Jones Lang LaSalle

Real value in a changing world

Perspectives on global supply chains

Five reasons to consider Mexico:
Prospects and realities for U.S. cross-border industrial opportunities

We're hearing a lot these days about Mexico from a supply chain and manufacturing industry perspective. Many of the perceptions fall into two major themes:

- **Mexico is well positioned in close proximity to the Unites States, one of the largest consumer markets in the world, and possesses an attractive combination of industrial capacity in terms of real estate, developable land and low-cost but highly skilled labor.**
- **Mexico is a dangerous place to do business. It is a no-man's-land controlled by drug lords who are disrupting day-to-day business and pose potential danger to traveling company executives.**

So which opinion is right? Neither—at least not completely. Mexico is neither a "slam dunk" choice for business expansion or relocation, nor an anarchic realm that manufacturers enter at their own peril. Just as every nation—including the United States—has advantages and drawbacks for international companies, so does Mexico. **Over the past few years Jones Lang LaSalle's Industrial & Logistics team and research staff have carefully monitored the dynamics of Mexico. We feel that, while not perfect, Mexico is an increasingly attractive supply chain (manufacturing and distribution) location when looking to access the United States and elsewhere.**

1 Mexico is not China—and that's a good thing

Companies are now considering Mexico as "the little darling of emerging markets" and an exciting growth story according to Kenneth Rapoza in his July 2012 *Forbes* magazine article.[1] Siemens Mesoamerica CEO Louise Goeser recently dubbed Mexico the "China of the Americas," but we actually think that may be selling Mexico short.[2]

Rising affluence = rising costs in China

The bloom is increasingly off the Chinese rose as the world's premier manufacturing location. As the *Wall Street Journal* has noted, "The pool of Chinese workers is getting shallower. China's one-child policy and cultural preference for boys have led to a shrinking population of young people, particularly the women who work the floors of the apparel and electronics firms. The United Nations projects the number of women age 15-24 in China will fall from 106 million in 2010 to 92 million in 2015. Add the rising affluence of Chinese workers with accompanying demands for higher pay, and labor costs are going up faster than productivity increases at Chinese firms can offset them."[3]

By our estimate, a Chinese combination of a decreasing cheap labor pool, growing middle class, and rise in land and energy prices is escalating the cost of manufacturing in China there by 15-20 percent per year.[4] Added to that is the geographic disadvantage China has always suffered. Shipping lead times to U.S. ports are 15-20 days or more from China, compared to 48-72 hours direct to market by truck from Mexico.[5] Combine that with issues ranging from piracy to cutting through often-formidable government bureaucracy and there is much truth to the Journal's headline that "China's Export Pain May Be Mexico's Gain."

2 Mexico is no Afghanistan either

Mexico's reputation for drug-related violence is not undeserved, but neither is it a reason to avoid the country at all costs. According to an IHS Global Insight report, drug wars show no sign of subsiding anytime soon, as Mexican government leadership has shown little ability to eliminate the problem. Killings from drug and other organized crime in Mexico rose 11 percent in 2011[6] but this has become more of a regional issue, not throughout the country as many view Mexico. Though the risk is real and should certainly not be discounted, it is important to realize that:

- The vast majority of murders and other public disruptions occur in cities and states along the major supply chain routes leading into the United States through the state of Texas and in the resort city of Acapulco. Of greatest concern among major manufacturing centers are the cities of Juarez, Nuevo Laredo, Monterrey and Chihuahua. While virtually none of Mexico is

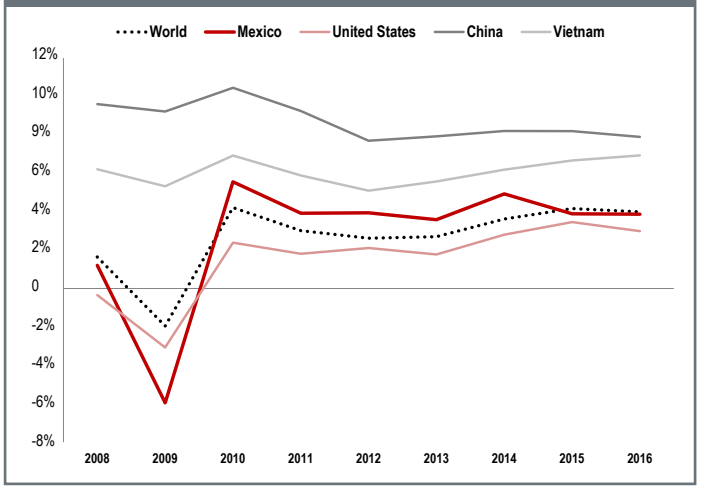
entirely crime-free, Mexico City and most of the fastest growing manufacturing and logistics centers are not strongly affected by drug cartel violence.

- The scenario might be compared to that of Chicago, where 2012 murders are rising at an alarming rate, but they don't affect commercial activity in the international business hub. Almost all of the violence is against rival cartels, local politicians and law enforcement, and does not generally disrupt the activities of large manufacturers and shippers.
- The Mexican drug underworld is beginning to consolidate into fewer, larger cartels. The likely result of this could be an overall reduction in violence from turf wars.

Mexico's economy, the13th largest globally, is in relatively good shape, especially considering that it is closely tied to the fate of currently sluggish conditions in the United States. Unlike other Latin American countries, Mexico experiences only mild inflation, which registered 3.4 percent in 2011. Most analysts forecast inflation to stay within 2-4 percent yearly for the near term. Mexico's current fiscal deficit is modest and the ratio of debt to GDP is a very low 27 percent.[7]

Spurred by manufacturing growth, particularly in the automobile industry, Mexico's economy has shifted into high gear during 2012. The peso, once a perpetually shrinking currency, actually gained almost 7 percent against the U.S. dollar during the first quarter, and quarterly GDP grew 4.6 percent year to year. The Mexican Central Bank is reporting record highs in its foreign reserves, which topped out at about $150 billion USD.[8] This reflects increasing confidence in Mexico by investors. First quarter 2012 investment increased 3.3 percent over fourth quarter 2011 and 8.8 percent year-over-year.[9]

Real GDP, annual percentage change



Source: IHS Global Insight, Jones Lang LaSalle

A commitment to a business-friendly environment

If anything, Mexico's economy is poised to jump-start after the July Presidential election, which put the brakes on commerce as stakeholders developed a wait-and-see attitude. Pro-business head of state Felipe Calderon was disqualified by law from running again, and election winner Enrique Nieto is from the opposing PRI party that, before 2000, had controlled the Mexican presidency for 71 years. So far Nieto has proclaimed his commitment to keeping Mexico a business-friendly nation for the United States and other trade partners.

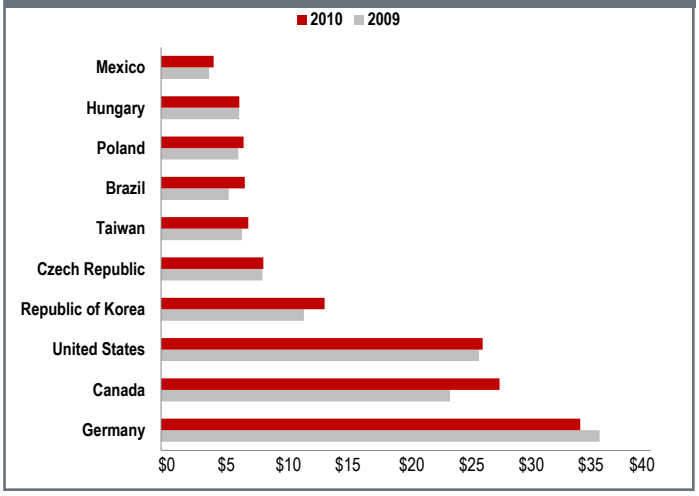
3 Mexico has a low-cost, increasingly skilled workforce

Competitive labor costs promote outsourcing

Mexico competes strongly in labor costs with most of the world's industrialized countries, including China. A 2010 survey by the U.S. Department of Labor found that total hourly compensation costs were $4.30, about one-half of Taiwan and Brazil, one-third of Republic of Korea, one-eighth of the U.S.and Canada, and one-tenth of Germany.[10]

According to research from consultant AlixPartners that took into account all important manufacturing costs including labor expense and productivity, currency fluctuation and freight rates, in 2010 Mexico was lower than the U.S. and five other frequent outsourcing locations including China. Mexico charted at 75 percent of the U.S. cost, compared to about 87 percent of the U.S. benchmark for China. Projecting into the future based on current trends, AlixPartners estimated that China manufacturing costs would actually pull even with the U.S. by 2015, while Mexico remained 20 percent below both nations.[11]

Hourly direct pay in manufacturing, U.S. dollars



Source: U.S. Bureau of Labor Statistics, Jones Lang LaSalle

As Mexico's labor costs improve against world competition, so do the abundance and quality of its workforce. The number of Mexican working-age individuals is expected to reach 62 million, and they are becoming increasingly affluent and well-educated. Adult literacy has slowly risen each year since the millennium, and was 93.4 percent as of 2009.[12] Mexico now has more than 2,500 higher education institutions, and every year 90,000 students graduate from engineering and technology programs.[13]

Siemens' Goeser reports that "the people of Mexico, in my experience, are more grateful for jobs and dedicated to their jobs than almost anywhere I've ever been. They really appreciate the job and work very hard. If you give them training, they want to learn, absorb, apply." [14]

4 Ever-improving supply chain infrastructure magnifies its geographic advantage

Mexico enjoys being "neighbors," with borderline proximity to the United States claimed by only one other nation—and its evolving supply chain infrastructure is beginning to give the Canadians some serious competition. Privatization of Mexican industries over the past 15 years has spurred the investment of $226 billion since 2006; over 50 percent higher than that of the previous six years.[16]

Cross-border rail traffic by value rose by about 14 percent in 2011, and double-digit growth is forecast to be the norm for many years to come.[17] Shipping via rail can be roughly 30 percent cheaper than shipping by truck – a critical factor to consider with increasing freight costs. Clearing customs is also quicker: typically about 30 minutes for a 250-container train compared with at least two hours for a truck pulling a single container.

Traffic rail on the rise

Rail as a percentage of Mexican freight shipments has risen from 7-8 percent in the 1990s to about 20 percent today, but the fact that railroads haul about 40 percent of U.S. freight demonstrates how much higher the bar can rise.[18]

Kansas City Southern de Mexico (wholly owned by Kansas City Southern Railroad) has strengthened a particularly attractive shipping lane between Houston and the huge and growing Mexican west coast port of Lazaro Cardenas, connecting many automotive and other manufacturing centers along the way. Over the past four years, the railroad has spent over $275 million on the corridor.

Besides autos, white goods and electronics increasingly send shipments north to the United States, while industrial materials such as soda ash, foundry sand and finished steel head the other way. Quick connections to the United States have helped Lazaro Cardenas become the fastest growing port in North America, expanding at about 30 percent per year.[19]

Nine ocean carriers now call at the port, and APM Terminals is building a $900 million container facility to compete for Asian imports bound for the U.S. and Mexican markets. Since it is about 300 miles closer to Houston by rail than the Port of Los Angeles/Long Beach, Lazaro Cardenas is an increasingly popular choice for international shippers of both finished goods, and components such as auto parts to be assembled at Mexican plants and moved on.[20]

However, train shipments have grown not instead of, but along with, the trucking industry. Truck shipments rose by 11.4 percent in 2011, and still comprise over three times the volume by value of rail freight.[21] The Mexican government is working to improve major truck highways and reduce the bottlenecks at border crossings.

Mexican *railway* system

Mexican *roadway* system

Mexican *intermodal* terminals

Yusen Logistics uses more than 100 Mexican trucking companies to move its customers' products to the U.S., especially for quick-turn requirements such as shipping fashion clothing. One of their customers is a T-shirt manufacturer with a plant in Celaya, about 165 miles northwest of Mexico City. The customer is able to ship merchandise from Celaya to Chicago in three days, compared with at least three weeks just to cross the ocean from China.[22]

5 Eager business partner

The attractiveness of Mexico is often viewed in terms of its' proximity to the United States, but the growth in truck shipping also reflects the growing market within its own borders. Mexico is the world's 12th largest consumer market. While consumer expenditures have been stagnant in much of the world, according to the research group Euromonitor International they are projected to increase here by 2.9 percent in 2012 over 2011, and 9.5 percent above the pre-recession level of 2008.

Gaining ground through free trade

Since the North American Free Trade Agreement was enacted in 1994, Mexico has worked hard to shed its reputation among foreign investors and trading partners for red tape and corruption. Today the nation is one of the most approachable for business in the world. Mexico has free trade agreements with 43 nations, compared to China's 20 and 15 for the U.S. [23] The U.S. is by far Mexico's largest trading partner, with 75-80 percent of the nation's exports heading north of the border.

The Mexican corporate tax rate is 30 percent. By comparison, according to *Forbes* magazine, multinationals pay an average corporate tax of 22 percent in China and 17 percent in India, while U.S. companies operating domestically pay an average of 23 percent.[24] To encourage foreign investment, Mexico has created export promotion programs to reduce or exempt general import, value added and customs operation taxes; and to allow for temporary or permanent importation of supplies and machinery to produce finished consumer goods, which can be exported or sold domestically. Another Mexican mechanism for promoting foreign trade is the Strategic Tax Zone Regime, which allows goods to be stored or repaired without paying taxes.

One of Mexico's most notable business-friendly achievements is its gains in operational transparency. According to Jones Lang LaSalle's Global Transparency Index, though Mexico's transparency ranks in the middle of the pack among industrialized nations, its rate of improvement ranks second in the Americas and third globally. Leading the way was transparency in listed real estate vehicles. In 2011 Mexico launched its first true publicly traded REITs, Fibra Uno (Funo), providing public information on investment benchmarks and other real estate performance data not previously available in that country.

Cars and a lot more: Manufacturing is on a Roll

Mexico was the world's seventh leading auto manufacturer in 2011—rising from tenth in 2009— but aims to gain ground on the leaders as production mushrooms in the nation's central region. Mazda and Honda opened new plants in the first quarter of 2012, while Ford, Nissan, Volkswagen and General Motors have expanded Mexican operations. Audi has announced the construction of a new plant in Mexico and two other German automotive companies are beginning their site selection process. Though proximity to the North American consumer market and inexpensive labor are undeniable lures, these major players in the quality-conscious auto industry also feel that the skill level of Mexican workers meets their requirements.

Skilled workers are also helping Mexico become a world leader in the consumer electronics industry. The nation is now the second largest supplier of electronic products to the U.S. market, and the third largest global exporter of cell phones. Much electronics manufacturing takes place in northern Mexico's maquiladoras, near the U.S. border, as well as central hubs such as Guadalajara.[15]

Many other Mexican industries are enjoying a surge in foreign and domestic investment as well. Jones Lang LaSalle's recent Mexican development projects include:

- ***L'Oreal:*** To accommodate the need for expanded production, this international cosmetics firm built a new 212,000-square-foot manufacturing plant in San Luis Potosi.
- ***Adidas:*** The global apparel firm tripled its distribution capacity in the Mexico City area with a new 290,000-square-foot distribution center.
- ***Grupo Bimbo:*** The world's largest baker leased a new 268,000-square-foot build-to-suit distribution center in Guadalajara.
- ***Levi's:*** An initiative is underway to expand an existing Mexico City distribution center by almost 150,000-square-feet.

Conclusion
Don't wait until tomorrow

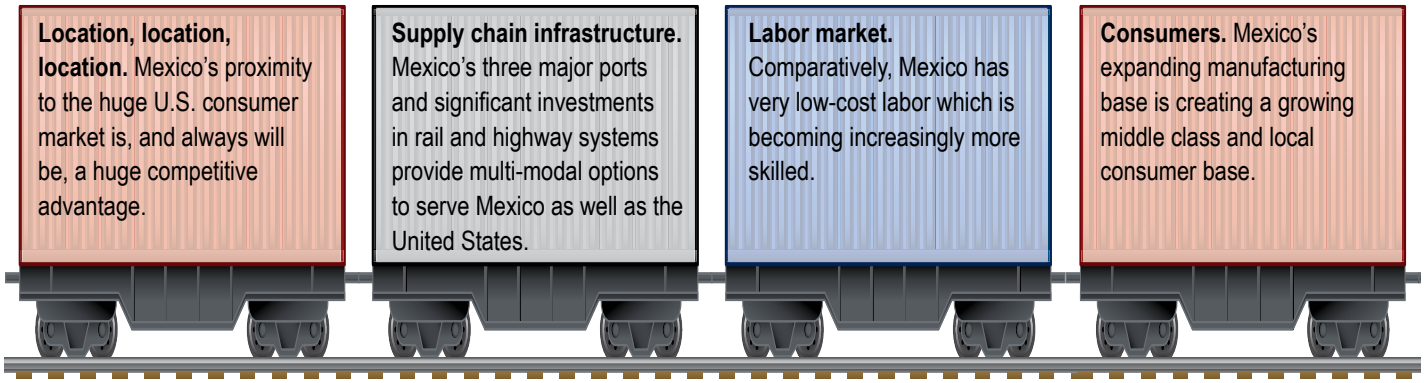
If you think that there's a chance Mexico might hold manufacturing or sourcing potential for your organization, now is the time to begin evaluating the opportunity. Hardly a well-kept secret anymore, demand for facilities and land is beginning to drive up once-bargain industrial real estate prices.

Mexican Industrial "Property Clock" (October 2012)

According to Jones Lang LaSalle's Industrial Property Clock, Central and Bajio region cities such as Mexico City, Guanajuato, Guadalajara and San Luis Potosi are peaking, while most other nearby manufacturing centers are on the rise. A few maquiladora markets near the U.S. border, including Chihuahua, are falling in price because of the lagging American economy and impact of crime in that area. Although Mexico's supply chain has improved exponentially in recent years, capacity shortages emerged during the summer of 2012, when manufactured goods must also compete with the peak season for perishable produce traveling to U.S. and Mexican destinations. Some major carriers reported 2.5 trailers crossing the border into the United States for every one heading southbound.[24]

Many major American railroad and trucking companies have a Mexican subsidiary or partner such as Kansas City Southern and Union Pacific, which is part owner of Mexico's Ferromex rail system. Tap these connections for intelligence on Mexican logistics and Jones Lang LaSalle for comparative real estate analysis and site selection consulting expertise. As with strategies for operating in many foreign countries, flexibility is a key to success. You should enter any venture into Mexico with a very solid plan—and an equally studied Plan B—Jones Lang LaSalle can help you get there.

KEY TAKEAWAYS



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EndNotes

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Real value in a changing world

Top 10 Mexican markets for manufacturing and logistics

#1 Mexico City

The world's second most populous city after Tokyo is Latin America's largest metropolitan economy, and the eighth richest in the world. Mexico City is the nation's main political, economic, financial and cultural hub, and home to the headquarters of most large Mexican companies. It is a major hub with high foreign direct investment levels, and boasts Mexico's highest per capita GDP. Mexico City is also the nation's most developed real estate market, with active investment particularly in the suburbs. A major new intermodal complex for container cargo is up and running as well. Major companies within metropolitan Mexico City include Pemex, Grupo Bimbo, Adidas, Levi's, Jumex, Penoles, Sears, Voit, Siemens, Proctor and Gamble, Nestle, Unilever, Bacardi, L'Oreal, Michelin, Pepsico, 3M, MSD and Phizer.

#2 Monterrey

Mexico's number two economic and financial hub has a strong industrial base that translates into high GDP per capita and one of the highest standards of living in Latin America. Monterrey's favorable business environment— including a skilled workforce and close proximity to U.S. markets—has drawn high foreign direct investment, although drug and other crime is still a minor concern. Major companies in Monterrey include Pemex, Mercedes-Benz, BMW, Grupo Bimbo, Sony, Toshiba, Carrier, Whirlpool, Samsung, Toyota, Daewoo, Ericsson, Nokia, Dell, Boeing, General Electric, LG, Johnson Controls, Caterpillar and Trane.

#3 Guadalajara

Mexico's second largest city is increasingly known as "Mexico's Silicon Valley" due to many high-tech companies having facilities in the city including General Electric, IBM, Intel, Hitachi, Hewlett-Packard, Siemens, Oracle, Freescale Semiconductor, Flextronics and TCS. Strong regional business growth is opening a new outer ring of industrial land for development for companies including Sanmina, Honda, Hersheys and Hella Automotive.

#4 Tijuana

The fortunes of Mexico's fourth largest economic are tied to the U.S., just across the border, which has slowed Tijuana's booming pace of a few years ago. The convenience of the huge American appetite and proximity to San Diego has made it attractive for many electronics, aerospace, automotive and biomedical companies. The high-profile crime of years past has returned to a common low-profile standard found in most cities. The city offers a low-cost yet skilled labor force, irresistible proximity to the major California markets, good infrastructure and extensive industrial parks. If the U.S. economy improves, Tijuana should surge again and provides a unique cohesion between both sides of the border as part of the bi-national effort known as the Cali Baja Mega Region in order to support further growth and incentives for business. Maquiladora manufacturers in Tijuana include Hyundai, Foxconn, Schlage, Welych Allen, Oxxo, Flextronics, Toyota, DJ Orthopedics, Samsung, Plantornics, Panasonic, Grupo Bimbo, GE, Philips, Mattel, Smiths Medical and Eaton.

#5 Chihuahua

Chihuahua is the capital of one of Mexico's largest and richest states. It is an important northern maquiladora industrial center and investment destination due to its good access to U.S. markets. It is also one of Mexico's only real estate markets currently falling in price, though a concern about crime is partially to blame. Chihuahua is Mexico's largest maquiladora center, with businesses including Ford, Honeywell, Hallmark, LG and Sumitomo Electrical.

#6 Toluca

Now the fifth largest urban area in Mexico, this expanding city benefits from economic overspill from Mexico City, only 30 miles to the east. Toluca, known as the "Detroit of Mexico," is home to manufacturers including Chrysler, BMW, Mercedes Benz, General Motors and Nissan, as well as multi-national companies such as Coca Cola, Grupo Bimbo, Nestlé, Pfizer, Bayer, Knorr, Lanxess, Vidrio Formas and Dana. Toluca also has several education centers and a high local literacy rate.

#7 Queretaro

One of Mexico's fastest-growing economies, centrally-located Querétaro is situated at a logistical crossroads. It also benefits from a highly-educated populace, attracting companies including Kellogg's, Samsung, Daewoo, Colgate-Palmolive, General Electric, Michelin, Tetra Pak, Siemens, New Holland, Sylvania, Procter & Gamble, Nestlé, Hitachi, Dow Chemical, Harmon Kardon and Bombardier.

#8 Aguascalientes

Another ideally located city in west-central Mexico, Aguascalientes has been cited as the best business environment in Mexico by the World Bank for three consecutive years. It has the lowest real estate costs of the Bajio region. Aguascalientes has several high-tech and robotics firms such as Texas Instruments and Flextronics, as well as the largest Nissan plant outside of Japan, which boosts diversity and quality of life for foreigners here.

#9 Mexicali

This California border city has grown for those demanding more infrastructure in terms of power and water joined with the linkage to a network of a higher educatoinal system. As an alternative to other cross-border locations such as Tijuana and Ciudad Juarez, it provides a great deal in terms of a constant history for security. For these reasons it has attracted such investments as the development known as the "Silicon Border" which promotes unprecented infrastructure in terms of power, water, gas and technology to rival not only big campus style manufacturers but rival U.S. high-tech corridors as well. The city has already attracted manufacturers such as Mitsubishi, Sunpower, Pilkington, Kentworth, Honeywell, Nestle, Coca Cola and Goodrich Aerospace.

#10 Lazaro Cardenas

Though its population is under 200,000, this Pacific coast city is the fastest-growing business seaport in North America. With a direct Kansas City Southern Railroad link to the U.S. heartland, Lazaro Cardenas is mushrooming as a less congested alternative to the Port of Los Angeles-Long Beach for container shipments to Chicago, Kansas City and Houston, as well as across Mexico.

We put our clients' interests first and foremost in everything we do. Call a Jones Lang Lasalle expert today to discuss how you can leverage Mexico for your manufacturing and logistics needs.

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