resources for territorial planning and progressive dissolution of state intervention. Regional and territorial policy delegated to states and municipalities. Urban- and regional-oriented policies subsumed within the Ministry of Urban Development and Ecology, which later became the Ministry of Social Development (SEDESOL). National Urban Development Program had limited applicability. The 100 Medium Cities Program was established.

1994-2000: Different territorial programs formulated but their implementation subordinated to sectoral policies: 100 Cities Program, Development Program for Metropolitan Areas Outside the Capital, Program for territorial planning and urban development, Program for social participation in urban development, Border XXI Program, National Program of Attention to 250 Microregions, Megaproject .

2000-2006: Reorientation of territorial and regional development. A central office specifically for strategic planning and regional development. Megaprojects included the Interstate regional planning (or mesoregions program), the Puebla-Panama Plan, and projects for the development of industrial infrastructure, regional trusts and other regional programs.

2006-2012: Fewer resources and limited attention to program implementation. Continuation of some programs such as the Program for Priority Areas Development, the Habitat Program, and the Local Development Program, among others. The Mesoamerica Project replaced the Puebla-Panama Plan.

2012-2018: Renewed interest in territorial policy under the new Ministry of Agrarian, Territorial and Urban Development (SEDATU). The main regional plan was the Special Economic Zones as a strategy for development and industrialization in the south of the country, but the plan was canceled by the new president.

Fig. 7 Regional Policy Orientation (1988–2018)

6 Final Considerations: Towards the Future of Regional Development

Little progress is expected in regional and industrial policy under the government that came to power in 2018. The 2019–2024 National Development Plan lacks a comprehensive and articulated regional development program. Regional development plans include three specific projects: the Mayan Train, the Transistmic Corridor, and the North Border Free Zone. The Mayan Train is considered the federal government’s most important infrastructure project, promoting sustainable development and multiplying the economic benefits of tourist activity in the Yucatan Peninsula by creating jobs. It will include a 1525-kilometer train route with 15 stations, passing through the states of Chiapas, Tabasco, Campeche, Yucatan, and Quintana Roo, interconnecting the main cities and tourist sites (DOF 2019a).

The Program for the Development of the Isthmus of Tehuantepec seeks to boost the growth of the regional economy in two of the country’s most backward states, Oaxaca and Veracruz, by developing an Interoceanic Multimodal Corridor. The project plans to take advantage of the geographical position of the Isthmus to increase transport competitiveness and for the development of storage, packaging, and other logistics services. A gas pipeline will be built to supply domestic

businesses and consumers; and free zones will be created to attract private investment. The project will be provided with infrastructure and supplied with energy, water, digital connectivity, and other basic services. VAT and income tax will be reduced and fuel will be sold at reduced prices in the 76 municipalities of Oaxaca and Veracruz involved in the project. The program includes the provision of educational services, housing, and infrastructure for research and technological development. Finally, the North Border Free Zone Program has already been implemented in the 43 municipalities bordering the USA. It offers benefits such as VAT reduced from 16 to 8%, a lower income tax of 20%, a better regional minimum wage, and the homologation of fuel prices with those of the USA.

Given the limited scope of and poor effects expected from regional economic policies, to conclude this Chap. 1 discusses some of the challenges for development in four major regions of the country: the northern border, the traditional center, the forgotten South, and the industrial Bajío. All four of these regions need efficient public policies, effective governance, and healthy public finances to strengthen Mexico's national and international position.

6.1 Border Competitiveness and the Relative Success of the Mexican North

The relative position of states and cities at the northern border was significantly redefined with the increasing opening up of the economy and the advantages of their proximity to Mexico's most important external market, the USA. The main international crossing points for goods, capital, and people are on the northern border and the success of the region in the North American market integration process has been celebrated. Powerful industrialization and relatively fast growth being the main attributes of this success (Trejo 2017). However, the North is highly complex. First, its local and regional economic agenda covers a wide variety of issues from international migration and international trade to FDI, employment, energy, etc. Its economy relies on the circulation of money related to money laundering, smuggling, and the trafficking of drugs, people, and weapons. Moreover, the northern border is very heterogeneous, with dynamic and productive areas as well as declining and stagnating areas. This heterogeneity in itself is a challenge that relativizes the country's regional success (Trejo 2013).

Cities in the North, especially those along the border, compete for investment and trade flows that generate economic benefits. The growing pressure on local economies to retain and attract FDI (especially from maquiladoras) and a complex network of social problems present an urgent need to rethink the issue of regional development. While different sub-regions and cities compete with one another they also face the task of jointly establishing themselves as an economically and socially efficient region. On the issue of competitiveness, the northern border is experiencing a series of difficulties that highlight the need to reach and maintain high levels of efficiency

in a context of crisis and international competition. These difficulties include underutilization, supersaturation, deterioration, and lack of infrastructure. The many problems that arise from inadequate infrastructure include traffic jams, saturation, and congestion at a few crossing points while a considerable number of other border crossings are underutilized. In turn, infrastructure flaws are closely related to the inadequacy and poor quality of public services. In various areas the northern Mexican border exemplifies the insufficiency of general public services which is exacerbated by the growing migration.

These deficiencies reveal the need for fast, efficient, and safe crossings to facilitate commercial activity with the country's main trading partner, and investment attraction. A larger number of border crossings and fiscal precincts with greater capacity, more efficient administrative procedures, and more security are required. In addition to logistic services, physical infrastructure is a fundamental aspect of increased productive efficiency and competitiveness at the border: inter-metropolitan connectivity and the national road network that connects the country with the borders need substantial improvement.

The progress of globalization and liberalization in the most recent stages of capitalism has led to strong competition for foreign capital to generate beneficial local economic impacts. While maquiladoras have been the basis of the industrial activity in numerous cities on the Mexican border, this model has been shown to have limited scope in terms of economic linkages and social development (Trejo 2017). The development strategies in this region have been strongly oriented towards competitiveness as an archetype of local and regional economic success. Alternative schemes should be deployed to expand their productive possibilities according to specific local realities, to result in both economic and social strengthening given the limitations of the competitiveness paradigm. The economic reality at the border, which is highly vulnerable to international readjustment, exacerbates this pending national need.

6.2 Restructuring and Predominance of the Central Region

The Central Region was consolidated in the twentieth century as the demographic and political heart of the country, the engine of national growth, and the place of highest economic concentration, especially within the framework of the import substitution industrialization model. As a result of the implementation of the export-oriented model, both Mexico City and the region experienced several adjustments, including significant deterioration in their economic growth and a declining concentration of economic activity compared to previous decades. During the 1980s and early 1990s, the region saw little economic growth, although this varied significantly across states. In particular, the manufacturing sector saw significant relocation to the north of the country. The region has maintained a much stronger economic influence than its demographic weight, indicative of its position in the national economy, the product of the persistent geographic centralization of multiple

economic and political functions in Mexico City, which is responsible for more than half of the regional GDP, followed by the State of Mexico (Trejo 2017).

Despite some reduction in Mexico City's contribution to the regional and national economy, the significance of these two states is still substantial due to the powerful agglomeration forces exerted by the national capital and its metropolitan area. In recent decades various medium-sized cities in the region have acquired greater weight and important changes to their local productive structures (ibid). The dynamics of cities such as Toluca, Puebla, and Pachuca and municipalities in the metropolitan area of Mexico City have contributed to supporting the regional economy. Yet the region shows significant internal heterogeneity and polarization in per capita GDP levels and growth. On the other hand, economic liberalization has fostered a sectoral change. In recent decades the Central region has specialized in commerce and services such as financial services, business services, and government activities; however, the more advanced service industries are concentrated in the largest urban centers, and there is significant heterogeneity in service activities in the rest of the region. Thus three major trends can be observed internally: Mexico City and to a lesser extent the region's service specialization; the geographic de-concentration of manufacturing from Mexico City, some of which have benefited a group of cities and metropolises near Mexico City; and slow economic growth and a general deterioration in labor productivity. This political and economic transition has created a regional scenario in which polarization and variation in local development processes are preventing regional integration. The central region remains the national node of high centrality and power. To maintain its status the region needs to encourage more balanced and integrated development and growth among states and cities, for example, by strengthening productive chains and diversifying its economic flows (Trejo Nieto and Negrete 2019).

6.3 *The Rise of the Industrial Bajío*

Since the 1980s states such as Guanajuato, Aguascalientes, and San Luis Potosí have increased their contribution to national production and employment, especially in the manufacturing sector, and their attraction of foreign investment. Important centers of industrial activity have emerged in the machinery and equipment sector in various towns and cities. In 1982 Nissan established an assembly plant in Guanajuato and in 1994 General Motors, one of the three major automotive companies in the USA, established a plant in Aguascalientes. In the last two decades, there has been a boom in investment in both established and new automotive industry plants. Volkswagen has invested in a plant that manufactures car engines in Silao, BMW in a plant in San Luis Potosí, Mazda in a plant in Salamanca, Honda in Celaya, and Nissan in new premises in Aguascalientes. This group of states (Aguascalientes, Guanajuato, and San Luis Potosí) has become a car production, foreign investment, and export activity hub (Trejo 2017).

Queretaro is considered one of the most important aerospace industry locations in the country, mainly in the field of design engineering. The industry has had a presence in the state since the 1990s (Villareal et al. 2016) and sustained economic growth even in 2008 and 2010 when the international crisis affected the Mexican economy and several states intensely.

The region has recently become known as the new automotive giant and in general the new industrial pole of Mexico. In one of the relatively few references to the industrial boom in the Bajío, Peniche and Mireles (2015) emphasize that the region is expected to become one of the largest manufacturing centers in the whole of North America. According to Stratfor (2013), the factors behind Bajío's emergence as a powerful industrial region are its educated and trained workforce, relatively low violence and insecurity, good transport and logistics infrastructure, strategic geographical position, and good climate. These define it as an ideal area for business, suitable for international trade and investment, with even better conditions than the northern border region.

Well-known as a historical mining and agricultural hub and once called the granary of Mexico, with a manufacturing tradition oriented towards textile and footwear production the Bajío region is a strategic territory for the immediate future of the country's economy. The industrial boom in the region is creating pressure on local governments with its demand for the adequate provision of services and public goods to meet its demographic and economic growth. Creating an appropriate social environment with a desirable overspill of economic benefits to the local population is a challenge for governments at different levels.

According to Peniche and Mireles (2015), the Bajío corridor does not have a guiding management plan to attract and locate industrial activity in an orderly and efficient way throughout the entire region. Despite the formulation of state and local development programs and plans, there has been no attempt to formulate a regional strategy for the required integration between cities and economic centers. The region undoubtedly benefits from productive international restructuring, trade agreements (especially NAFTA), and its proximity to the country's capital. Based on this it has forged an advantageous productive restructuring resulting in a demographic and economic dynamism that is above the national average. The continuity and integrality of development projects that involve adequate regional and local governance and public action will provide not only stability for local development but also a sustainable path in the light of future challenges.

6.4 Failed Regional Policy in the South and Southeast

One of the most important initiatives in the renewed interest in regional policy in Mexico in the 2012–2018 presidential period was the creation of Special Economic Zones (SEZs) in regions of the country with greater economic backwardness and significant social gaps. The SEZs were announced as a novel and ambitious project that symbolized a strategy for industrialization that would attract foreign and

national investment with a package of incentives consisting mainly of tax and customs cuts and physical infrastructure. SEZs were envisaged as a powerful strategy for boosting economic growth, reducing poverty, providing public services, and expanding economic opportunities in poor regions. The project engendered high social and economic expectations, which were reflected in the formal name of the project: Special Economic Zones, the Great National Project (Ministry of Finance and Public Credit 2017).

The proposal for the development of the SEZs was part of a series of corrective measures across security, justice, and economic development announced by the President two months after the disappearance, in September of 2014, of 43 students from Ayotzinapa, Guerrero (Expansión 2014). It was this specific event, rather than a recognition that the South has historically been excluded from development processes with severe repercussions for the integration and cohesion of the country, that originated the proposal. After the required legal approval, in June 2016 the Federal Law on the creation of SEZs in Mexico stated that the first zones would be established in the port of Lazaro Cárdenas on the border between the states of Michoacán and Guerrero; on the Isthmus of Tehuantepec (Veracruz and Oaxaca); in Puerto Chiapas (Chiapas); and in the Coatzacoalcos/Ciudad del Carmen (Campeche) corridor. However, the project was canceled in March 2019 under a new presidency (DOF 2019b).

The SEZ model has been used generically worldwide to designate a variety of phenomena: free zones, free trade zones, export zones, etc. In general, these are limited portions of the national territory that adopt a special regulatory and fiscal regime to attract FDI, generate employment and international trade, and support the national reform and development strategy. Around the world, many SEZs have been populated by private companies taking advantage of tax cuts without producing substantial gains in either employment or exports. Others have been successful in attracting FDI and creating jobs in the short term but are unsustainable when faced with increases in labor costs or when they lose their preferential treatment in trade (Farole and Akinci 2011). The most paradigmatic cases are found in China, where they were implemented among the first steps towards trade and foreign investment liberalization and have supported industrial development and technological progress (Terán 2013).

In Mexico, the proposal to implement the SEZ program emerged within the framework of the Regional Economic Productivity Program in the middle of a third reformist wave. The general design of Mexico's SEZs followed international best practices. However, from the beginning, the proposal was subject to strong criticism as a project driven by a political agenda that entailed not only high economic expectations but also significant risk and public policy challenges, as well as considerable negative social and environmental impact (Gómez Zaldívar and Molina 2018). If the south of the country has been left out of development, it has been due to various structural barriers: low connectivity and poor infrastructure, low levels of human capital, lack of a critical mass of companies, poor innovation and technological development, limited access to credit, weak institutions, lack of security and legal certainty, and fragmented land use, among many other factors

(Trejo 2017). As with other major development projects for the South, the SEZs faced strong restrictions and contradictions due to their weak and short-term institutional design.

The amount of financial, human, and institutional resources required for the implementation of the SEZs would hardly outweigh the benefits. Due to productive, social, and cultural preconditions and the historical trajectory of southern Mexico, parallel policies in education, public safety, technology, communications, finance, support services and integration of national production chains would be necessary. Finally, the SEZs have never been an automatic catalyst for the reduction of inequality, and their impact on regional development has depended on the successful involvement of local actors.

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