



Outsourcing: New Pressures to Stay Home, Old Reasons to Go Abroad

Published : January 11, 2011 in [Knowledge@Wharton](#)

As wages and other costs increased in recent decades, U.S.-based global manufacturers gradually opted to outsource more and more of their production to suppliers in Asia, especially China. This process may have made sense for U.S. multinationals that needed to compete with companies based in those low-cost countries -- and with multinationals from other countries doing business there. And outsourcing has indeed lowered the costs of many products.

But it has also gradually become emblematic of globalization's drawbacks, and it is widely condemned as one of the key sources of today's high unemployment rates. In last fall's U.S. Congressional elections, some candidates from both the Democratic and Republican parties attempted to attract voters by accusing their opponents of supporting policies that make it easier for companies to "ship jobs overseas" -- in other words, outsourcing.



Can the tide of outsourcing be reversed without enacting protectionist, anti-trade legislation? Is such a reversal already under way in some sectors? Or is it unrealistic to expect a reversal?

Analysts generally agree that U.S. companies -- and many of their counterparts in Europe and other developed economies -- tend to think a little harder nowadays about sending production lines to Asia. Indeed, some companies were burned after outsourcing turned out to involve all sorts of hidden costs, including quality control problems and delays that resulted from longer supply chains. Recent headlines suggest these companies may be relocating some low-cost production lines back to "near-shore" locations in Mexico or Central America. Even better for U.S. workers and trade unions, more companies may soon be persuaded to expand their workforces in the United States, rather than outsource from foreign plants. In a rare, but high-profile success story, General Electric recently announced that it would add 200 jobs at its appliance plant in Bloomington, Ind., rather than shut down the plant and move production to Mexico.

"The worldwide economic downturn and its aftermath have had a significant effect on how companies view and approach global sourcing," says a recent report by The Boston Consulting Group (BCG). The report notes that exports from low-cost countries dropped sharply during the crisis -- from \$3.8 trillion in 2008 to \$3 trillion in 2009 -- and have yet to recover to their pre-downturn levels. So companies are "re-thinking" their strategies to take into account the "total cost" of outsourcing production lines to Asia rather than calculating just the most obvious costs, such as wages and transportation. Under increased scrutiny are the real and potential costs involved with handling such challenges as product recalls and volatile commodity prices, among other issues, says the report.

Nevertheless, outsourcing is hardly about to disappear. According to data compiled by the Economist Intelligence Unit and BCG, exports from low-cost countries, while sharply down in 2009, were still at the third-highest level in history, exceeded only in 2007 and 2008. Moreover, says the BCG report, outsourcing is "no longer restricted to high-labor-content products such as garments, toys and shoes. Increasingly, multinationals are sourcing a wider range of products from low-cost countries to capitalize on the less expensive overhead, inputs and capital -- and for strategic reasons such as better access to supplier clusters or to consumers in emerging markets." That means the total volume of exports from low-cost countries almost certainly finished 2010 on an upward course as demand for goods from those countries continued to recover from the recession.

In a Not-so-flat World, a Complex Process of Analysis

Many politicians may remain in the dark about the subtleties of outsourcing, but executives at leading global companies have long understood its complexities, says [Mauro Guillén](#), a professor of international management at Wharton and director of the school's Joseph H. Lauder Institute for Management & International Studies. Knowledgeable executives reject the conventional public wisdom that outsourcing is a simple, straightforward proposition because, as the cliché goes, the world is "flat." That is an "entirely wrong" assumption, states Guillén. "The world is only flat in some places." If the world were entirely flat, it would always make sense to outsource where wages and other costs are lower -- but that is clearly not the case.

Well-managed companies with experience in non-U.S. markets have long recognized that it is "very difficult to generalize" about the virtues of outsourcing, adds Guillén, noting that what makes sense for some sectors and products just doesn't make sense for others. Fortunately, the notion that most global companies dive blindly into China "couldn't be further from the truth. Companies are much more sophisticated than that."

Astute analysis of the total costs -- including potential risks -- involved in outsourcing a production line can lead companies to make decisions that are not at all obvious at first glance. "What drives the location of outsourcing is the value-to-cost ratio," says Ravi Aron, a professor at the Johns Hopkins Carey Business School and a senior fellow at Wharton's Mack Center for Technological Innovation. If, for example, the value of a product is \$100, but the cost is \$4, the value-to-cost ratio is 25 to 1, high enough that you can source that product at home. "Only in such cases do you tend not to outsource" a product, Aron says. That's because doing so is not worth the risks that go along with managing any extended supply chain.

To raise the value-added side of that ratio, multinationals sometimes need to invest in upgrading their production lines in high-wage countries. For example, GE's recent decision to add 200 workers in Indiana committed the company to making \$93 million in new investments in its plant, which will manufacture higher-value, more-energy-efficient refrigerators. To lower the cost side of the ratio, on the other hand, GE was promised \$2.25 million in state-income tax credits and federal energy incentives of \$5 million. For its part, the International Brotherhood of Electrical Workers agreed that new hires at the plant would start at \$13 an hour, much lower than the \$24 paid to existing workers.

Cricket, the Spanish maker of cigarette lighters, provides another case study in the subtleties of calculating the value-to-cost ratio. Cricket operates three factories -- one in Spain, one in India and a third in China. Predictably, Cricket's labor costs in Spain are much higher than in India or China, yet Cricket's per-unit production costs in Spain are actually lower than in China, says Guillén, because its Spanish plant was fully automated at significant investment cost. Why does Cricket even have a plant in China? Because when customers need to order customized lighters -- for example, lighters carrying a corporate logo -- production lines must be retooled, and it is cheaper to retool in China where the lines are not automated. "The China plant gives them flexibility," says Guillén.

Global managers have also learned over the years that products such as high-end aircraft don't lend themselves to outsourcing because they cannot be mass produced; they must be manufactured to meet unique specifications demanded by each buyer. In other cases, notes Guillén, "You want R&D to be close to the manufacturer, or you want the manufacturer to be close to the buyer" so that you can respond rapidly to changes in demand. Such considerations explain why Germany is the second-largest exporter in the world, after China, despite the fact that it has very high wages.

Two key variables that determine whether it makes sense to hand over your production line to foreign suppliers, adds Aron, are its "codifiability" and the nature of the metrics involved in the manufacturing process. "Some products do not lend themselves to being codified," and even the most exhaustive attempts to codify how they need to be manufactured won't do the job. So those kinds of products should probably not be outsourced. As for metrics, global manufacturers need to be able to provide their would-be suppliers with precise, well-defined metrics so they know exactly how to measure their performance. But for some products, notes Aron, the only possible performance metrics are too imprecise or subjective, so outsourcing again doesn't make sense.

When Near-Sourcing Makes Sense

Discussion about companies bringing overseas production back to the Americas has been exaggerated or misunderstood, says Tom Kim, Hong Kong-based transportation researcher at Goldman Sachs (Asia), adding that global companies are not bringing their production lines back to the United States despite the downturn in demand for outsourced products during the recession. Something else is happening, he says. "What we are seeing is a diversification of new sources of growth in order to help companies diversify their corporate exposure" to global risks. This trend does not involve "the displacement of their existing production from China but the expansion of their capacity into different markets outside China." In other words, rather than shut down their plants in China or sever their ties with independent Chinese contract suppliers of those goods, some global companies are also outsourcing production from countries like Cambodia, Thailand and Vietnam.

Under what conditions does "near-sourcing" to, say, Mexico, make sense? "The reason for near-sourcing is that it allows you to change your supply destinations much faster," Aron says. Adds Walter Kemmsies, chief economist of Moffatt & Nichol, a marine infrastructure engineering firm: "Those companies whose products are frequently redesigned may find that outsourcing to Asia makes less sense than to near-source to Mexico, Central America or the Caribbean."

Trade pacts, such as the Central American Free Trade Agreement (CAFTA), which gives tariff preferences to firms that export from that region, can be a key factor in making near-sourcing cost-effective. In the case of CAFTA, U.S. textile mills must first export their yarn and fabric to that region, where Central American companies then cut and sew the material into apparel, which is then shipped back to the United States for distribution to retailers. This complex supply chain makes sense only because, under CAFTA, apparel made in Central America enters the United States duty-free, so long as the yarn and fabric "originate[d] in the U.S." (Otherwise, U.S. tariffs on apparel are high.)

This sort of near-sourcing benefits both Central America and the United States. Thanks to CAFTA, the average piece of clothing imported to the United States from Central America now contains 70% U.S.-made yarn and fabric. In contrast, the average piece of clothing imported from China to the United States contains less than 1% U.S. yarn and fabric, says David Spooner, a former U.S. trade negotiator who is now an attorney at Squire, Sanders & Dempsey in Washington, D.C.

Kim of Goldman Sachs agrees that near-sourcing may work well for some global companies that want to respond quickly to changes in customer demand and that need to ship products to U.S. buyers within days, not weeks. However, he adds, China will continue to be the prime location for global companies to outsource products in a wide range of industrial sectors, despite its distance from the United States -- and even despite the fact that China's wages will continue to rise, especially along its eastern coast. Why will it be so hard to replace China in so many outsourced production lines? Kim says that China offers global manufacturers a very strong physical infrastructure, which the Chinese government has been "aggressively expanding" over the past several years. Newer outsourcing sites in Asia -- even those that pay lower wages than China -- can't offer total costs that are competitive with China's because those countries' roads, ports, bridges and other facilities are significantly inferior, leading to higher costs for critical transportation and logistics.

In addition, notes Kim, Chinese companies have been actively upgrading their technology infrastructure, implementing the latest IT platforms and applications to improve their efficiency and to lower the total cost of outsourcing, even with rising wages. A final factor, he says, is the sheer size and capability of the Chinese labor force. "It is very hard to replace China's huge pool of workers" in the much smaller nations of Southeast Asia, Latin America or elsewhere. "China's workforce is upgrading its level of skills so that it can handle the production of an ever-wider range of products."

Global companies that outsource their manufacturing processes need to weigh very different sorts of factors from those that outsource their back-office processes, known as business process outsourcing (BPO), adds Aron. When it comes to manufacturing, economies of scale are very important; if economies of scale can't be provided by a particular supplier or group of suppliers in one manufacturing site, companies need to look elsewhere. In contrast, when it comes to BPO, the ability to automate and standardize processes "is a lot more important than scale," Aron states. In the case of services, inputs, outputs and working processes are all information, "so co-location is not as important in services as it is in manufacturing."

Surveys show that BPO activity is increasing again after declining briefly in the wake of the recession. IDC, an IT research firm, estimates that worldwide revenues for BPO services were \$158.2 billion in 2010, and it expects an increase of 5.4% in 2011.

However, the BPO business is also growing more competitive, and some countries have developed specialized BPO capabilities that feed off the skills of their workforces and/or the time zones in which they operate, says Aron. For example, the time zone is an important factor for BPO in such countries as Mexico, El Salvador and Chile, which compete for supplying Spanish-language call centers to customers in North America.

Logistics: The Potential Bottleneck

Even with all the new concerns, many companies don't pay enough attention to the full range of logistics challenges they face when they outsource manufacturing to suppliers in distant locations, according to George Stalk, a Toronto-based senior advisor at BCG. "People have to be careful when they go out [to Asia] about stock-outs and overstocks," says Stalk, and they must be prepared to pay the higher cost of shipping fashions, high-tech goods and other products that customers demand on short notice. Many companies "don't think about logistics" until they have a problem, he adds, and too many corporate heads of logistics are "a level or two down" from senior management, where they "don't have the throw weight" to make strategic decisions that have a major impact on profitability. Notable exceptions to that rule include apparel companies as well as supply-chain-driven companies like Wal-Mart and Dell Computer, whose logistics heads have long exercised a strong voice in senior management.

Stalk also worries that global companies could be caught unprepared for upcoming increases in logistics costs. "Companies have calculated their logistics footprint when logistics costs were going down in real terms. But now, all of these costs are beginning to reverse themselves," including rates for containers and railroads as well as oil prices. Despite the Obama administration's bold rhetoric about upgrading U.S. infrastructure, 95% of infrastructure spending in the stimulus package "was about catching up with delayed maintenance," Stalk notes. "We have no new runways, no new airports and the 'next generation' air traffic control systems are still not up. All across the board, the opportunity to get ahead of the problem has passed. The congestion costs are beginning to bite."

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