

## The Other Mexico: A Wave of Investment

**Who says it's a "failed state"? Ignoring the drug wars, multinationals are pumping in billions to set up factories**

By [Pete Engardio](#) and [Geri Smith](#)

K. Alan Russell has spent 23 years clearing bureaucratic and logistical hurdles for U.S. companies running low-cost plants in Ciudad Juárez. Never has he had to do as much hand-holding as now. Each time the Mexican city makes headlines—for kidnappings, murders, or police battles with drug cartels—Russell does damage control. He calls the headquarters of the 28 tenants at his company's industrial parks to tell executives their staff and property are safe. "They need to hear from Ground Zero that there [were] no disruptions and the violence is not affecting their people," he says.

He has his work cut out. Since early 2008 the corpses of 2,050 victims of a turf war among narco-traffickers have been dumped around this city of 1.4 million. Twice, Russell had to remove ATMs from his facilities after thieves attempted heists—once with a forklift. Juárez Mayor José Reyes Ferriz estimates the violence cost 20 foreign projects last year that would have created 5,000 jobs.

But there also is surprising truth in Russell's message. Even as American TV anchors report on "the war on our border," the city's 285 *maquiladoras*—factories making goods for export—are not fleeing. Each day, 9,000 managers cross the Rio Grande without incident from their homes in El Paso to the Juárez plants of Johnson Controls ([JCI](#)), Cummins ([CMI](#)), Emerson Electric ([EMR](#)), Visteon ([VC](#)), Delphi Automotive ([DPHIQ.PK](#)), and others. Travel to Monterrey, Guadalajara, Mexicali, and Querétaro, where Whirlpool ([WHR](#)), Honeywell International ([HON](#)), Daimler ([DAI](#)), and Lenovo ([LNVGY](#)) have been expanding, and you'll think that talk of Mexico as a "failed state" seems absurd. "Not only are we not going anywhere, but more and more of our key suppliers are in Mexico," says Randy E. Wilcox, president for the Americas for Otis Elevator. "It's the hub of our supply chain for North America."

### A VALUABLE PARTNER

Manufacturers have good reason to hang tough. The **41% drop in the peso against the dollar since August** has made Mexico an even cheaper place to manufacture: **Factory workers in Juárez can be hired for \$1.50 an hour**. When President Barack Obama visits Mexico in mid-April, he will find a nation that has enhanced its position as a global manufacturing and design base for everything from appliances to aircraft parts. If Mexico can rein in the drug cartels—a huge if—it could emerge a more valuable partner than ever for U.S. industry.

Mexico's economy is reeling now. Nationwide, foreign investment plunged 46% in 2008, to \$18.6 billion, and the economy in January shrank at a 9.5% annual clip. The country will probably lose half a million jobs in this year's first half.

But the slump is almost entirely due to the global recession—not economic mismanagement as in the past. Manufacturing has crashed everywhere, China included. Attacks on foreign staff and factories, moreover, have been rare in Juárez and other border towns along drug-trafficking routes, such as Reynosa, Nuevo Laredo, and Tijuana. The narcos seem focused on each other and police and politicians who stand in their way. Indeed, though the crime wave was obvious early last year, investment kept coming—until the global financial meltdown.

Meanwhile, a quiet transformation has begun south of the border. For much of the decade, Mexican officials watched with dismay as multinationals crated up *maquiladora* operations and moved to lower-cost havens in Asia. Mexico's schools, roads, and bureaucracy still rate poorly in international competitiveness rankings, making it hard to graduate to more sophisticated industries.

Yet national statistics obscure the progress several Mexican states and cities have made in boosting their ability to compete. Studying successful models in Asia, the U.S., and Europe, local governments collaborate with universities and private industry to upgrade their workforces, parts-supply networks, research and development programs, and infrastructure. They have become magnets for factories that go well beyond assembly work. Mexican exports of aerospace products, for example, have nearly tripled, to \$3 billion, since 2003. In March, French President Nicolas Sarkozy announced that Eurocopter would invest \$550 million to make helicopters in Querétaro, a rising production and engineering base for General Electric ([GE](#)), and Bombardier.

On the national level, sound fiscal and monetary policies after the 1994 financial crash have made Mexico better able to endure global shocks. "You can now do business here in a stable macroeconomic environment," says World Bank country director Axel van Trotsenburg.

Mexico also stands to benefit from a subtle but steady shift in strategic thinking by U.S. manufacturers, who are reassessing their reliance on Asia and focusing more on "near-shore" options. Rising Chinese costs and fears of higher trans-Pacific shipping prices if oil spikes again are part of it. With capital scarce and markets hard to forecast, companies don't want to tie up cash in inventory as they wait for their cargo to arrive. Such reasons are driving precision manufacturers like GKN Aerospace, a maker of aircraft engine components, to cluster close to the border in cities like Mexicali. "If you have to reduce costs, China is too far away. Our products can cost \$80,000, so we can't afford mistakes," says GKN Mexicali plant manager Ardy Najafian.

Other big factors are China's rampant piracy, quality failures, and communication problems. In Mexico, U.S. companies can better control their operations than in China, where they often must work with government-linked partners. When Fusion Specialties, the No. 1 maker of mannequins, moved some work offshore in 2007 to cut costs, it chose Juárez over China because goods can reach such U.S. retailers as Nike ([NKE](#)), Gap ([GPS](#)), and J. Crew ([JCG](#)) in two days rather than five weeks. Also, "it was a definite risk that we would lose our intellectual property in China," says Richard Moran, vice-president for operations at Fusion, which holds patents for its polyurethane molding process.

A recent survey of 136 U.S. manufacturers by Boston supply-chain consulting firm AMR Research confirms Mexico's rising business stature. While 15% of respondents said they expect to cut output in China, only 5% plan to do so in Mexico. Companies intending to expand in Mexico outnumber those planning to cut back by 5 to 1. In China, that ratio is 2 to 1. "Mexico clearly is gaining at China's expense," says Kevin O'Marah, AMR chief strategy officer. As for Mexico's violence, O'Marah says compared with other things multinationals confront daily—disease outbreaks in China, abrupt policy shifts in Moscow, riots in South Africa—"it's scary, but not enough to prevent you from going." So when U.S. demand returns, says Boston Consulting Group Senior Partner Harold L. Sirkin, expect a "significant increase" in Mexican manufacturing.

## **MOVING TO MEXICALI**

Some sectors that were devastated by China are already reviving. In February, Beijing's Lenovo opened a plant in Monterrey to make up to 5 million ThinkPad notebook PCs a year. Since October electronics contract manufacturer Jabil Circuit ([JBL](#)) of St. Petersburg, Fla., has more than doubled to 8,000 the staff at its Guadalajara plant, where it shifted some assembly of BlackBerry smartphones from China. Electronics manufacturers Foxconn Electronics of Taiwan and Flextronics ([FLEX](#)) have expanded their huge Mexican campuses as well.

Factory jobs are moving from the U.S., too. In Mexicali, Skyworks Solutions ([SWKS](#)), a Woburn (Mass.) maker of semiconductors for mobile phones and PDAs, is adding 100 jobs to a factory to produce items that had been made in Maryland. Skyworks also has built a 300-strong engineering team. J.C. Nam, the plant's general manager, says two years ago Skyworks considered relocating some work to China, but decided Mexico is actually cheaper because its skilled workforce is more efficient. With engineers' pay averaging

around \$25,000, including benefits, Nam contends Mexicali's high-tech industry can take off. "We believe there is opportunity in crisis," he says.

A sprawling city of 1 million close to San Diego and Phoenix, Mexicali has been largely spared the violence of nearby Tijuana. While the financial crisis has stalled many new projects, Mexicali has still attracted such industries as microelectronics, aerospace, and medical devices. Gulfstream has expanded its facility to produce sections of executive jets. Honeywell, which has large manufacturing operations in Mexicali, recently opened a \$40 million center where 300 engineers run simulations for next-generation aircraft. Last year, an affiliate of Goodrich Corp. opened a 120-worker aircraft parts plant with plans to expand to 160 by yearend. Intuitive Surgical ([ISRG](#)) of Sunnyvale, Calif., started up a factory to manufacture the EndoWrist, an instrument modeled after the human wrist that is used for robotic-assisted, minimally invasive surgery.

David J. Hill, the former National Semiconductor ([NSM](#)) executive leading development of a 10,000-acre high-tech park called Silicon Border near Mexicali, likes what he sees. "People work as hard as they did in Silicon Valley, Singapore, and Taiwan in the 1980s," he says. Hill is unfazed by the violence. One of his partners helped build a chip packaging plant in El Salvador in the 1970s during an attempted coup. Hill was based in Malaysia in the mid-1980s when criminals kidnapped a Hewlett-Packard ([HPQ](#)) exec. Those incidents didn't stop construction. "This is life for expatriates," says Hill, who hopes soon to land a big investment from German solar-cell maker Q-Cells.

In the past five years the Mexicali campus of Universidad Autónoma de Baja California (UABC) has doubled its engineering enrollment, to 4,000. UABC and CETYS Universidad, a top private school, recently added bachelor's and graduate programs in aerospace engineering, microelectronics, bioengineering, radio frequency design, and renewable energies. The curriculum is partially designed by Honeywell, Gulfstream, Skyworks, and others. Fluency in English is a requirement. "All these companies say they will do more engineering and design here if we have the skilled professionals," says UABC Secretary Felipe Cuamea Velázquez.

Even bigger ambitions are being pursued in Monterrey, the industrial capital and home to huge plants for Whirlpool, General Electric, Chrysler, Ford, and others. Monterrey was rocked by gangland shootouts and even a grenade attack on the U.S. consulate last year, but now is relatively tranquil.

Monterrey and surrounding cities are nurturing engineering centers and high-end component suppliers such as Nematik, which makes lightweight aluminum engine blocks for major automakers. Monterrey certainly can't match Bangalore or Shanghai in sheer numbers of engineers. But a \$250 million IT services industry has taken root, doubling in five years, to 7,000 workers. The concept of Mexico as a near-shore alternative to India was pioneered by Monterrey software firm Softtek, which counts 17 of America's 50 biggest corporations as customers. Indian outsource shops Infosys ([INFY](#)), Wipro ([WIT](#)), and Tata Consultancy Services have followed Softtek's lead. To improve the quality of local IT workers, 25 Monterrey university educators spent eight months studying training methods at the Infosys campus in Mysore, India, where tens of thousands of raw recruits a year are turned into software developers.

With engineering salaries in Mexico starting at around \$12,000, the cost gap with India isn't huge. In terms of hourly rates, India is 25% to 30% cheaper than Mexico, says Jagmohan S. Nanaware, general manager of the Monterrey development center of Sasken Communication Technologies, an Indian maker of cell-phone software. But add the indirect costs of travel, high Indian staff turnover, and collaboration at odd hours on complex jobs with colleagues half a world away, and the real gap is closer to 15% to 20%. For many U.S. companies within just an hour or two by air, Monterrey makes more sense. Quality is good, too. "At first we didn't know what kind of engineers we would get, so we brought over six from India," says Nanaware, who doubled his Monterrey staff, to 120, in two years. Within six months, "Mexican engineers were contributing beyond our expectations."

## **A FRAGILE BEGINNING**

Tight collaborations with industry and universities are essential. "Our aim is that for every dollar we invest, we get two from industry," says Mario A. Martínez Hernández, dean of engineering at the Tecnológico de Monterrey. Foreign schools pitch in, too. The CarTec Project is a tieup with Virginia Tech and Tec de Monterrey to train 50 Mexican students to design cars, from the fiberglass molds used to make body parts

to the engine and interior ergonomics. The students are developing a compact car, but Tec's ultimate aim is to build a talent pool skilled enough to make Monterrey a global center of car design, rather than just assembly.

Would that all of Mexico were like Mexicali and Monterrey. Sadly, it is not. Many states are making slow progress, and the central government does a poor job of coordinating development. Some executives fear drug violence and government corruption could eventually again snuff out enthusiasm for Mexico. "You can't have investment in a country that's perceived as lawless," says Julio A. de Quesada, president of the Executive Council of Global Companies, a group of 38 multinationals operating in Mexico.

Yet if it can make headway in solving these problems, Mexico's bigger moment could arrive when recovery comes and multinationals start to invest anew. Many now look to China for manufacturing and to India for engineering. By becoming a top locale for both low-cost production and design right on America's border, Mexico could offer a better alternative. That helps explain why tenants are keeping their space in Russell's Juárez industrial parks. "Nobody," he says, "wants to be caught without capacity when this market turns."

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### **An Unfinished Agenda**

Mexico ranked No. 52 among 131 countries surveyed in the latest edition of the Global Competitiveness Index, compiled by the World Economic Forum. While that places Latin America's second-largest economy ahead of other emerging-market powerhouses such as Brazil and Russia, the report's authors note that Mexico still has lots of work to do in areas such as labor-market reform, improving the integrity of its public institutions and building up the skills of its population.

To read the full report, go to <http://bx.businessweek.com/mexico-business/reference/>

[Engardio](#) is an international senior writer for *BusinessWeek*. [Smith](#) is *BusinessWeek*'s Mexico bureau chief.