

Mexico's Four Economies Reflect Regional Differences, Challenges

By Jesus Cañas and Emily Gutierrez

ABSTRACT: The economic potential of Mexico's four regions is defined by their industrial makeup, income per capita and how much of the labor force operates outside the formal economy. Recent government reforms could promote growth and reduce regional inequality.

Mexico is a country of contrasts, its geography varying from deserts to jungles, mountains to beaches. Such differences extend to the economic characteristics of Mexico's four regions: the manufacturing north, the agrarian north-central, the service-based central and the energy-producing south (*Chart 1*).

Such economic specialization has contributed to significantly different levels of development—evident in persistent and often worsening disparities in standards of living.¹

Regional Diversity, Growth

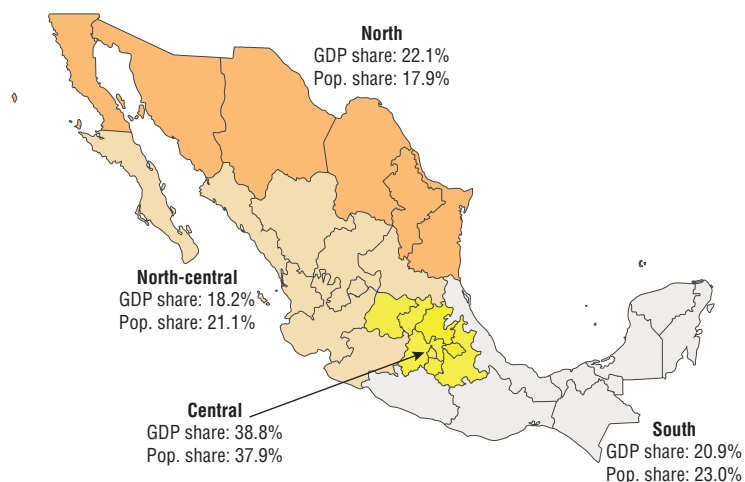
Mexico's affluent north is characterized by a large manufacturing base, which sharply diverges from the poverty-stricken south, a hub of energy activity. The central region benefits from the sprawling reach of Mexico City, one of the world's largest metropolitan areas

and the heart of the Mexican economy, while the agriculturally driven north-central zone makes a much smaller economic contribution.²

Each region's industrial base helps explain these regional income and growth disparities. Researchers use location quotients (LQs) as a means of identifying dominant or prominent industries in an area.³ An LQ is a region's share of output in a specific industry divided by the national share of output in that same industry. When an industry's LQ exceeds 1, the industry accounts for a larger portion of output in the region than in the nation as a whole; the larger the LQ, the greater the industry's importance.

For instance, agriculture in the central region has an LQ of 0.5, indicating the industry's share of gross domestic product (GDP) is half the national average. The north-central

Chart 1 | Mexico's Four Economic Regions Are Diverse



NOTE: 2013 values were used to create shares.

SOURCES: Instituto Nacional de Estadística y Geografía (National Institute of Statistics and Geography); Consejo Nacional de Población (National Council of Population).

region has an LQ of 2.2 for the same sector, indicating a GDP share more than twice the national average. Taken together, LQs highlight what makes a region unique.

LQ analysis of the northern economy shows a high concentration in manufacturing, which isn't surprising given that it's home to almost 3,000 manufacturing plants (Table 1). The north has capitalized on the manufacturing symbiosis between Mexico and the U.S., posting the highest regional economic growth between 2003 and 2013.

The northern region—particularly the states of Chihuahua and Coahuila—boasts a world-class automotive industry that includes General Motors and Ford operations. It is also home to a cluster of auto parts manufacturers that have made Mexico the No. 1 supplier of parts to the U.S. market since 2001. Additionally, the north has a highly competitive electronics manufacturing industry in Baja California and has solidified its aerospace manufacturing sector in Sonora and Chihuahua.⁴

The north-central region specializes in agriculture—Sinaloa is a major tomato producer, and about 80 percent of the avocados consumed globally are produced in Michoacán. This region is

also the transportation hub of Mexico. Tourism, as reflected in a high LQ for leisure and hospitality, is an important economic engine in the region, driven by attractions in Jalisco (Puerto Vallarta) and Baja California Sur (Cabo San Lucas). The north-central region grew at about the same rate as the central region over the 10-year period.

Central Mexico, which includes Mexico City, also performed well, with its GDP growing on average 2.7 percent annually in inflation-adjusted terms over the period. As the high LQs across most of the service industries suggest, the central region is the country's financial center and provides business services to the domestic market and to international companies and investors.

This densely populated region is home to more than 45 million people within a 200-mile radius of the nation's capital. It has first-class road and rail networks and is only a few hours' drive from major ports on the Pacific and Gulf of Mexico. In addition, major transnationals such as Nestlé and Telmex and strategic government-owned enterprises like Pemex have major offices in this region.

The south is the slowest-growing region, expanding 1 percent annually

► *This densely populated central region is home to more than 45 million people within a 200-mile radius of the nation's capital. It has first-class road and rail networks and is only a few hours' drive from major ports on the Pacific and Gulf of Mexico.*

Table 1 Industry Location Quotients by Region

	North	North-central	Central	South
Annual average growth rate (2003–13)	3.0	2.7	2.7	1.0
Goods-producing industries				
Agriculture	0.9	2.2	0.5	1.0
Mining	0.6	0.4	0.1	3.7
Construction	1.1	1.2	0.8	1.2
Manufacturing	1.4	1.0	1.0	0.6
Service-providing industries				
Trade, transportation & utilities	1.0	1.1	1.1	0.8
Information	0.9	0.8	1.5	0.5
Financial activities	0.9	1.0	1.2	0.8
Professional & business services	0.9	0.5	1.6	0.5
Education & health services	0.9	1.1	1.1	0.9
Leisure & hospitality	0.7	1.2	0.9	1.3
Other services	0.8	0.9	1.3	0.8
Government	0.8	1.0	1.2	0.8

NOTE: Location quotients greater (less) than 1 represents a gross domestic product concentration higher (lower) than the national average in a given region.

SOURCES: Instituto Nacional de Estadística y Geografía (National Institute of Statistics and Geography); authors' calculations.

► *The south heavily relies on energy-related activity, with most of it concentrated in two states: Campeche and Tabasco. A big factor behind the south's anemic growth is the steady decline in oil production since 2004.*

in real (inflation-adjusted) terms over the 10-year period. The south heavily relies on energy-related activity, with most of it concentrated in two states: Campeche and Tabasco. A big factor behind the south's anemic growth is the steady decline in oil production since 2004. Moreover, the Mexican energy industry is wholly controlled by Pemex—the national monopoly—whose energy revenues flow to the federal government and largely bypass the local area. That is in contrast to energy-dependent regions in the U.S., which benefit directly from oil and gas production.

Although Mexico has implemented initiatives to overhaul its oil industry, Pemex continues to control operations, beginning with exploration and extending to transport, refining and retail sales.⁵

Additionally, the south is the region with the lowest levels of education and highest concentration of poverty, labor informality and social unrest.⁶

Regional Income Gaps

The north and central regions are diverging from the north-central and south, recent data show. The contrast with the southern region is even more pronounced when discounting the oil-rich states (*Chart 2*).

The uneven regional growth rates go back many years and have allowed the north and central regions to grow

richer relative to the rest of the country (*Table 2*).

GDP per capita was \$12,627 in the north and \$10,415 in the central region in 2013. Output per capita in the north-central (\$8,777) and south (\$8,573), meanwhile, trailed the nation as a whole. When the oil-producing states of Campeche and Tabasco are excluded from the south, output is significantly lower, \$6,583 per capita.

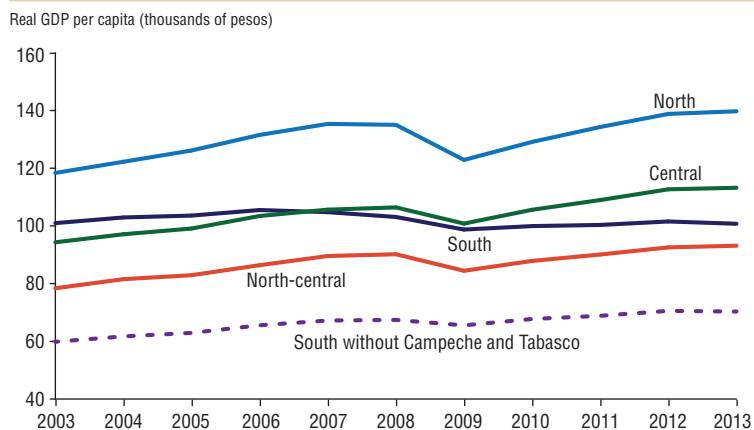
Table 2 also shows labor informality and poverty rates by region. Generally, where labor informality is found, poverty abounds. The southern region, where close to 70 percent of the labor force works in the informal sector, is also the poorest area of Mexico.

Role of Reforms

Recent labor, energy, financial and fiscal reforms could contribute to a reduction in regional inequality.

Federal labor law includes increased flexibility in hiring and payment of wages that could help workers move from informal to formal employment. Energy reform aims to introduce competition in refined products and electricity markets, allowing private investment to flow into the sector, particularly into oil and gas exploration. The reform also will allow private participation in the sale, transport and distribution of energy products. Changes that allow more competition and foreign

Chart 2 | Income Divergence in Mexico Remains the Norm



SOURCES: Instituto Nacional de Estadística y Geografía (National Institute of Statistics and Geography); authors' calculations.

**Table
2**

Labor Informality Tied to Poverty in Mexico

	Per capita GDP (dollars)	Informal labor (% of labor force)	Poverty rate (% of total population)
Total Mexico	10,193	60	46
North	12,627	43	30
Central	10,415	63	49
South	8,573	68	55
South without Campeche and Tabasco	6,583	69	57
North-central	8,777	57	43

NOTE: Data are from 2013.
 SOURCES: Instituto Nacional de Estadística y Geografía (National Institute of Statistics and Geography); Consejo Nacional de Población (National Council of Population); Consejo Nacional de Evaluación de la Política de Desarrollo Social (National Council for the Evaluation of Social Development Policies).

investment could spark regional growth in energy-dependent areas similar to that seen in recent years in Texas regions such as the Eagle Ford Shale.⁷

Comprehensive reform of the financial sector includes improving small-business access to the financial system and increasing credit availability. Finally, fiscal reform designed to increase the tax base could accelerate government revenue diversification, allowing public investment to flow into needed areas. However, some evidence suggests that existing regional public investment has gone to “pork barrel” projects—those satisfying a political debt—rather than to redistribution or efforts to boost regional growth.⁸

Looking Forward

Regional inequality continues to haunt Mexico. The dynamic north and central regions contrast with the lackluster north-central region and dismally performing south. Economic growth over the past decade, mainly due to external factors such as high oil prices and strong global demand, has proven insufficient to mitigate inequality.

As long as the U.S. economy continues expanding, it’s likely the north will grow faster than the rest of the country. Mexico manufacturing is highly dependent on U.S. demand, with 80 percent of exports going to the U.S. market. Growth in the north-central and central regions will continue to be more closely tied to the national average because both predominantly serve the domestic market.

The central region benefits from greater diversification because of its access to bigger and wealthier areas of the country.

Economic expansion in the south, with its high poverty levels and labor informality, will continue to lag behind the nation. However, recent labor, energy, financial and fiscal reforms could help close the gap in the medium to long term by increasing investment and labor mobility.

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Notes

¹ For purposes of this analysis, Mexico’s 32 states are divided into: north (Baja California, Chihuahua, Coahuila, Nuevo León, Sonora and Tamaulipas); north-central (Aguascalientes, Baja California Sur, Colima, Durango, Jalisco, Michoacán, Nayarit, San Luis Potosí, Sinaloa and Zacatecas); central (Distrito Federal, Estado de México, Guanajuato, Hidalgo, Morelos, Puebla, Querétaro and Tlaxcala); south (Campeche, Chiapas, Guerrero, Oaxaca, Quintana Roo, Tabasco, Veracruz and Yucatán).

² There is no official regional classification system in Mexico’s national statistics. The grouping of states used here is based on Banco de México’s regional economic report series.

³ Banco de México’s criteria for the grouping of the states and the location quotient (LQ) technique were followed to determine the economic base of each region. Output was aggregated by industry and region to obtain a regional numerator for the LQ calculation.

⁴ See “The Maquiladora’s Changing Geography,” by Jesus Cañas and Robert W. Gilmer, Federal Reserve Bank of Dallas *Southwest Economy*, second quarter, 2009.

⁵ See “Reforma Energética: Mexico Takes First Steps to Overhaul Oil Industry,” by Michael D. Plante and

Jesus Cañas, Federal Reserve Bank of Dallas *Southwest Economy*, second quarter, 2014.

⁶ More specifically, informal labor is defined as private sector workers who are not reported to the government and thus do not pay employment taxes or receive government-mandated benefits and pensions.

⁷ For more information, see “Oil Boom in Eagle Ford Shale Brings New Wealth to South Texas,” by Robert W. Gilmer, Raúl Hernandez and Keith R. Phillips, Federal Reserve Bank of Dallas *Southwest Economy*, second quarter, 2012.

⁸ For more information, see “Political Competition and Pork Barrel Politics in the Allocation of Public Investment in Mexico,” by Joan Costa-i-Font, Eduardo Rodríguez-Oreggia and Darío Luna Plá, *Public Choice*, vol. 116, nos. 1-2, 2003, pp. 185–204.