

the supply chain

EXECUTIVE SUMMARY

Since the signing of the North American Free Trade Agreement (NAFTA) in 1993, Mexico has continually climbed in the ranks and emerged as both a critical enabler of global supply chains and a key hub on the continent. From auto manufacturing and electronics to distribution and logistics, the country has served as an all-important link in the supply chain, offering both lower-cost production and proximity to the US market.

Because of rising labor costs in China, recent trade wars, and growing concerns about resiliency, many supply chains have started to contract. And with US companies taking a closer look at nearshoring, Mexico has become a focal point in the discussion. The United States-Mexico-Canada Agreement (USMCA)—the new version of NAFTA—went into effect in July 2020 and offers new benefits. In addition, the COVID-19 global pandemic has escalated many nearshoring trends, making the country a prime alternative to China.

Mexico remains the world's 15th largest recipient of foreign-direct-investment (FDI), with inflows of US \$33 billion,¹ and it became America's largest trading partner in 2019.

It is also one of the few Latin American countries that did not experience a significant drop in FDI during the pandemic: inflows declined less than 10%—significantly lower than the average of 37% throughout Latin America and the Caribbean.

Even though Mexico remains highly attractive in such areas as value, proximity, and resources, such issues as security and corruption remain challenges for many US businesses. Finding suitable suppliers, too, can be a challenge; labor productivity is declining; and new trade agreements may put upward pressure on manufacturing-labor rates.

To take a closer look at Mexico and the opportunities it offers US companies,

ALIXPARTNERS EVALUATED THE COUNTRY THROUGH THE LENSES OF:



PROXIMITY AND ACCESS



COST



RESOURCES AND INFRASTRUCTURE



BUSINESS ENVIRONMENT

The resulting report spotlights current trends happening in the country and offers a basis upon which US manufacturers and distributors can weigh the costs of nearshoring in Mexico.

^{1.} World Investment Report 2020: International Production Beyond the Pandemic. United Nations Conference on Trade and Development; https://unctad.org/system/files/official-document/wir2020_en.pdf.

PROXIMITY AND ACCESS: SHORT SUPPLY CHAIN AND REDUCED RISK

Given Mexico's proximity to the United States, locating operations in Mexico shortens supply chains, reduces some risks, and facilitates close communication with plant management.² Quick transit times and executives' ability to keep a close eye on projects have made the country a top location where American companies can boost resiliency in the supply chain.

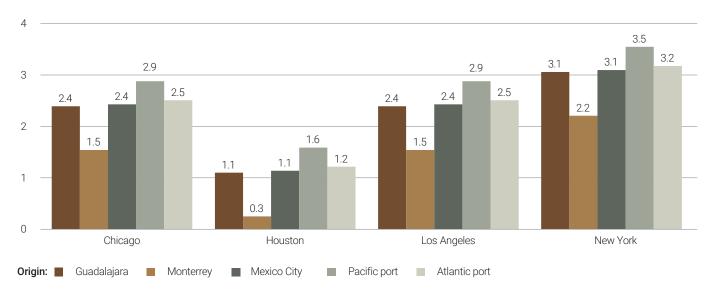
Based on accessibility to the United States, setting up shop in Mexico shortens the supply chain, reduces risk, and facilitates close communication with plant management.

Quick transit and easy oversight

Due to Mexico's geographic adjacency to the United States and because of excellent transportation links and relative border-crossing efficiency, shipments from Mexico can reach all parts of the United States within one-to-four days (figure 1)—in contrast to the three-to-five weeks it takes a shipment from Asia to reach the United States. The shorter transit time from Mexico enables companies to maintain smaller inventories of their products and reduces overall transportation and storage costs. It also reduces variability and risk in the supply chain, thereby keeping companies leaner and enabling them to be more agile when it comes to responding to any external shocks.

The proximity, combined with minimal language and cultural barriers compared with those that must be handled in China, also makes it easier for executives to maintain hands-on oversight of plants and suppliers.

FIGURE 1: AVERAGE SURFACE TRANSIT TIME (DAYS) FROM MEXICO TO MAJOR US CITIES



Source: Freightos (Tradeos, Ltd.), Prince Manufacturing

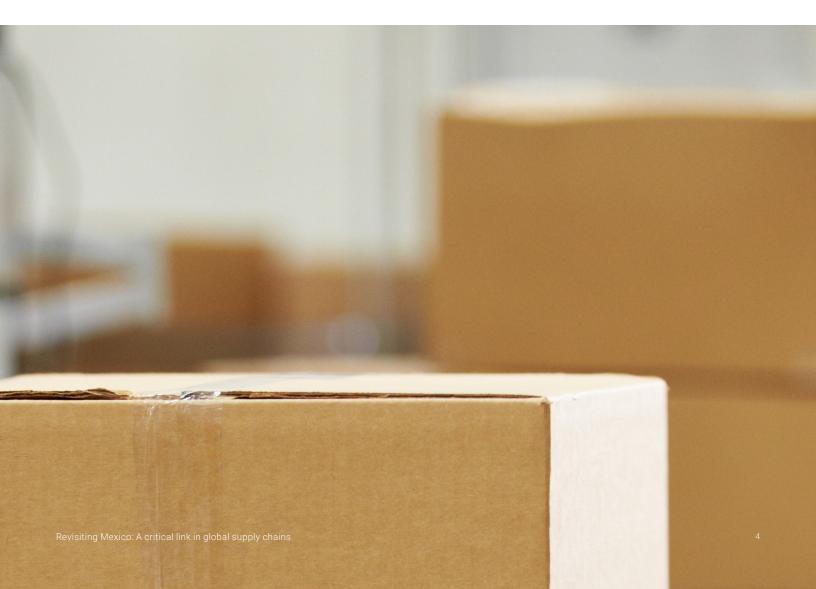
^{2.} Genoveva (Veva) Sanchez Cruz, "Nearshoring in Mexico: Advantages and Savings for Foreign Direct Investors." Prince Manufacturing, May 20, 2020; https://princemanufacturing.com/nearshoring-in-mexico-advantages-and-savings-for-foreign-direct-investors/.

Nearshoring for resiliency and agility

Until recently, nearshoring wasn't of top interest to many United States-based manufacturers because of the labor value and attractive export/import tariff structures in place in China.³ However, rising transportation costs, tariffs on Chinese imports, and wages in China coupled with recent global supply chain disruptions have led many US companies to reconsider nearshoring. In addition to lower costs and faster time to market, Mexico also enables US companies to operate with lower inventories and reduced working-capital requirements. The short supply chain and the level of collaboration also make challenges easier to overcome.

The recently enacted USMCA has strengthened the value by incentivizing United States—based businesses to take advantage of manufacturing in Mexico. Since February 2020, the pandemic has served to further increase the attractiveness of nearshoring so as to create a redundant, nearby supply source that improves resiliency in the supply chain. In many cases, that includes balancing capacity between suppliers in China and Mexico to ensure resiliency, should one place be shut down by, say, a natural disaster or a pandemic-like event.

3. Willy C. Shih, "Global Supply Chains in a Post-Pandemic World." Harvard Business Review, September–October 2020; https://hbr.org/2020/09/global-supply-chains-in-a-post-pandemic-world.





COSTS: STRONG VALUE FOR THE CHINA+ STRATEGY

Mexico offers several cost benefits that make it an attractive manufacturing and distribution hub. A stable corporate tax rate and an incentive program combined with low labor rates and low costs of inbound freight make it a cost-effective location for manufacturing and distribution—especially when compared with China.

Stable tax rates and attractive incentives

Mexico's current tax rate of 30% has not changed since 2010,4 and there are no indications it will change in the near future. And even though the Biden administration has proposed increasing US corporate tax rates, further investigation into the tax policies of both countries may offer potential tax savings based on actual operating footprints.

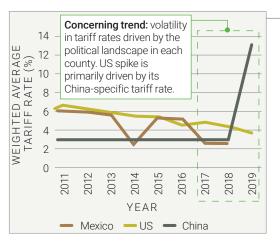
Mexico's IMMEX program (Decreto para el Fomento de la Industria Manufacturera, Maquiladora, y de Servicios de Exportación, or Decree for the Promotion of the Manufacturing, Maquiladora, and Export Services Industry) offers tax and duty savings to companies that establish supply chain entities in the country,⁵ and companies that meet the program's rigorous standards may find it a strategic lever for saving on traditional supply chain costs.⁶

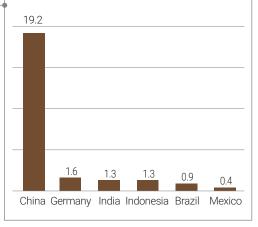
Mexico enjoys one of the most favorable composite tariffs with the United States (0.04%)—compared with China's composite tariff rate of 19.2%.

Mexico also enjoys one of the most favorable composite tariffs with the United States (0.04%)—compared with China's US composite tariff rate of 19.2%. However, companies will have to consider that recent spikes in the US tariff rate may deter them from shifting production from the United States to Mexico. For domestic importers, tariff rates are attractive compared with other popular traditional manufacturing countries (figure 2). Mexico's import trends have been favorable for the past two years, and the country has increased imports of most of its major commodities.

FIGURE 2: US-SPECIFIC WEIGHTED-AVERAGE TARIFF BY COUNTRY

US import weighted-average tariff (%)





High-level insights

Tariffs are typically difficult to forecast far into the future because of the nature of their determination by ever-changing political regimes and agendas.

Mexico import trends appear favorable for the past two years. Relative to China, Mexico has increased imports among most of its major commodities.

Source: The World Bank

- 4. Mexico Corporate Tax Rate, Trading Economics; https://tradingeconomics.com/mexico/corporate-tax-rate.
- Rene Cobos, "The Maquila Handbook: Quick Tips for Understanding Mexico's IMMEX Program," Industry Week, May 13, 2009; https://www.industryweek.com/the-economy/article/21941830/the-maquila-handbook-quick-tips-for-understanding-mexicos-immex-program.
- 6. A Comprehensive Guide to the IMMEX Program, NAPS, https://napsintl.com/manufacturing-in-mexico/the-immex-program-manufacturing-in-mexico/.
- Tariff rate, applied, weighted mean, all products (%) Mexico, United States, China. World Bank; https://data.worldbank.org/indicator/TM.TAX.MRCH.WM.AR.ZS?end=2019&locations=MX-US-CN&start=2009.

Labor and materials

Despite slightly rising wage rates and stagnant productivity, Mexico's labor market still offers great value, 8 with an average manufacturing labor cost of US \$4.80 per hour compared with US \$6.50 per hour in China.9 Mexico also recognizes a 48-hour workweek before overtime is required, thereby offering employers more hours of productivity at a lower operational rate.

Mexico's proximity to the United States also offers certain significant advantages over China's inbound freight because there are fewer touch points, less complexity, and reduced risk. Consider that from Mexico, a typical inbound truckload to Memphis costs \$3,111 and takes four days. From China, that same shipment would cost \$6,453 and take 31 days.¹⁰

A primary player in the China+ strategy

The new, China+ strategy, which reduces dependency on China and increases reliance on non-China sourcing options, is a growing trend in many industries. Many US companies are now looking at nearshoring, considering new low country cost (LCC) options, or developing new supply bases or partnerships to mitigate future costs and risks.

Based on import trends in Mexico as demonstrated by AlixPartners' Global Trade OptimizerTM, areas that have shown greater potential for nearshoring include mechanical and electrical, footwear and headgear, metal parts, and manufactured products. Some sectors—specifically, those with complex engineered products—are exiting China faster than others and are dependent on a developed ecosystem of supply bias (figure 3). And even though many companies were already planning to shift to a China+ strategy, the pandemic has accelerated the trend.

FIGURE 3: CHINA+ STRATEGY IS DOMINATING MOST INDUSTRIES

Global import and trend in trade shift

| | | | CHANGES OVER TWO YEARS | |
|-----------------------------|---------------|--------------------|------------------------|----------------|
| | IMPORT 2019 | | CHINA | MEXICO |
| Commodity | Global (\$BN) | China share (\$BN) | Change (%) | Change (%) |
| Apparel and textiles | \$111 | \$36 | V (8%) | (7%) |
| Auto/transportation | \$311 | \$11 | ▼ (30%) | +6% |
| Chemicals/allied | \$242 | \$15 | ▼ (2%) | ▲ +14% |
| Computers and electronics | \$346 | \$90 | (18%) | +2% * |
| Food and beverage | \$155 | \$5 | ▼ (23%) | ▲ +16% |
| Footwear and headgear etc. | \$33 | \$17 | ▼ (3%) | + 33% |
| Furniture | \$34 | \$16 | ▼ (50%) | V (48%) |
| Leather goods | \$14 | \$5 | ▼ (32%) | V (7%) |
| Mechanical and electrical | \$364 | \$125 | (15%) | ▲ +19%* |
| Metal parts/products | \$127 | \$24 | ▼ (5%) | ▲ +13% |
| Misc. manufactured products | \$443 | \$50 | ▼ (8%) | ▲ +12% |
| Plastics and rubber | \$86 | \$21 | A 4% | + 10% |
| Wood and pulp | \$43 | \$9 | (12%) | + 9% |
| Total | \$2,309 | \$424 | (15%) | +7% |

^{*} Average change - Computers and electronics, and Mechanical and electricals parts/goods Source: AlixPartners' analysis, US International Trade Commission (USITC)

^{8.} Mexico Labor Rates Offer Huge Cost Savings. IVEMSA; https://www.ivemsa.com/manufacturing-in-mexico/mexican-labor-rates/.

^{9.} Manufacturing labor costs per hour for China, Vietnam, Mexico from 2016 to 2020, Statista, https://www.statista.com/statistics/744071/manufacturing-labor-costs-per-hour-china-vietnam-mexico/.

^{10.} Drewry Ocean Freight Report, DAT, Rates from February 2021; https://www.drewry.co.uk/supply-chain-advisors/supply-chain-expertise.

RESOURCES AND INFRASTRUCTURE: MAJOR IMPROVEMENTS ON THE HORIZON

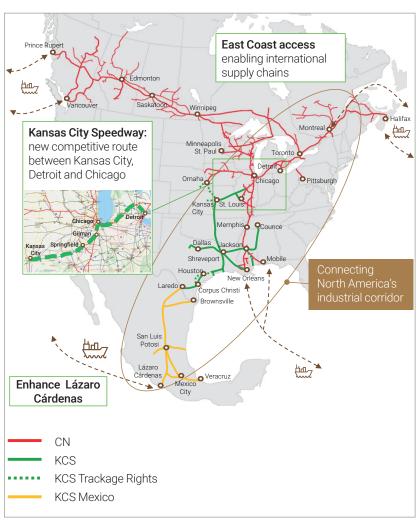
With billions of dollars in road, railway, and port improvements allocated for the next few years, Mexico's growing infrastructure is poised for further development. The country's latest plan allocates approximately US \$14 billion to logistics infrastructure, including significant highway projects, expansions of ports and railways, and refinery upgrades.¹¹

Roadways and railways

Although Mexican roads have greatly improved in the past couple of decades, challenges remain. Some areas have limited suitable road linkage, and the security threat between cities in some areas remains a major concern. These future investments will continue a trend of road improvements, with initiatives forecast to significantly improve roadways and extend paved-road kilometers to nearly 380,000 km by 2024. 12

Railways also offer good transportation options to the border, albeit slowly. Although rail infrastructure has remained stagnant in the past decade, the new infrastructure plan will make significant improvements to benefit US manufacturers and distributors. And the proposed merger between Kansas City Southern (KCS) railway and either Canadian National (CN) or Canadian Pacific (CP) could offer unprecedented arowth through exposure to Mexico's industrial heartland. The proposed merger exposes the Mexican supply chain to cost efficiency and low risk trade highways to US and Canadian markets—with several benefits. including Mexico grain import advantages from Canada and the US Upper Midwest (figure 4).

FIGURE 4: FUTURE COMBINED CANADIAN NATIONAL/ KANSAS CITY SOUTHERN RAILWAY NETWORK



Source: Canadian National

Private investment in ports

Even though lacking the strength and volume of many US ports, Mexico has 16 major maritime hubs offering Pacific Ocean and Atlantic Ocean access.¹³ Fully 15 port projects were to be launched with private investment in 2020, and an additional 25 projects could be executed as part of the infrastructure plan. Critical investments include a Veracruz rail line corridor connection to Oaxaca connecting the Atlantic and Pacific coasts and an expansion of the Lázaro Cárdenas Specialized Automotive Terminal.¹⁴

^{11.} Michael O'Boyle and Amy Stillman, "AMLO Announces \$14 Billion Plan for Mexican Infrastructure." Bloomberg, October 5, 2020; https://www.bloomberg.com/news/articles/2020-10-05/amlo-announces-14-billion-mexican-highway-port-and-energy-plan.

^{12.} Infrastructure Investment Plan for Mexico. White & Case, October 12, 2020; https://www.whitecase.com/publications/alert/infrastructure-investment-plan-mexico.

^{13.} World Port Source, http://www.worldportsource.com/ports/index/MEX.php.

^{14. &}quot;Spotlight: The outlook for Mexico's port infrastructure in 2020." BNamericas, February 21, 2020; https://www.bnamericas.com/en/news/spotlight-the-outlook-for-mexicos-port-infrastructure-in-2020.



BUSINESS ENVIRONMENT

Environmental and social considerations: Security risks and declining business reputation

Despite the opportunities in Mexico, corruption, organized crime, and violence remain significant concerns for US businesses operating there. Corruption is endemic, and although US companies have not been targeted specifically, cartel violence can negatively affect transportation and operations along the border and central region of the country.

Security remains a major issue for US companies seeking to invest in the country and can cost as much as 5% of operating budgets.

Corruption is common

Corruption still exists in many forms in Mexico, and collaborations between government officials and law enforcement officials with criminal elements remains a major concern. According to Transparency International's 2020 Corruption Perceptions Index, Mexico ranked 124th of 180 nations, and its ranking has fallen continually since 2012.15 The US Embassy has engaged in a broad-based effort with Mexican agencies to fight corruption and promote fair play in the area of government procurement, yet in practice, many companies have to factor in "gifting" as a cost of doing business.

From 2019 to 2020. Mexico fell six spots to number 60 of 190 countries in the World Bank's 2020 Doing Business ranking. 16 In the first quarter of 2020, the three major rating agencies (Fitch, Moody's, and Standard & Poor's) downgraded both Mexico's sovereign and Pemex's credit ratings.

Growing security threats

Security remains a major issue for US companies seeking to invest in the country and can cost as much as 5% of operating budgets, according to

the American Chamber of Commerce in Mexico.¹⁷ Many companies take extra precautions to protect executives, and security costs for shipments are on the rise. Transportation between cities remains risky for business officials, and mass demonstrations are common in larger metro areas in southern states like Guerrero and Oaxaca. Drug and organized-crime-related violence have increased significantly in recent years. Mexico recorded a record number of homicides in 2019, bringing its national homicide rate to 29 per 100,000 residents, one of the highest in the world.

Unenforced labor policies

Enforcement of labor and environmentally friendly policies is relatively effective in Mexico's organized sector. However, more than half of the country's workforce works under informal arrangements with unregistered firms about which workers complain of poor working conditions, low wages, long work hours, unjustified dismissals, and lack of safety.

Workers are likely to become further emboldened in demanding higher wages as independent unions compete with the corporatist unions to represent worker interests. According to the United Nations' International Labour Organization, although the Mexican government is reasonably effective in enforcing labor laws at large- and mediumsized companies—especially US companies—it is inadequate in dealing with small companies and the agricultural and construction sectors. Such enforcement is nearly absent in the informal sector.

Mexico's private and public sectors have developed more CSR programs during the past decade.

Rising interest in corporate social responsibility

Because of Mexico's geographic proximity and figurative closeness with the United States, corporate social responsibility (CSR) practices and trends are starting to rub off on Mexican companies. Although not as impactful as practices in the United States, Mexico's private- and public-sector CSR programs have seen more and more development during the past decade. Such efforts in Mexico have gradually evolved from philanthropic efforts to more holistic approaches in attempts to match international standards such as the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises and the United Nations Global Compact.

Responsible-business-conduct reporting has made progress in the past few years, with more and more companies developing corporate responsibility strategies. Mexico became the 53rd member of the Extractive Industries Transparency Initiative in October 2017, which represented an important milestone in the country's Pemex effort to establish transparency and public trust in Mexico's energy sector.

- 15. Corruption Perceptions Index, Transparency International; https://www.transparency.org/en/cpi/2020/index/nzl.
- 16. Ease of Doing Business Rankings. World Bank; https://www.doingbusiness.org/en/rankings.
- 17. 2019 Investment Climate Statements: Mexico. US Department of State; https://www.state.gov/reports/2019-investment-climate-statements/mexico/.

EVALUATING OPPORTUNITIES IN MEXICO

Mexico remains a highly attractive nearshoring location for US manufacturers and distributors. Its value has only grown since the advent of the COVID-19 global pandemic because rising labor costs in China and increasing awareness of the risks inherent in long supply chains have led companies to seek more resiliency and agility.

Solid infrastructure, geographic proximity, and relatively low costs make Mexico a prime location. Fast transit times and executives' ability to closely collaborate with and physically visit factories offer many of the benefits organizations find in domestic factories but at lower costs.

Despite the opportunities, though, Mexico presents several challenges for US companies: labor productivity is waning, and suppliers typically lack the flexibility and risk tolerance of suppliers in China. Crime remains a significant issue that affects the safety of executives and operations. And corrupt practices can be burdens.

US companies will have to carefully evaluate their supply chain goals based on their top priorities and concerns. We recommend that clients take a total-cost-of-ownership (TCO) approach to assessing Mexico's role in their supply chains.

| CATEGORY | KEY CONSIDERATIONS | SUPPLY CHAIN CHARACTERISTICS THAT FAVOR MEXICO |
|-------------------------|---|---|
| PROXIMITY AND ACCESS | The impact of time and distance against your | Product types or categories with faster speed-to-market for just-in-time supply chain requirements |
| | company's sophistication in global trade, and products' value, complexity, and speed- to-market requirements | High-value products with higher carrying costs benefiting from fewer days in transit |
| | | Less sophisticated global traders that will benefit from faster and easier access to local operations and suppliers |
| COST | The makeup of your cost base and trade-offs between labor cost/productivity and logistics costs | Lower levels of sensitivity to higher labor costs and lower productivity levels compared with other sourcing hubs |
| | | Higher levels of sensitivity to logistics costs versus manufacturing input costs |
| INFRASTRUCTURE wid | Manufactured products' wide variations in needs | Lower dependency on world-class utility infrastructure such as water and electricity versus other global trade hubs |
| | for local resource and infrastructure support Needs for raw materials, utilities, transportation, and other elements | Reliance on standard means of transportation that is congruent with the country's developing transport infrastructure |
| BUSINESS ENVIRONMENT | Crime and corruption challenges, which add further considerations in total cost of ownership | Robust compliance and security programs that help mitigate risks of corruption as well as localized security concerns |

By asking yourselves the right questions, clearly identifying top concerns, and weighing those concerns against risk tolerance levels, you will be best positioned to determine whether nearshoring is best for your company.

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Special thanks to the following organizations for their contributions to this article:

AMPIP (Mexican Association of Industrial Parks): www.ampip.org.mx/en Descartes Systems Group: www.descartes.com TSOL: www.tsolco.biz

ABOUT US

For more than 40 years, AlixPartners has helped businesses around the world respond quickly and decisively to their most critical challenges – circumstances as diverse as urgent performance improvement, accelerated transformation, complex restructuring and risk mitigation.

These are the moments when everything is on the line – a sudden shift in the market, an unexpected performance decline, a time-sensitive deal, a fork-in-the-road decision. But it's not what we do that makes a difference, it's how we do it.

Tackling situations when time is of the essence is part of our DNA – so we adopt an action-oriented approach at all times. We work in small, highly qualified teams with specific industry and functional expertise, and we operate at pace, moving quickly from analysis to implementation. We stand shoulder to shoulder with our clients until the job is done, and only measure our success in terms of the results we deliver.

Our approach enables us to help our clients confront and overcome truly future-defining challenges. We partner with you to make the right decisions and take the right actions. And we are right by your side. When it really matters.

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