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# Mexico Consensus Economic Forecast, Volume 21, Number 1

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## CONSENSUS ECONOMIC FORECAST

# MÉXICO

University of Texas at El Paso  
Border Region Modeling Project

## 1<sup>st</sup> Quarter 2018

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Mexico Consensus Economic Forecast, Volume 21, Number 1  
1<sup>st</sup> Quarter 2018

### Wrestling with Adversities

Mexico's economy faces an array of challenges, from rising inflation, to domestic policy uncertainty, to trade disputes with the United States. As a consequence, real GDP grew by a fairly moderate 2.0 percent in 2017. In a context of ongoing question marks, the consensus forecast calls for the same rate of growth in 2018.

Preliminary estimates suggest that private domestic consumption helped shore up economic growth in Mexico last year. Panelists expect that the same will be true in 2018. On average, private consumption is predicted to rise by 2.8 percent this year.

Efforts to restrain public borrowing helped improve the fiscal budget balance in 2017. This may provide some relief from pressure to curtail public spending this year. Although 2018 is an election year, the consensus forecast of growth in government consumption is 1.6 percent.

Reductions in corporate tax rates north of the border may encourage some companies to reduce investment in Mexico. Rising interest rates have also contributed to suppressing investment growth. The consensus forecast calls for a 0.4 percent increase in total investment.

Tumultuous and evolving trade relations with the United States continue to inject uncertainty into trade forecasts, while also encouraging Mexico to strengthen trade partnerships with other countries. Panelist forecasts of export growth average 4.1 percent. In a context of projected peso appreciation, imports are predicted to grow at a somewhat more rapid pace: 5.2 percent.

The recorded rate of consumer price inflation exceeded 6 percent in 2017 for the first time in 16 years. In response, the central bank has raised interest rates to help slow prices. In light of those efforts, the consensus forecast calls for 2018 inflation of 4.6 percent.

The consensus exchange rate forecast is 18.77 pesos per dollar. That figure represents a modest appreciation relative to the 2017 annual average exchange rate. Relatively high interest rates, combined with lower inflation forecasts, contribute to the expected appreciation.

The average yield on 28-day CETES rose to a 9-year high in 2017. The panelists predict that interest rates will continue to increase this year, albeit at a somewhat slower pace. The consensus annual average forecast of the yield on 28-day CETES in 2018 is 7.3 percent.

The consensus forecast for 2019 is broadly similar to that for 2018. The projected growth rates for GDP and private consumption are 2.1 and 2.8 percent, respectively. Government consumption forecast to grow by 1.7 percent while total investment growth is predicted to pick up slightly, to 1.2 percent, while exports and imports are predicted to hold steady near current predicted growth rates.

The panelists predict that inflation will decelerate to 4.2 percent in 2019. Against that backdrop, the consensus exchange rate forecast is 18.62 pesos per dollar and the yield on 28-day CETES us predicted to remain stable at 7.2 percent.

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2018 Mexico Consensus Economic Forecast	Annual Percent Change, 2018 from 2017							Annual Average	
	GDP	Private Consumption	Government Consumption	Total Investment	Exports	Imports	Consumer Price Index	Exchange Rate	CETES 28 Day
Action Economics!	2.4	2.9	1.9	1.6	6.3	6.5	4.1	18.90	7.5
BBVA Bancomer	2.0	3.2	1.2	-1.5	3.0	4.8	3.8	18.88	7.5
Wells Fargo Bank	1.8	2.6	2.2	-1.4	4.2	4.4	5.8	18.50	7.3
UACJ	2.2	3.3	1.5	1.5	2.5	7.4	5.1	18.70	7.5
ITESM	2.0	3.0	1.5	-2.0	5.0	7.0	4.5	19.00	7.6
COLEF	1.8	2.3	1.7	1.2	4.3	4.1	4.3	18.75	6.9
UAdeC	2.0	2.0	1.0	2.4	5.0	3.5	4.5	18.90	7.2
UANL	2.2	2.9	1.6	1.3	2.6	3.9	4.5	18.50	7.2
Consensus -- this quarter	2.0	2.8	1.6	0.4	4.1	5.2	4.6	18.77	7.3
-- last quarter	2.0	2.5	1.9	1.3	4.9	4.6	4.5	19.17	6.8

2019 Mexico Consensus Economic Forecast	Annual Percent Change, 2019 from 2018							Annual Average	
	GDP	Private Consumption	Government Consumption	Total Investment	Exports	Imports	Consumer Price Index	Exchange Rate	CETES 28 Day
Action Economics!	1.8	2.5	2.9	0.6	3.6	4.1	3.7	18.56	7.2
BBVA Bancomer	2.2	3.0	1.7	-0.4	5.3	5.7	3.5	17.75	7.1
Wells Fargo Bank	2.1	3.0	2.0	1.5	4.6	4.3	5.9	17.50	7.4
UACJ	2.2	3.1	1.1	1.1	3.1	7.6	4.7	19.10	7.5
ITESM	2.3	3.5	1.0	0.0	3.0	4.0	4.0	18.60	7.0
COLEF	2.0	2.4	1.8	1.3	4.7	4.4	4.2	20.25	7.2
UAdeC	2.0	2.0	1.0	2.5	5.0	3.5	3.7	19.00	7.2
UANL	2.4	3.1	2.3	2.7	5.2	6.2	3.8	18.20	6.9
Consensus -- this quarter	2.1	2.8	1.7	1.2	4.3	5.0	4.2	18.62	7.2
-- last quarter	NA	NA	NA	NA	NA	NA	NA	NA	NA

							Annual Averages		
Historical Data	GDP (2013 Pesos, billions)	Private Consumption (2013 Pesos, billions) <sup>1</sup>	Government Consumption (2013 Pesos, billions) <sup>1</sup>	Total Investment (2013 Pesos, billions) <sup>1</sup>	Exports (2013 Pesos, billions) <sup>1</sup>	Imports (2013 Pesos, billions) <sup>1</sup>	Consumer Price Index Dec 2010 = 100	Nominal Exchange Rate Pesos/ Dollars	CETES 28 Day
2017	18,153.8	12,222.4	2,135.8	3,739.9	6,293.5	6,539.6	127.22	18.93	6.69
<i>Percent Change</i>	2.04%	3.27%	0.21%	-1.17%	2.92%	7.22%	6.04%	1.41%	
2016	17,791.5	11,835.8	2,131.3	3,784.1	6,114.8	6,099.5	119.97	18.66	4.15
<i>Percent Change</i>	2.91%	3.66%	2.39%	1.09%	3.46%	2.90%	2.82%	17.77%	
2015	17,287.8	11,418.0	2,081.5	3,743.1	5,910.2	5,927.4	116.68	15.85	2.98
<i>Percent Change</i>	3.27%	3.36%	1.94%	4.99%	8.41%	5.92%	2.72%	19.23%	
2014	16,740.3	11,046.5	2,041.8	3,565.4	5,451.5	5,596.2	113.59	13.29	3.00
<i>Percent Change</i>	2.85%	2.10%	2.89%	3.07%	6.98%	5.92%	4.02%	4.07%	
2013	16,277.2	10,819.3	1,984.4	3,459.3	5,095.7	5,283.4	109.20	12.77	3.75
<i>Percent Change</i>	1.35%	1.76%	0.54%	-3.35%	1.37%	2.12%	3.81%	-3.02%	
2012	16,059.7	10,632.5	1,973.7	3,579.2	5,026.8	5,173.9	105.20	13.17	4.24
<i>Percent Change</i>	3.64%	2.34%	3.36%	4.93%	6.52%	5.42%	4.11%	6.01%	
2011	15,495.3	10,389.5	1,909.5	3,411.1	4,718.9	4,908.0	101.04	12.42	4.24
<i>Percent Change</i>	3.66%	3.36%	3.04%	7.85%	7.71%	5.62%	3.41%	-1.68%	
2010	14,947.8	10,051.7	1,853.2	3,162.9	4,381.0	4,646.9	97.71	12.64	4.40
<i>Percent Change</i>	5.12%	3.59%	2.28%	4.71%	22.36%	17.06%	4.16%	-6.49%	
2009	14,220.0	9,703.2	1,811.9	3,020.6	3,580.3	3,969.9	93.81	13.51	5.43
<i>Percent Change</i>	-5.29%	-6.25%	2.94%	-11.67%	-10.85%	-15.95%	5.30%	21.42%	
2008	15,013.6	10,350.2	1,760.1	3,419.6	4,016.3	4,723.2	89.09	11.13	7.68
<i>Percent Change</i>	1.14%	0.71%	2.93%	6.56%	-1.02%	3.28%	5.12%	1.84%	
2007	14,843.8	10,277.4	1,710.1	3,209.2	4,057.6	4,573.1	84.75	10.93	7.19
<i>Percent Change</i>	2.29%	2.51%	1.82%	5.82%	1.97%	4.83%	3.97%	0.27%	
2006	14,511.3	10,025.8	1,679.5	3,032.8	3,979.0	4,362.5	81.52	10.90	7.19
<i>Percent Change</i>	4.50%	4.06%	2.71%	9.31%	7.81%	8.69%	3.63%	0.01%	
2005	13,887.1	9,634.7	1,635.2	2,774.4	3,690.7	4,013.9	78.66	10.90	9.20
<i>Percent Change</i>	2.31%	2.76%	2.26%	6.21%	6.31%	5.38%	3.99%	-3.44%	
2004	13,573.8	9,376.1	1,599.1	2,612.3	3,471.5	3,809.0	75.64	11.29	6.82
<i>Percent Change</i>	3.92%	4.77%	-0.97%	7.09%	9.87%	6.48%	4.69%	4.61%	

<sup>1</sup> Components of GDP for 2017 are based on figures reported by INEGI for quarters 1 through 3 and estimates for quarter 4.

\*GDP: Producto Interno Bruto, INEGI, 2013 Pesos

\*Private Consumption: Consumo Privado, INEGI, 2013 Pesos

\*Government Consumption: Consumo de Gobierno, INEGI, 2013 Pesos

\*Total Investment: Formacion bruta de capital fijo, INEGI, 2013 Pesos

\*Exports: Exportacion de bienes y servicios, INEGI, 2013 Pesos

\*Imports: Importacion de bienes y servicios, INEGI, 2013 Pesos

\*CPI, Banco de Mexico, Annual Average, Base = Dec 2010

\*Exchange Rate, Banco de Mexico, Peso-to-dollar, Fecha de Liquidacion, Annual Average

\*CETES 28 Days, Banco de Mexico, Annual Average

## North America and the Global Competitiveness Index

The World Economic Forum has released its 2017-2018 *Global Competitiveness Report*, along with the Global Competitiveness Index (GCI). The GCI summarizes a number of factors that contribute to national economic dynamism. In 2017, all three of North America's largest economies occupied positions in the upper half of the ranking. Mexico scored 4.44 out of 7 on the GCI, which places it in 51<sup>st</sup> place out of 137 economies. Mexico's score on the GCI improved slightly relative to last year, but not enough to change its ranking relative to other countries. The United States scored 5.85 out of 7 on the GCI and placed second in the ranking, just behind Switzerland. Finally, Canada occupied the 14<sup>th</sup> position on the list, with a score of 5.35. Both Canada and the United States moved up one position in this year's rankings compared to last year. While the GCI provides a convenient metric for ranking national economies, it shares with many other summary measures of economic performance the defect of obscuring the underlying strengths and weaknesses of individual economies. This report is devoted to analyzing the key components of the GCI in order to better understand how Mexico, the United States, and Canada achieved their scores on the World Economic Forum's competitiveness index.

The GCI is a composite of 114 sub-indices, 80 of which are derived from responses to the World Economic Forum's Executive Opinion Survey. In 2017, 14,375 business executives responded to the survey and 12,775 of those responses were retained after data editing. The GCI also incorporates data from institutions such as the World Bank, the International Monetary Fund, and the International Telecommunication Union. The 114 indicators are grouped under twelve broad "pillars of competitiveness." Topical coverage includes market size, macroeconomic conditions, institutions, education, health, efficiency, physical infrastructure, financial market development, technological readiness, business sophistication, and innovation. A country's overall GCI score is a weighted average of the scores for the twelve "pillars of competitiveness." The weights vary depending on the country's stage of development, as measured by per capita GDP and the share of raw materials in total exports. For the following discussion, one representative indicator is described for each "pillar of competitiveness." Country rankings for Mexico, the United States, and Canada are provided parenthetically at the base of each bar chart. The height of the bars indicates the value of the indicators, as measured on the vertical axes.

Domestic market size accounts for 4-6% of a country's overall score on the GCI, depending on the country's stage of development. Domestic market size is quantified as GDP plus the value of imports of goods and services, minus the value of exports of goods and services. The rationale for including domestic market size as a determinant of competitiveness is that larger domestic markets may enhance productivity by allowing firms to exploit economies of scale. However, firms can also benefit from access to large export markets in foreign countries in addition to domestic markets. Therefore, exports as a percentage of GDP are also included in the calculation of GCI country scores. The North American Free Trade Agreement (NAFTA) enhances access to foreign markets for all three of its member states, thus contributing to their competitiveness. Exports represent 38 percent of Mexico's GDP, placing it ahead of Canada (31 percent) and the United States (12 percent). The data are displayed graphically in Figure 1.

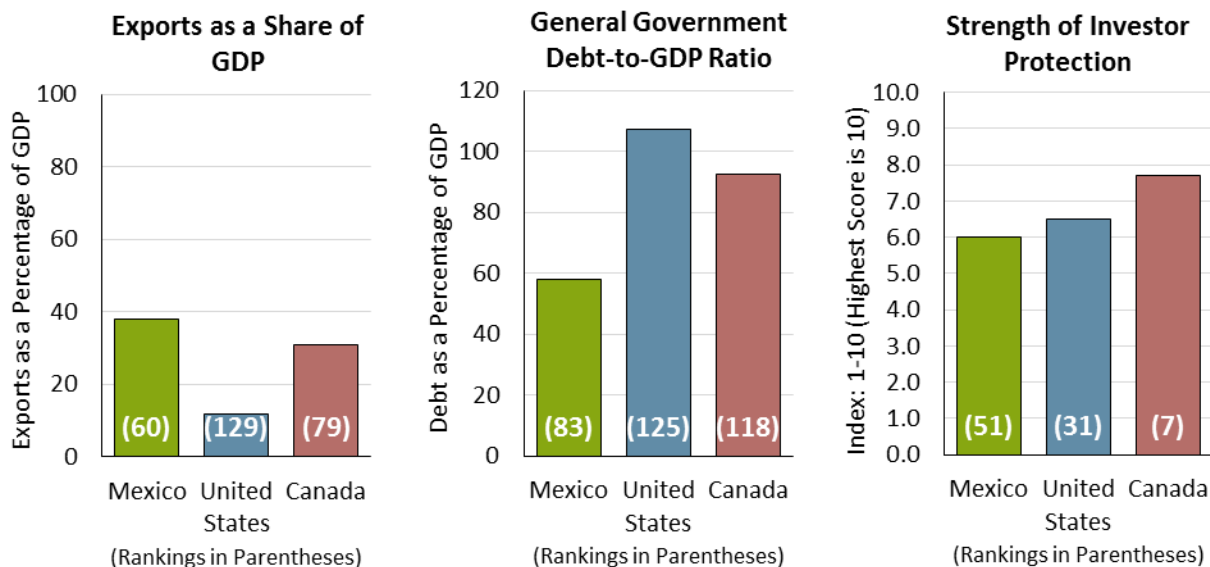


Figure 1. Key Economic and Institutional Indicators

The macroeconomic environment also affects national economic competitiveness. Macroeconomic health is quantified in the GCI by variables such as government debt as a percentage of GDP and gross national savings as a percentage of GDP. The United States has a relatively high government debt burden, equal to 107 percent of GDP (Figure 1). This places it near the bottom of the GCI rankings, in 125<sup>th</sup> place out of 137 countries. Furthermore, US government debt is likely to increase as a consequence of recently approved tax cuts. By comparison, the public debt is 92 percent of GDP in Canada and 58 percent in Mexico. The Mexican government approved a fiscal reform package in 2013 that was designed, among other things, to increase tax revenues. The tax reform may help explain why Mexico has been able to keep budget deficits under control despite suffering from low prices for oil, which constitutes a major source of government revenue. Mexico's prudent fiscal policies and generally sound management of public resources have placed it well ahead of both Canada and the United States on the GCI's macroeconomic environment rankings.

In addition to macroeconomic fundamentals, factors such as legal institutions, regulations, and prevailing business practices also affect national economic potential. Some of the specific indicators used to measure institutional quality include indices for transparency of government policymaking, strength of auditing and reporting standards, efficacy of corporate boards, and strength of investor protection. The investor protection index ranks countries on a scale of one to ten (where ten is the highest possible score). That index is a composite of three other indicators: the extent of disclosure index (measuring transparency of business transactions), the extent of director liability index (liability for self-dealing), and the ease of shareholder suit index (shareholders' ability to sue officers and directors for misconduct). Appropriate regulation of corporations helps minimize the risk of mismanagement and fraud. As shown in Figure 1, Canada obtains 7.7 out of 10 possible points on the investor protection index, placing it in 7<sup>th</sup> place among all countries evaluated. The United States scores 6.5 out of 10 on the index (corresponding to 31<sup>st</sup> place), and Mexico scores 6.0 (51<sup>st</sup> place). It is encouraging that all three of North America's largest economies rank in the top half of the distribution for strength of investor protection.

An educated workforce is a key precondition for sustained economic growth. Increasingly complex products and production processes require workers with advanced knowledge and specialized skills. Both formal education and on-the-job/vocational training are critical means of equipping workers with the capabilities demanded by modern industries. One measure of a country's performance in ensuring a highly educated workforce is the secondary education enrollment rate (Figure 2). This metric is defined as the ratio of total secondary enrollment, regardless of age, to the population of the age group that officially corresponds to the secondary education level. While Canada ranks fairly well on this indicator (21<sup>st</sup> place), both the United States and Mexico lag behind in secondary enrollment (ranking 57<sup>th</sup> and 74<sup>th</sup>, respectively). Secondary enrollment rates are above 90 percent for all three countries, but more work is needed to ensure that the North American workforce is well equipped to compete in a global economy increasingly reliant on advanced skills and technologies.

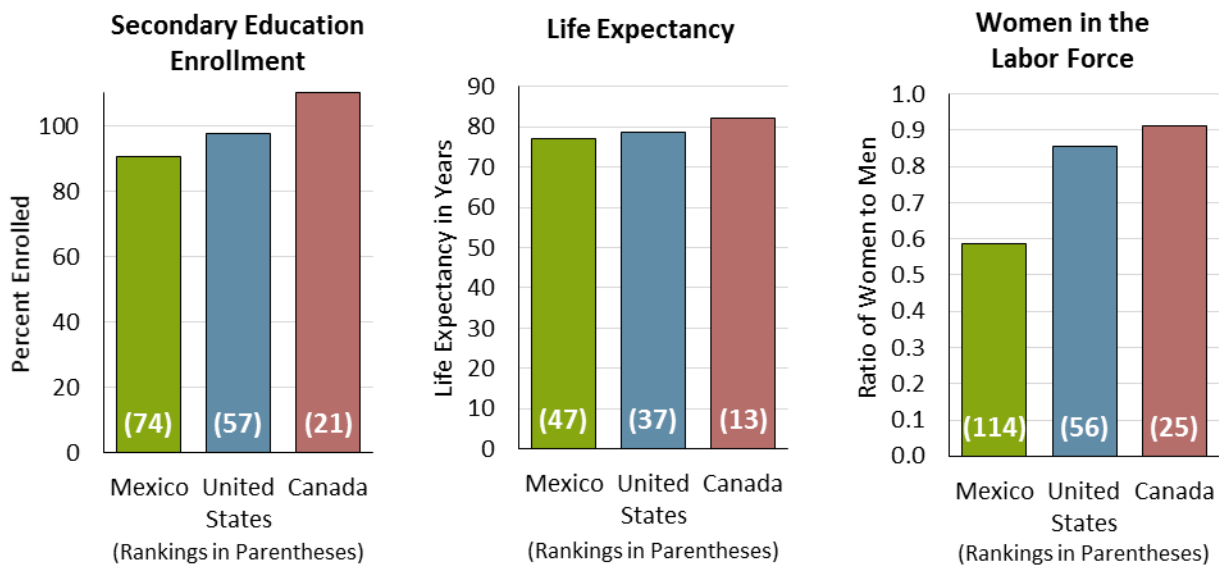


Figure 2. Key Social and Economic Indicators

Like education, adequate healthcare is a basic prerequisite for an efficiently functioning economy. Poor health may result in frequent absences from work and reduced productivity, both of which impose significant costs on businesses and individuals. Healthcare systems vary substantially across North America's largest economies. Canada has a primarily publically-funded healthcare system, while the United States relies more on private sector institutions. In Mexico, health insurance has historically

been tied primarily to formal employment as in the United States, although access to healthcare for those in the informal sector has improved somewhat since the adoption of Seguro Popular in 2004 (Paris, Devaux, and Wei, 2010). The GCI assesses the health of the labor force through various measures, including the prevalence of specific diseases, costs associated with those diseases, the infant mortality rate, and life expectancy at birth. As shown in Figure 2, Canada has a relatively high life expectancy of 82 years (13<sup>th</sup> place), followed by the United States and Mexico with life expectancies of 79 and 77 years, respectively (corresponding to the 37<sup>th</sup> and 47<sup>th</sup> positions in the ranking).

A country's economic competitiveness is also determined by its ability to attract talent from abroad and to efficiently employ human resources. Countries where women are underrepresented in labor markets may not be taking full advantage of the skills available within the national population, with adverse consequences in terms of national income performance (Elborgh-Woytek et al., 2013). The GCI measures female participation in the labor force by dividing the percentage of women aged 15–64 participating in the labor force over the percentage of men aged 15–64 participating in the labor force. For every woman in the Saudi Arabian labor force, there are four men. In North America, the disparities are not as extreme, but are still large (Figure 2). The ratio of women to men in the labor force is 0.91 in Canada (25<sup>th</sup> place), 0.86 in the United States (56<sup>th</sup> place), and 0.59 in Mexico (114<sup>th</sup> place). Greater inclusion of women in the economic sphere would help increase the proportion of working-age adults with paid jobs, thus augmenting the stock of labor that, in turn, contributes to national economic output.

Many of the factors that influence a country's economic growth potential are difficult to quantify and measure. As a consequence, a large number of the indicators incorporated into the GCI are based on survey responses. One of the questions in the Executive Opinion Survey asks "How do you assess the general state of infrastructure (e.g., transport, communications, and energy) in your country?" Possible scores range from 1 (extremely underdeveloped) to 7 (extensive and efficient). As shown in Figure 3, the United States and Canada achieve relatively high scores on infrastructure quality, 5.9 and 5.2, respectively. Mexico's score of 4.1 indicates that additional work is needed to improve the quality of the nation's infrastructure. Because well-maintained roads, railroads, seaports and airports are critical to the efficient movement of goods, transportation infrastructure quality affects a country's capacity to exploit opportunities for trade. Furthermore, deficiencies in other forms of physical infrastructure such as electric power grids and telecommunications networks also impose costs on firms and deter business investment.

In addition to efficient physical infrastructure systems, firms also rely on smoothly-functioning financial systems. Those systems play a crucial role in facilitating business investment, which is a key driver of overall economic growth. To measure the maturity of national financial markets, the Executive Opinion Survey includes questions regarding the availability and affordability of financial services, ease of access to loans, venture capital availability, regulation of securities exchanges, and the soundness of banks. For the latter question the minimum score of 1 indicates that banks are generally unsound and may require recapitalization, while a score of 7 indicates that banks are typically healthy with sound balance sheets. Canada ranks second among all countries for the perceived soundness of its banking system and scores 6.6 out of 7 on the index (Figure 3). The United States scores 5.7 (24<sup>th</sup> place) and Mexico scores 5.4 (47<sup>th</sup> place). Mexico was deeply scarred by the 1994-1995 financial crisis and all three countries were battered by the financial meltdown of 2008 and its aftermath. While the scores generally indicate that the major North American banking systems are now perceived as relatively stable, they also suggest that there is room for improvement, especially in the United States and Mexico.

Competition from both domestic and foreign companies is a key factor in improving business productivity and efficiency. A number of questions on the Executive Opinion Survey assess the competitive environment. These questions concern factors such as the intensity of local competition, the extent of market dominance, the effectiveness of anti-monopoly policy, the prevalence of trade barriers, and the prevalence of foreign ownership. Figure 3 shows how the largest North American countries score on a summary measure of foreign competition. Canada achieves a score of 5.0 out of 7 (35<sup>th</sup> place), while both Mexico and the United States have a score of approximately 4.8 (47<sup>th</sup> and 48<sup>th</sup> places, respectively). While the large size of these economies attenuates the importance of foreign competition in comparison to domestic competition, openness to foreign trade is, nonetheless, a critical component of the region's competitiveness. The North American Free Trade Agreement (NAFTA) has played a key role in reducing barriers to cross-border trade in the region. If NAFTA is not successfully renegotiated, the region as a whole will likely see a decline in its competitiveness vis-à-vis other regions.

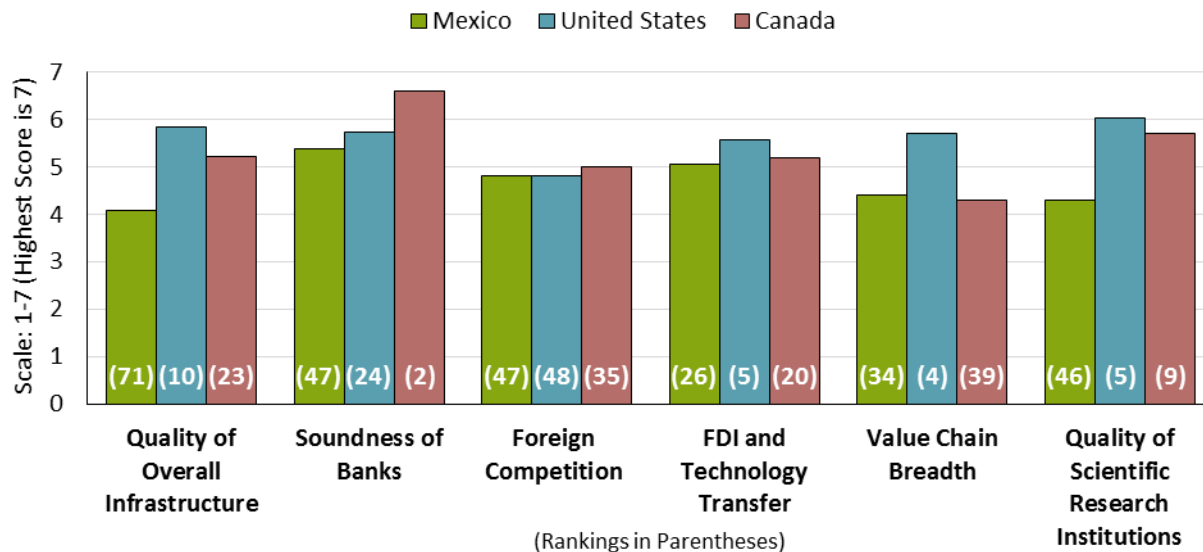


Figure 3. Summaries of Executive Opinion Survey Responses

The remaining “pillars of competitiveness” all focus on a country’s competitive advantages in advanced technologies, sophisticated products, and mature, highly-developed industries. As mentioned above, the weights assigned to each “pillar” vary from one country to another depending on the stage of development. Factors such as innovation capacity and technological readiness receive relatively large weights in calculating the overall GCI scores for Mexico, the United States and Canada because all three countries have achieved relatively high stages of economic development. Foreign direct investment (FDI) can play a significant role in the absorption and diffusion of advanced technologies across national borders, provided that appropriate technology transfer policies are in place (UNCTAD, 2010). To assess national performance in harnessing the full potential of FDI, the Executive Opinion Survey asks “To what extent does FDI bring new technology into your country?” On average, business executives give the United States a score of 5.6 out of 7 on this metric (5<sup>th</sup> place), indicating that the country has acquired abundant technological advantages from foreign investment (Figure 3). Canada and Mexico are not far behind, scoring 5.2 (20<sup>th</sup> place) and 5.0 (26<sup>th</sup> place), respectively. All three countries have enlisted FDI as a tool in their efforts to achieve national economic development goals.

Another key determinant of competitiveness concerns the sophistication of businesses, production processes, business networks, and inter-industry linkages. Some of the Executive Opinion Survey questions in this area concern the quantity and quality of local suppliers, the development of industry clusters, production process sophistication, product differentiation, and the extent to which domestic companies control the international distribution of their products. One of the key questions in this category asks “How broad is companies’ presence in the value chain?” The answers range from 1 (narrow, primarily involved in individual steps of the value chain, e.g., resource extraction or production) to 7 (broad, present across the entire value chain, including production, marketing, distribution, design, etc.). As a large and diverse economy, it is not surprising that the United States scores fairly high on this metric, achieving 5.7 out of 7 possible points and placing 4<sup>th</sup> worldwide (Figure 3). Mexico scores 4.4 points, placing it in 34<sup>th</sup> place, ahead of Canada (4.3 points; 39<sup>th</sup> place). The latter two economies are smaller than the United States and, at least in the case of Canada, somewhat more dependent on natural resource extraction. Those factors may explain their somewhat lower scores on the “business sophistication” metric.

The final “pillar of competitiveness” concerns scientific innovation. For countries that have already implemented state-of-the-art technology, further technological progress requires the creation of new knowledge and the invention of new production processes. Continuous innovation typically entails collaboration and interaction between public-sector scientific institutions and private-sector research and development projects. One of the questions on this topic in the Executive Opinion Survey asks “In your country, how do you assess the quality of scientific research institutions?” The scale ranges from 1 (extremely poor) to 7 (extremely good). The average score given to the United States by business executives in that country is 6 out of 7, which places the country in 5<sup>th</sup> place internationally (Figure 3). The first four places are occupied by Switzerland, the United Kingdom, Israel, and the Netherlands. Canada’s score is 5.7, placing it in 9<sup>th</sup> place. Mexico scores 4.3, which corresponds to the 46<sup>th</sup> place out of 137 countries. While Mexico’s score on this metric is better than most of the countries in the sample, it suggests that greater investment in scientific research and post-secondary education is needed. The quality of North American educational and research institutions is one of the many factors influencing the region’s ability to attract investment and achieve higher living standards.



In summary, examination of the sub-components of the GCI provides a better understanding of each country's strengths and weaknesses. For Mexico, relative strengths include macroeconomic stability, proximity to a large export market, and improving healthcare outcomes. More work is needed in areas such as physical infrastructure and technological innovation. Factors that help the United States achieve high scores on the GCI include its large and diverse national economy, its technological innovation capabilities, and its well-maintained physical infrastructure. Its chief weakness is the nation's macroeconomic environment and, in particular, the large and growing government debt. Canada's strengths include high quality healthcare and education systems, technological readiness, and a generally sound financial system. Canada has some of the same macroeconomic shortcomings as the United States and may also suffer in the GCI rankings from a limited degree of economic diversification. North America as a whole benefits from cross-border trade linkages and policies that bind the region's largest economies into a major trade bloc. Working in unison, Mexico, the United States, and Canada are more competitive on the world economic stage than any one of them would be working in isolation.

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**University of Texas at El Paso Border Region Modeling Project**

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