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Battling China on Price

Businesses say Chinese-made items are pricier than Mexican if you consider costs associated with quality, logistics, and engineering changes

By [Pete Engardio](#)

Like many U.S. purchasing managers, Fred Heegan found himself under pressure over the "China price." Heegan is vice-president for global parts sourcing for the North American manufacturing operations of [Takata](#), the Japanese maker of automobile air bag, seat belt, and steering-wheel assemblies. Over the past couple of years, U.S. customers often pressed him to cut costs by pointing to a lower-priced part from China.

But Heegan pushed back. He would patiently counter with PowerPoint presentations showing that many Chinese-made items aren't such bargains when one considers the costs associated with quality, logistics, and engineering changes. That's why he argued to have most parts made near Takata's factories in the U.S. and Mexico. "There are significant hidden costs to having supply lines that extend to China," he says.

Heegan now looks like a visionary. Rather than only considering factors like labor and shipping rates and raw material prices, companies are increasingly calculating the "total cost of ownership," tallying all of the direct and intangible costs and benefits linked to buying something in one place compared to another. Under this light, the China Price, which always seemed to be at least 40% below U.S. costs for everything from electronics products and bedroom furniture to high-end telecommunications gear, has not been as low as it seemed.

DRAMATIC SHIFT

Over the past three years, in fact, the once-formidable China Price edge has all but disappeared for a number of manufactured goods, according to a new study by Southfield (Mich.) consulting firm AlixPartners. To illustrate its point, Alix assessed the total cost of ownership of five categories of machined products, such as large, cast-aluminum engine parts requiring significant labor and small mass-produced plastic components requiring little labor.

Alix found there has been a dramatic cost shift since 2005. Then, the "total landed cost," meaning price after an item had arrived at a West Coast shipping port, was 22% cheaper on average for Chinese parts than those American-made in the sample AlixPartners studied. By yearend 2008, however, the average price gap with the U.S. had dropped to a mere 5.5%, which is often not large enough to be worth the hassle of sourcing something from halfway around the world.

The more surprising reversal is the comparison with Mexico. While China was around 5% cheaper on average than Mexico in 2005, China is now 20% more expensive. Compared with the U.S., the Mexico Price edge widened to 25% from 16%. "A couple of years ago, outsourcing to China was a no-brainer" says AlixPartners Managing Director Stephen Maurer. "Right now, Mexico looks super attractive."

To illustrate the change, Maurer cites a machined aluminum engine part, for which labor typically accounts for about 30% to 35% of the manufacturing cost. It would have cost \$25 in 2005 to make that part in the U.S. The

same part would have been made in China for \$17. Today, he says, the U.S. price will have risen to \$29. But the Chinese-made part will be \$25. The Mexico Price? Around \$20.

CURRENCY SHIFTS

The biggest factors behind that sharp shift are currency and labor. The Mexican peso has lost nearly 20% against the U.S. since late 2005, while the Chinese yuan has appreciated by around 11%. On top of this, Chinese wages have steadily risen some 7% to 8% a year. Mexican wages also rose in peso terms, but measured in U.S. dollars Mexican labor rates plummeted.

Of course, some cost trends have shifted back in China's favor since the onset of the global recession. Ocean shipping rates skyrocketed early last year as oil prices soared to \$140 a barrel, but they have since crashed. But because AlixPartners' calculations account for that because they are based on data at the end of 2008, by which time oil prices had already dropped. China's price edge could improve some more this year, but only by around one or two percentage points, Maurer says: "not enough to change your decision."

China isn't losing its export edge in every industry, of course. For example, the mainland still dominates the global garment, shoe, and toy industries, where abundant cheap labor is the biggest factor.

China also is still the king of consumer-electronics and personal-computer manufacturing. "What makes this industry sticky is that the entire supply chain is now in Asia," says Michael Andrade, North America manager for Celestica, a giant Toronto electronics contract manufacturer. Transplanting that ecosystem to Mexico would take years. However, Andrade says production of higher-end electronics such as telecom switches and computer servers is returning to the Americas in order to be closer to U.S. customers.

TAXES AND SHIPPING TIME

Beijing policies have played a part in changing some sourcing patterns. One reason products involving metal-casting and chemical processes are pricier in China is that the government has stopped exempting exports from value-added taxes as part of a strategy to shift Chinese industry away from polluting factories. That decision added around 16% to the cost of work performed in China.

The 45-day average shipping time from China to the U.S. also has become a bigger issue because it adds to the inventory costs of suppliers and American importers. Inventory costs have become an even bigger issue during the recession, when it became more difficult for manufacturers to predict U.S. demand, forcing them to stash unsold products in warehouses for longer times.

The long lead times needed by Chinese factories can result in other unanticipated expenses. If a factory runs behind schedule on a badly needed component, for example, bulky items must be shipped by air at huge cost rather than by boat. Once they land in the U.S., the importer must pay premium trucking rates. "People were chasing nickels at the expense of huge supply-chain costs," Maurer says.

That's a major reason Heegan would rather buy parts close to where final assembly is done. He cites the example of automotive wire harnesses, insulated bundles of electrical conductors that can cost as little as \$1 and are churned out by the millions. Heegan says he might be able to buy a harness from China for 15% less than would it would cost in Mexico.

SLUGGISH DESIGN CHANGES

Trouble is, changes in wire-harness designs are required frequently. If a design change is required after a big batch of Chinese-made harnesses already was loaded on a boat from Shanghai, "that means four or five weeks

of shipping and inventory costs are wasted on obsolete parts," Heegan says. "That could eat up whatever we saved."

Changing designs also can be complicated. "If I need answers from China, I have to go through time changes and go through an interpreter. I might solve the problem or I might not," Heegan says. "If our suppliers are in Mexico, they can be in our plant in hours."

Some of the same considerations are starting to drive production shifts in electronics. Mexico lost a huge portion of its electronics industry to China after Beijing entered the World Trade Organization in 2001. Consumer electronics aren't coming back. Nor is Mexico gaining in high-volume components such as computer circuit boards. But more production of higher-end equipment is starting to return.

Manufacturing cost is not the big driver, says Celestica's Andrade. Instead, "what is drawing work back to the Americas is that customers are gaining a more sophisticated understanding that electronics are mission-critical to their environment," says Celestica's Andrade. "And there are risks to having an extended global supply chain."

HOLDING OFF ON MAJOR MOVES

Despite the evolving economics, don't expect a rapid migration of manufacturing out of China. The mainland is a vital market itself. And because of the recession, consultants say, most U.S. manufacturers are holding off on any major moves right now. Whatever they can save by returning to Mexico may not be worth the cost and effort of relocating an established, modern, and efficient plant with experienced managers and well-trained workers. Besides, says Maurer, "you don't want to shift everything to Mexico—and then see the yuan drops like a stone and that China is cheap again."

But observers like Maurer do believe they are witnessing the start of a structural shift in corporate strategic thinking that could determine where they put future production facilities. "There was a herd mentality, with many companies going to China for only a marginal benefit," Maurer says. "A lot of work that went from Mexico to China probably shouldn't have." That stampede is apparently over.

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