

Introduction





We analyzed hundreds of news articles and websites to answer the question:

Is it cheaper to manufacture in Mexico than in China?

We uncovered some interesting findings that may change how you view manufacturing in China compared to Mexico.

Here is a Summary of Our Key Findings:

- Manufacturing Labor Costs are 19% higher in China compared to Mexico.
- 2. Average rent per square foot for industrial space in Mexico is 15% Less expensive than China.
- The Price to Ship a 40-Foot Full Container From China to the United States Is Than 82% Higher Than Shipping From Mexico.
- 4. There Is 514% Increase From 2020 to 2021 in Mexican Suppliers Receiving Bids From Its Big U.S. Buyers and a 155% Increase in Latin American Suppliers Receiving Bids. Manufacturers Sought Goods From 26% Fewer Suppliers in the Asia-Pacific Region.
- 5. In Accordance With the USMCA's Rules of Origin, Goods Are Eligible for Duty-Free Treatment, Avoiding 2.5% Tariffs. Goods coming from China pay a 25% tariff..
- 6. Europe and Asia are paying up to nearly six times more for natural gas than the U.S. Natural gas prices in Mexico follow those in the U.S.
- 7. The Exchange Rate for the US Dollar In China Is 66% Lower Than the Exchange Rate for the US Dollar in Mexico.
- 8. With \$536.7 billion in total (two-way) goods trade, Mexico is a solid, dependable partner.



Manufacturing Labor in Mexico Is Cheaper Than in China



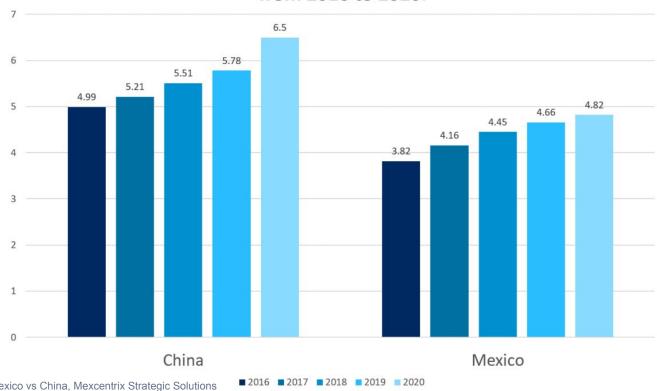


Several years ago, when China was emerging as a global manufacturing center, labor costs were very low; however, it is not the case any longer as labor costs in China have been steadily increasing for years. Mexico's labor costs are cheaper than those of China as a result.

According to <u>Statistia</u>, in 2018 manufacturing labor costs in China were estimated to be 5.51 U.S. dollars per hour. This is compared to an estimated 4.45 U.S. dollars per hour in Mexico, and 2.73 U.S. dollars in Vietnam.



Manufacturing Labor costs per hour for China and Mexico from 2016 to 2020.



Source: Source: Manufacturing in Mexico vs China, Mexcentrix Strategic Solutions https://topforeignstocks.com/2021/05/24/comparing-manufacturing-labor-cost-in-china-and-mexic

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Manufacturing Labor in Mexico Is Cheaper
Than in China



A study by <u>PWC</u> reports:

"Labor costs in China have risen with rising living standards, tripling since 2020, and surpassing labor costs in Mexico in 2015. This rise challenges strategies that

have fueled sourcing and production decisions for more than two decades. And, more

recently, the size of China's manufacturing workforce has declined, as workforces in other ASEAN countries have risen."

Companies in Mexico can invest the savings from manufacturing in innovation and features for their customers and products without having to deal with high labor costs.

For example, U.S. auto manufacturers are taking advantage of Mexico's low labor costs to include costly <u>fuel-saving features to comply with stricter gas mileage</u> <u>regulations</u>, without increasing car prices.

Manufacturing Labor in Mexico Is Cheaper
Than in China

Warehousing Space is Plentiful & Less Costly in Mexico Than China





Global supply chains have become increasingly fragile over the past two years, and occupants have responded by realigning their supply chains, leading to a need for more warehouse space closer to their customers.

<u>China's average rent for a warehouse space in 2019</u> was 44.3 yuan (\$6.62) per square meter. The demand for warehouses has been on the rise in that country, leading to rent increases. Conversely, <u>Statista reports</u> that Mexico City (CDMX) and cities in the state of Mexico have the highest prices for industrial warehouse rentals per month at 5.7 U.S. dollars per square meter, in Mexico City.



It has been reported by <u>Supply Chain Brain</u> that the affordability and availability has led to a boon of warehousing along the Texas/Mexico border:

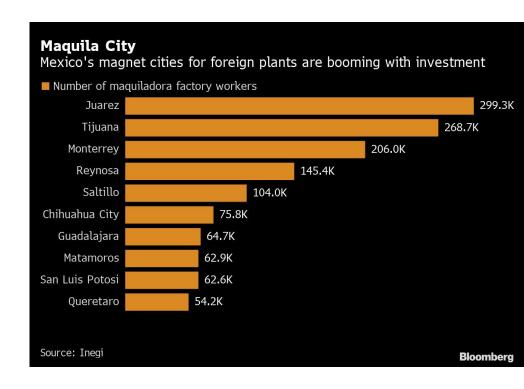
"This, in the lingo of corporate executives, is near-shoring, one of the biggest economic transformations sparked by the pandemic: Shrink the length of the supply chain to keep production closer to its final destination and reduce the risk of some snag messing things up along the way. A shorter chain is a stronger chain, the thinking now goes, and there's a growing sense that this new approach will remain in vogue in C-suites long after Covid fades.

For the multinationals that do business in the red-hot U.S. economy, near-shoring often means northern Mexico, where labor costs are cheap, land is plentiful and the border is just a short ride away. El Paso, Texas, is less than 10 miles to the north of most of the new plants in Juarez."

Warehousing Space is Plentiful & Less Costly in Mexico Than China



"Other border cities — Tijuana, along the west coast, and Reynosa, Matamoros and Piedras Negras, far to the east — are undergoing similar industrial booms, providing a much-needed lift to a Mexican economy that has been slow to recover from last year's collapse. "



Warehousing Space is Plentiful & Less Costly in Mexico Than China

Shipping from China is Expensive and Unreliable





In recent months, the global supply chain crisis has caused havoc among the shipping community, particularly between Asia and the United States. The cost of containers on these ships is increasing dramatically, not to mention the fierce competition for space on these ships.

According to <u>BR Logistics</u>, a 20 ft. container will cost approximately \$8,500 to ship from China to the U.S. West Coast, and a similar container will cost approximately \$10,500 to ship to the East Coast of the United States, Additionally, a 40HC container can cost up to \$15,000 to ship to the West Coast, and \$18,000 to ship to the East Coast.



<u>FreightWays reports</u> that prices for shipping continue to rise and don't appear to be slowing anytime soon.

"The index shows Asia-U.S. West Coast rates at \$18,345, six times higher than a year ago, and the price for shipping to the U.S. East Coast quadrupled to \$19,620 per forty-foot equivalent unit. Rates from Asia to Northern Europe climbed 4% since last week and are more than eight times higher than a year ago and 2.5 times more than at the start of the year. "

Besides the high rates, there is another issue: due to congestion in many American ports; many ships are unable to leave Asian ports, and those that do leave spend many weeks at sea before being delivered.



<u>S&P Global</u> reports that congestion levels at ports in mainland China increased by between 30-40% since March.

"The port congestion at Shanghai has showed signs of easing in May, as traffic has been diverted to alternative ports throughout northern and southern China. However, overall congestion levels remain high and longer vessel queues are being seen at alternative ports such as Tianjin and Zhoushan."



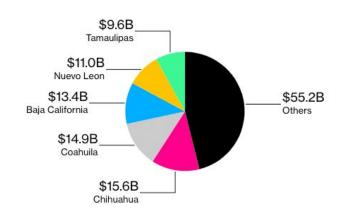
The shipping problems China is experiencing have so far not affected goods coming from Mexico. The cost of transporting a 40-foot full container load of a shipment worth US \$15,000 from Veracruz, Mexico, to San Francisco, California is about US \$2,700. The cost of shipping a 40-foot full-truck load with the same value of goods from Mexico to San Francisco is approximately US \$1,600.

Mexican manufacturers find rail and trucks to be more cost-effective than waiting for ships at sea to reach congested ports. <u>The US Department of Transportation</u> reports that nearly 35,000 trucks cross the Mexican-US border daily.



According to <u>Bloomberg</u>, more investment is going to the border regions of Mexico, particularly for shipping:

"Due to strong U.S. demand and a revival of the auto sector, investors are moving in and banks are getting ready to finance new projects. Exports of non-petroleum goods grew almost 27% in February compared with the year earlier. If you're interested in cars, toys, or medical supplies, there's probably a company ready to ship through the world's busiest border."



Source:Bloomberg. (2022, April).Mexico's Border Bonanza Shows U.S. Importers Looking Outside China. https://www.bloomberg.com/news/newsletters/2022-04-05/supply-chain-latest-mexico-gains-as-companies-near-shore-from-china

Rates for shipments crossing the Texas- Mexico border and traveling 501-1,500 miles averaged \$2.93 per mile. Time to market is also an added advantage: By ground, goods can be moved from Mexico to the United States in days - and in some cases hours. It is impossible to move shipments that fast when manufacturing products in China.

Shipping from China is Expensive and Unreliable

US Buyers are Buying Manufacturing Materials More in Mexico Than China





Trade tensions between the United States and China have also affected third countries, including Mexico. Since the generalized increase in tariffs on Chinese exports, US companies have increasingly looked abroad for raw materials for manufacturing that were previously purchased from China. The natural status of Mexico as an import and manufacturing destination for U.S. businesses has resulted in Mexico being a major winner.

Curtis Spencer, president of IMS Worldwide, <u>said nearly two-thirds of North</u>

<u>American manufacturers</u> plan to bring their production and sourcing back to North

America in a keynote speech in 2020 at the CORFAC International Virtual Fall Summit.

"People make supply chain decisions based on cost. Once you start adding more tariffs, you're resetting your pro forma for supply chain costs, and maybe the North American continent becomes more cost effective" said Spencer.

US Buyers are Buying Manufacturing Materials More in Mexico Than China



<u>A Wall Street Journal article</u> also reports that American manufacturers are looking to Mexico as a viable alternative to China for their manufacturing suppliers.

"Last year, large American manufacturers solicited chemicals, produce and construction materials and other goods from six times as many suppliers based in Mexico as they did in 2020, according to procurement software firm Jaggaer. At the same time, the number of suppliers in China that received procurement bids declined by 9% in 2021, Jaggaer said, using data from its 30 biggest U.S. manufacturing customers with an average of over \$30 billion in annual revenues."



The cost of materials in Mexico is the most important determining factor for manufacturing firms seeking to source materials, although the quality of the goods being sourced is also of critical importance, as is the reliability of getting these materials to their manufacturing plants on time. Shoreview Advisors says:

"China has been, and is still, perceived as the bargain for manufactured products. The economic costs of these massive supply chain disruptions, however, have more than offset these previous bargains. Beyond that, in many cases, the product manufactured in China is no longer always the cheapest. Products with a high labor content are often less expensive when sourced from Mexico. Combine that with shorter lead times, zero duties due to USMCA, competitive transportation costs, reduced cultural differences, and a nation that views itself as an ally and friend of the United States, and Mexico appears to be the clear, strategic choice."

US Buyers are Buying Manufacturing Materials More in Mexico Than China

The Advantage of Free Trade Agreements Like USMCA Are Clear





Manufacturing in China may initially appear to offer savings, but when you consider the cost of importing these products into the United States, those savings are quickly erased. As of July 2019, imported goods from China are subject to a 25 percent border tax. This tax, along with other tariffs on Chinese products, will increase the cost of buying products from China for American businesses and consumers. There is a 25 percent border tax on goods manufactured in China, which will result in higher prices for your customers or a decrease in profit margins for your business.

As a result of the USMCA treaty, there are no tariffs on goods imported from Mexico and Canada. It is imperative that you become familiar with two acronyms if you intend to manufacture in Mexico: USMCA and IMMEX.



According to Investopedia, USMCA is "...a trade deal between the three nations which was signed on November 30, 2018. The USMCA replaced the North American Free Trade Agreement (NAFTA), which had been in effect since January of 1994. Under the terms of NAFTA, tariffs on many goods passing between North America's three major economic powers were gradually phased out."

There are many reasons why USMCA is significant, but the most important reason is the ability to save money for US businesses. Tariffs have been reduced between the nations; investments have been encouraged in North American industrial buildings, and international markets have been opened. The USMCA provides duty-free treatment for goods that qualify under its rules of origin, which avoid two percent tariffs.



The USMCA has also significantly strengthened U.S. supply chains. COVID-19 and increasing competition with China have highlighted the vulnerability of relying on Chinese supply chains. According to the Brookings Institute:

"The significance of USMCA is clear. Canada and Mexico are the United States' largest export markets: 23 percent of U.S. exports go to Canada and Mexico (versus 5 percent to China), over 70 percent of Mexican exports are sent to the U.S. and Canada, and 62 percent of Canadian exports are to the U.S. and Mexico. Trade among the countries provides key inputs into regional supply chains' value added (40 percent U.S. value add versus 5 percent China). "



Additionally, manufacturers with operations in Mexico should know about the labor cost savings provided by IMMEX ("Manufacturing, Maquila, and Export Services Industries Program"; in Spanish, "Maquiladora"). By using the IMMEX program, a manufacturing company can save money on operations that can't be achieved by companies that use manufacturing options in another country, such as China.

The IMMEX program allows manufacturers to reduce their costs by temporarily exporting supplies and equipment to Mexico, having them manufactured or assembled, and re-exporting them to the United States for sale or distribution. Additionally, the IMMEX program provides American manufacturers access to a large, skilled, and economically priced labor pool.

According to the IMMEX program, a manufacturing facility in Mexico that uses temporary imported equipment, tools, and materials is exempt from the entire 16 percent VAT tax.

The Advantage of Free Trade Agreements Like USMCA Are Clear

Energy Costs Are Cheaper in Mexico





The costs of energy for powering factories is a major concern for manufacturers all over the world. Global primary energy consumption has increased steadily over the past century as a result of several factors, including the rapid industrialization of China.

Compared to the rest of the world, China currently has an average industrial power rate of US\$0.084/kWh. Compared to China, the average industrial power rate in Mexico ranges from US\$0.09/kWh to US\$0.11/kWh.

Although the unregulated electricity utilities in Mexico can be higher than those in China, natural gas prices are similar to those in the United States. <u>Compared to the US</u>, China's natural gas costs are between 50 and 170% higher.



The high cost of natural gas in Asia has forced <u>China to become more dependent on coal</u> as an energy source. China's government's emissions-reduction campaign, however, is causing energy shortages in many of the country's main manufacturing provinces due to plunging coal supplies caused by the campaign.

Justin Floyd, CEO of ecommerce and distribution company RedCloud, <u>discusses the impact of the coal shortage on Chinese manufacturing production</u>.

"If you've got no energy, your factories are on kind of a complete standstill, and when your factories are on standstill, you're not producing any goods; what we're seeing is the global impact it has by highlighting how many countries have been and are reliant on China."



Mexico is investing in renewable energy sources that may help reduce its electricity costs by the end of the decade, unlike the Chinese who are looking for alternative energy sources in the opposite direction.

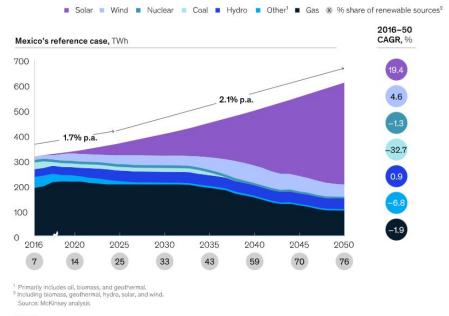
According to the McKinsey Group:

"Renewables have a privileged cost position that will prevail under any scenario. Therefore, Mexico can become a global leader in clean energy and help cut electricity costs for the industry in half by 2030."

"The transition from fossil fuels to a more diverse set of renewables could increase the economic viability of Mexico's energy sources."

Renewables could generate more than 75 percent of Mexico's power by 2050.





McKinsey & Company

Source: McKinsey & Company. (2019, November). How Mexico can harness its superior energy abundance.

https://www.mckinsey.com/industries/oil-and-gas/our-insights/how-mexico-can-harness-its-superior-energy-abundance

The Exchange Rate for the US Dollar is Better in Mexico Than China





The yuan exchange rate is a cornerstone of China's economic policy. Most advanced economies have a floating exchange rate determined by market forces, but not China. Rather, the yuan (or renminbi) is pegged to the dollar. This practice allows the Chinese to keep their exchange rate at a favorable level regardless of how the market performs. As a result, your dollar investment will not go very far if it is invested in China.

Furthermore, the true exchange rate of dollars to Yuan is difficult to determine because the Chinese government consistently undervalues its currency. According to Investopedia:

"The true value of the yuan is difficult to ascertain, and although various studies over the years suggest a wide range of undervaluation - from as low as 3% to as high as 50% - the general agreement is that the currency is substantially undervalued. By keeping the yuan at artificially low levels, China makes its exports more competitive in the global marketplace."

The Exchange Rate for the US Dollar is Better in Mexico Than China



Mexico, on the other hand, has <u>a 66% lower exchange rate for the US Dollar than</u> with China. Years of conservative fiscal policies have paid dividends for the Mexican peso allowing it to become one of the strongest worldwide market currencies. The Mexican peso is uniformly low against the dollar throughout the country, so your money will go far wherever you are.

<u>A recent analysis</u> by Ramsé Gutiérrez, senior vice president and co-director of investments at Franklin Templeton Mexico, indicated that the rate hit a high in early March following Russia's invasion of Ukraine, reaching 21.4 pesos to a dollar. It has since appreciated steadily, reaching 19.5 to a dollar.

The proximity of Mexico to the U.S. and our shared border also contributes to the Peso's liquidity. <u>Investopedia states</u>:

"Physical proximity has an additional effect on the peso's value. Highly prosperous border regions engaging in commercial interactions significantly increase Mexican peso liquidity."

The Exchange Rate for the US Dollar is Better in Mexico Than China

China Cannot Compete With Mexico's Shelter Manufacturing





In the face of trade tariffs against China and the Chinese government's zero-Covid policies, manufacturing companies in the US and other international locations are not only rethinking China but manufacturing in Asia as a whole. Now, Mexico is being considered the most logical location. In terms of manufacturing destinations, Mexico offers advantages that China cannot match. Some of these advantages have been covered previously: competitive labor, proximity to the market, free trade agreements, etc. It is also important to note that Mexico offers a number of other cost-competitive advantages over China.



Companies based in Mexico are eager to welcome these Chinese companies leaving the country and are willing to make concessions in order to gain their business.

<u>According to the China Law Blog</u>:

"Mexican business leadership is still very optimistic about Mexico's future. They understand Mexico's treaty obligations in the USMCA and the opportunities it presents for Mexico. They wring their hands about AMLO's (President Andrés Manuel López Obrador) trajectory, but they are determined to succeed by continuing to build the business environment with or without the government's help.

"Mexico is not the only country that will benefit from China's current negative trajectory, but if Mexico's government is paying attention, it will have more fuel to root out the less desirable hurdles to doing business in Mexico. For companies leaving China for Mexico, this cannot happen soon enough."



Additionally, moving manufacturing to Mexico can save time and paperwork, which will ultimately result in significant cost savings. These include, but are not limited to:

Legal liability is reduced: A foreign investor doing business in Mexico through a Mexican subsidiary has traditionally been <u>protected from liability</u> for the debts and obligations of the Mexican subsidiary.

Setup Model is very quick: There are many factors that influence this, such as equipment, training and sourcing materials. However, some companies who are interested in <u>starting manufacturing in Mexico can do so within a month</u>. Since many shelter manufacturing companies are incorporated in Mexico, and hold current maquiladora permits, there is no legal aspect to this process.

Knowledge of Business Practices in Mexico: Manufacturing companies often make the mistake of assuming they know enough about Mexico to do it on their own. The majority of <u>shelter manufacturers can assist you</u> in cutting through the red tape in starting your manufacturing operation by providing analyses, site visits, classifications, permits, factory setup, and training. Also, Mexico's industrial capabilities make choosing a location for a manufacturing operation less difficult; most places in the country have some sort of industrial facility, although some locations are more suitable than others.

China Cannot Compete With Mexico's Shelter Manufacturing



Protection of Intellectual Property: Intellectual property theft is a tremendous problem in China. The new USMCA agreement strengthens intellectual property rights even further in Mexico, with one of its main objectives to protect the Intellectual Property Rights of products between the United States, Mexico, and Canada. In accordance with the Office of the United States Trade Representative:

"The United States, Mexico, and Canada have reached an agreement on a modernized, high-standard Intellectual Property (IP) chapter that provides strong and effective protection and enforcement of IP rights critical to driving innovation, creating economic growth, and supporting American jobs. By enforcing these rights, it becomes very difficult, if not impossible, for companies manufacturing in Mexico to have their intellectual property rights stolen."

For these reasons, <u>U.S. goods and services trade with Mexico</u> totaled an estimated \$577.3 billion in 2021.

Conclusion: It is Cheaper to Manufacture in Mexico Than China





All the data analyzed in this report indicate that, although manufacturing in China may offer some immediate cost benefits, it is more cost effective to operate manufacturing operations in Mexico in the long run. To summarize:

- Manufacturing Labor is Less Expensive and More Plentiful than China
- There is an abundance of warehousing and manufacturing space on the border of the US & Mexico (particularly in Texas) that is significantly more inexpensive than in China.
- In light of the current supply chain problems using sea freight, the speed of the arrival of goods from Mexico to the US is perhaps the greatest advantage offered by manufacturing in Mexico. In comparison to China, it takes a fraction of the time for your products to reach American warehouses and stores.
- US buyers, citing poor quality and delays from China, are buying more goods and supplies from factories located in Mexico.
- Due to the US Free Trade Agreement with Mexico, it is relatively inexpensive and almost seamless to move goods across the border. Currently, Chinese goods entering the US are subject to high tariffs, which makes the process of transporting them into American markets very expensive.
- In Mexico, energy costs are comparable to those in the United States, making them both cheaper and more environmentally friendly. There is a high dependence on coal in China, and there is a gas shortage, making energy costs high and causing frequent power outages.
- The exchange rate for the Peso compared to the US dollar is very favorable, allowing investments in Mexico to go further than investments in China.
- The intangibles of manufacturing in Mexico; easy setup model, protection against intellectual property theft and limited legal liabilities are benefits that are not offered when manufacturing in China.

Conclusion: It is Cheaper to Manufacture in Mexico Than in China



NovaLink has the process of getting started with <u>manufacturing in Mexico</u> down to a precise science. Whether you are <u>a large corporation</u> or a small business trying to get off the ground, **NovaLink has the process**, <u>consulting for supply chain</u>, **software**, <u>facilities</u> **and manpower** to get your business up and running quickly and efficiently with minimal cost.





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