



Why domestic outsourcing is leading America's reemergence in global manufacturing

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Abstract With cost advantages from manufacturing in Asia and Mexico steadily deteriorating, U.S. firms are reassessing the option of domestic outsourcing to remain globally competitive. The challenge in evaluating international versus domestic outsourcing strategic options lies in that first-movers are extremely and intentionally vague about how they reach their decisions. The purpose of this article is to reveal these reasons by providing statistical and firm-based evidence on five major factors that are influencing the decision regarding where U.S. companies should manufacture to optimize their gross profits. The factors include (1) increasingly competitive U.S. labor costs; (2) increasing productivity of the U.S. workforce; (3) increasingly competitive domestic production costs; (4) incentives from federal, state, and local governments; and (5) improved synchronization of production with other business functions.

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1. Incentives for domestic outsourcing

With cost advantages from manufacturing in Asia and Mexico steadily deteriorating, U.S. firms are reassessing the option of domestic outsourcing to remain globally competitive. Domestic outsourcing is a fast-emerging strategy among U.S. firms. It involves a company relocating primary and support activities to America that were previously performed outside the country in pursuit of competitive advantage. Alternatively called 'insourcing' or 'reshoring,' *domestic outsourcing* occurs when an

activity is returned to the United States and is performed by the company internally, when it is shifted to a domestic partner through a strategic alliance, or when it is contracted out to a domestic supplier. However, the firm's intention is always the same: to establish a long-term basis for improving company operation by performing a key business activity in the U.S.

Outsourcing manufacturing activities gained popularity among American firms 4 decades ago as they expanded the search for a labor cost advantage. Currently, outsourcing retains the core objective of increasing a firm's competitiveness but has become global in scope, encompasses virtually all business activities, and is undertaken for a package of justifications—with labor savings representing the

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main but not exclusive benefit considered. Outsourcing has evolved beyond manufacturing to include research and development; engineering and software development; logistics; customer service; information technology (IT); human resources; and accounting, tax, and other professional services.

Expected benefits to the company include the ability to exploit economies of scale and scope offered by vendors, to mitigate technological risk and uncertainty, and to improve a firm's focus on its retained core competencies. Yet, the main benefit sought by outsourcing is cost reduction, with 49% of U.S. firms that outsource internationally indicating cost reduction as the primary reason for their initial decision to move operations from the United States (McCormick, 2011).

In 2012, an initial wave of American businesses captured media attention by announcing their intent to reverse previous international outsourcing decisions and bring those production activities back to the United States. In 2013 the momentum grew, with U.S. corporations across a range of industries and firm sizes declaring plans to produce domestically. The news is largely welcomed. It is predicted that such domestic outsourcing will spur employment, economic vitality, and national pride.

To understand the rebound in manufacturing performance in the U.S., we look to corporations that have newly committed to domestic outsourcing. The challenge in assessing their corporate strategic choice of international versus domestic outsourcing is that these first-movers are extremely and intentionally vague about how they reached their decisions. The platitudes that characterize their announced decisions are intended to create causal ambiguity to prevent competitors from benchmarking many of the factors that influenced their decisions. The purpose of this article is to reveal these reasons by providing insights into five major factors that are influencing the decision about where U.S. companies should manufacture to optimize their gross profits.

2. Conditions turning against international outsourcing

The prominent international providers of manufacturing outside of the United States are experiencing severe reversals of fortune. For example, even in the late 2000s, some U.S. firms chose anew to outsource work to India because manufacturers there could hire employees at wage rates that were far below those demanded in the U.S. However, concerns about rising labor costs and problems with the quality of work in India have eroded the

advantages of operating there. The cost savings of outsourcing work to India have gone from 40%–50% to a current low of 10% (King, 2008).

Similarly, other U.S. firms have outsourced work to Mexico because of its low wage rates, which were often below those required in India. While Mexico maintains some labor cost advantage in manufacturing, there are factors that do not make it a viable source for all outsourced work. The low availability of skilled labor, a cost-ineffective supplier network, and an inferior infrastructure prevent much of the manufacturing done in India from relocating to Mexico.

Propelled by the devaluation of its currency, a reduction of tariffs from its entrance into the World Trade Organization, generous tax incentives, cheap industrial land, and low labor rates, China became the first-choice option for the international outsourcing of manufacturing at the turn of the 21st century. Faced with super-low-cost competition from China, firms that manufactured in the U.S. had to accept relegation to niche specialty markets or move their production to low-wage nations. China became the preferred site for these U.S. companies, especially if they competed in clothing, electronics, or computer manufacturing. However, China's economic progress as a newly industrialized nation brought internal changes that are counterbalancing its low wage rates and degrading its competitive advantage as a provider of manufactured goods. Immature infrastructure, environmental pollution, overcrowding, government regulations, bureaucratic delays, and the perpetual challenges of subcontractor values, cross-cultural decision-making, and long-distance communication increasingly negate the labor cost savings that Chinese manufacturers can offer.

As recently as the U.S. recession in 2007–2009, the ability to perform portions of a business at significantly cheaper costs resulted in U.S. firms outsourcing internationally to Mexico, India, China, and other low labor cost nations. However, major changes are underway. U.S. companies that made the decision to outsource internationally are being induced by economic evolution and competitive innovation to reassess and reconsider the comparative costs and benefits of domestic outsourcing.

Each time a nation's low wage rates led it to become the new hot spot for international manufacturing, the resulting economic invigoration helped propel the country's growth and development. Foreign direct investment and increased trade from the United States and other developed nations stimulate the economic advancement of host countries to such an extent that their domestic costs rise, eroding their advantages as low-cost

suppliers of labor. Over time, the economic growth of these countries has greatly narrowed their low-cost advantages over firms producing in the developed nations. For many U.S. firms in particular, international outsourcing has become a 'bad' business option when compared to domestic outsourcing (Rugaber, 2012).

Some harm to a country's continued success as a provider of manufacturing is self-inflicted. For example, unfavorable currency exchange rates add to the rising costs of manufacturing in China. From 1994 to 2005, China maintained a fixed exchange rate between its yuan and the U.S. dollar. However, the decision to peg the yuan to a basket of currencies in June 2005 resulted in the Chinese currency rising by 40% in real terms by 2012 (Dolega, 2012). The fall of the U.S. dollar against the yuan provides another important incentive for U.S. firms to reconsider the decision to outsource production to China.

Detracting further from the appeal of manufacturing internationally for U.S. firms, is growing uneasiness over foreign providers' ability to satisfy outsourcing U.S. companies' increasing expectations regarding quality, management control, shipping and delivery costs, and proximity to customer markets. Therefore, with the objectives of securing high-quality outsourcing support and reducing production costs, increasing numbers of U.S. firms are deciding to satisfy their outsourcing needs with manufacturers located in America.

3. Why the U.S. is becoming a premier option for outsourcing

Table 1 highlights major advantages that specific U.S. firms have been able to capture recently by relocating international outsourcing to domestic outsourcing. While many of the firms faced higher

labor costs because of their moves, the wage gap is declining and U.S. domestic producers are generating net gains by benefiting from improved time-to-market, lower transportation costs, competitive non-labor manufacturing costs, and increased control over production. The corporate outsourcing model is shifting from oftentimes exclusive reliance on securing the lowest available labor cost to assembling a cost-effective package of benefits, including a sufficiently low labor cost component. A detailed examination of the firms that bring outsourced activities back to the U.S. reveals that they are enjoying five major benefits:

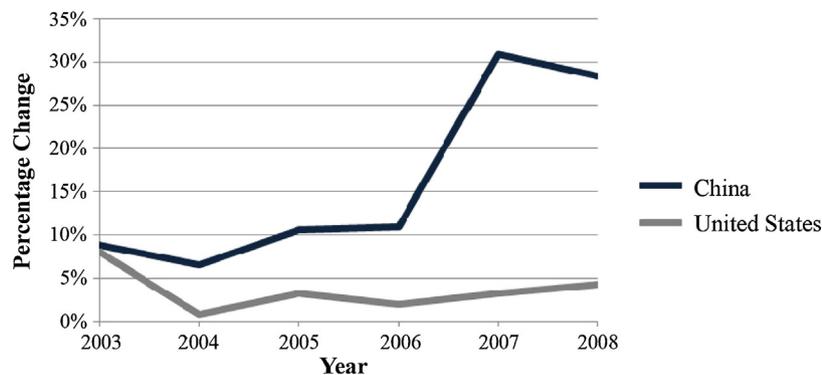
1. Increasingly competitive U.S. labor costs;
2. Increasing productivity of the U.S. workforce;
3. Increasingly competitive non-labor production costs;
4. Increased incentives from U.S. federal, state, and local governments; and
5. Improved synchronization of production with other business functions.

3.1. Increasingly competitive U.S. labor costs

Almost counterintuitively, the main factor working against the appeal of international outsourcing is the rising labor cost in developing nations. Labor costs in China, for instance, are on track to rise by 750% in 2015 from where they were in 2000 (Markowitz, 2012).

Figure 1 highlights the rapidly growing labor costs in China. While the rate of growth in labor costs in the United States and China was nearly identical in 2003, labor costs in China rose at a rate ten times (10x)

Figure 1. Percent change in manufacturing wage rate



Source: Data from the U.S. Bureau of Labor Statistics and Banister and Cook (2011)

Table 1. U.S. domestic outsourcing: Selected company examples

Company	Benefits of Shifting International Outsourcing to Domestic Outsourcing	From	To
Caterpillar	Increased worker productivity 100% property tax abatement	Japan	Victoria, TX
DuPont	Receives state benefits from the Virginia Enterprise Zone Program combined with local government benefits	International and Domestic options	Chesterfield Co., VA
Ford	Streamlined engineering Streamlined manufacturing	Mexico	Avon Lake, OH
General Electric (IT)	Increased ability to recruit skilled labor for its IT operations	India	Michigan
General Electric (Manufacturing)	Reduced per-unit costs by \$20 in manufacturing Increased engineers' proximity to production to allow for more innovativeness	China	Louisville, KY
General Motors	Reduced data centers from 23 to 2 to increase data sharing and enable consolidation of its data marts to one data architecture	India	Austin, TX
Google	Increased engineers' proximity to production to allow for more innovativeness	China	San Jose, CA
Honda	Ability to sell faster due to proximity to largest market	Japan	Greensburg, IN
Lenovo	Increased speed to market Improved public relations by selling products 'Made in America'	China	Whitsett, NC
LightSaver Technologies	Reduced shipping and distribution costs by producing within U.S.	China	Carlsbad, CA
NCR	Decreased time from manufacturing process to customer Reduced operating costs	China	Columbus, GA
Ultra Green Packaging	Reduced shipping costs by producing within U.S. Increased IP protection	China	Devils Lake, ND
Unilife	Received regulatory approval to sell product	China	York, PA
Wham-O	Ability to focus on other core activities as Manufacturing Marvel took over manufacturing process	China Mexico	California Michigan
Whirlpool	Reduced shipping costs by producing within U.S.	China	Greenville, SC
Yaskawa Electric	Increased customization by having control over process Increased speed to U.S. market	Japan	Buffalo Grove, IL

greater than that of the U.S. in 2007 (Dolega, 2012). Consequently, the rapid rise in wages in China—and throughout Asia—has narrowed the cost gap between goods produced in the U.S. and those produced in most developing and newly industrialized nations.

Although labor costs in China, Mexico, and India are still lower than in the U.S., a recent survey by the Boston Consulting Group (BCG) indicates that the gap is shrinking steadily. Indeed, 57% of U.S. firms polled in the BCG study cited lower U.S. labor costs as a motivating factor in returning their manufacturing source to the U.S. (Eichler, 2012).

As the labor cost savings of outsourcing to foreign countries declines, increasing numbers of American firms are bringing manufacturing back to the United States to be domestically outsourced. According to BCG research, by 2015, total labor costs of

manufactured goods in China are expected to be only 10%–15% lower than for U.S.-based manufacturing firms (Sirkin, Zinser, Hohner, & Rose, 2012). An early beneficiary is WaveCrest, which reduced the cost of its operations by domestically outsourcing because it was able to find labor rates in the U.S. that are 30% lower than those offered by international competitors.

3.2. Increasing productivity of the U.S. workforce

Complementing the shrinking of the wage gap are competitive gains in U.S. worker productivity. Labor rates in China continue to increase due to an imbalance of supply and demand of skilled labor, although they are still comparatively low.

However, companies that manufacture their goods in the U.S. report that the Chinese wage rate advantage is counterbalanced by savings from the far greater output of U.S. workers, who are almost 3x more productive than their Chinese counterparts.

In 2012, one-third of American companies with revenue greater than \$1 billion and international production operations stated their plans to relocate manufacturing activities to the United States (Markoff, 2012). This finding is in keeping with the 2012 forecast that the U.S. will be the preferred site of manufacturing by American companies by 2015 (Sirkin et al., 2012).

For related reasons, internationally outsourced IT and transactional back-office finance and accounting services are candidates for domestic relocation. The skilled labor force in the U.S. provides an important motivation for firms to relocate their IT to America. General Electric (GE) certainly agrees. Having invested \$163 million in information technology in Michigan from 2009 to 2012, GE expanded its IT facility in 2012 to hire the highly skilled labor available in the area. Examples of U.S. companies that are benefiting from domestic outsourcing, like GE, appear throughout this article and are listed in Table 1.

Figure 2 provides a comparison of worker productivity in the United States versus China. The graph shows that from a high point in 2001, Chinese worker productivity is now at a far lower level. Newly available data from 2011 shows that Chinese worker

productivity in 2010 was only 48% of U.S. worker productivity, falling rapidly from 112% a decade earlier.

Combining analyses of wage rates and worker productivity helps to explain the surge of domestic outsourcing in the United States. Data from the U.S. Bureau of Economic Analysis shows that the productivity-adjusted wage rate gap between Chinese and U.S. workers is narrowing quickly (Sirkin et al., 2012). China's impressive 4.6x advantage in productivity-adjusted wage rates in 2005 fell to a 3.2x advantage in 2010. The gap is forecasted to narrow to a 2.3x advantage by 2015—exactly half of what it was 10 years earlier.

3.3. Increasingly competitive production costs

Recognition of the United States as a premier provider of production for outsourcers is especially evident among manufacturers in several key industries. Companies in the chemicals, coal, food and beverage, glass, minerals, paper, petroleum, primary metal manufacturing, stone, and wood products industries are shifting production to the U.S. or are investing to keep it there. The abundant availability of natural resources and the extensive investment in capital-intensive facilities combine to provide a national infrastructure that attracts companies in search of manufacturing support.

The U.S. is also experiencing a decline in manufacturing costs as its dependence on foreign

Figure 2. Chinese worker productivity on a sharp comparative decline

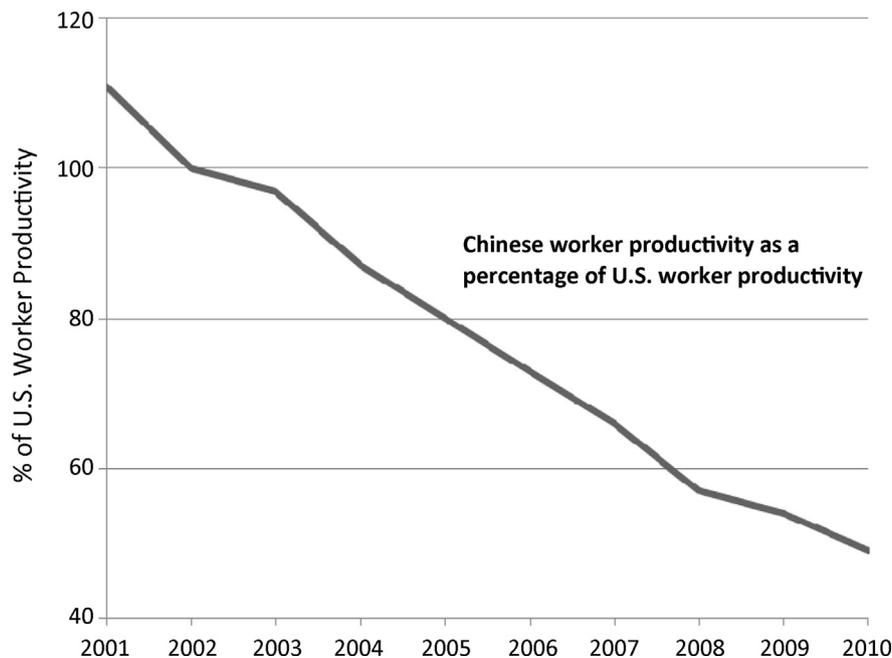
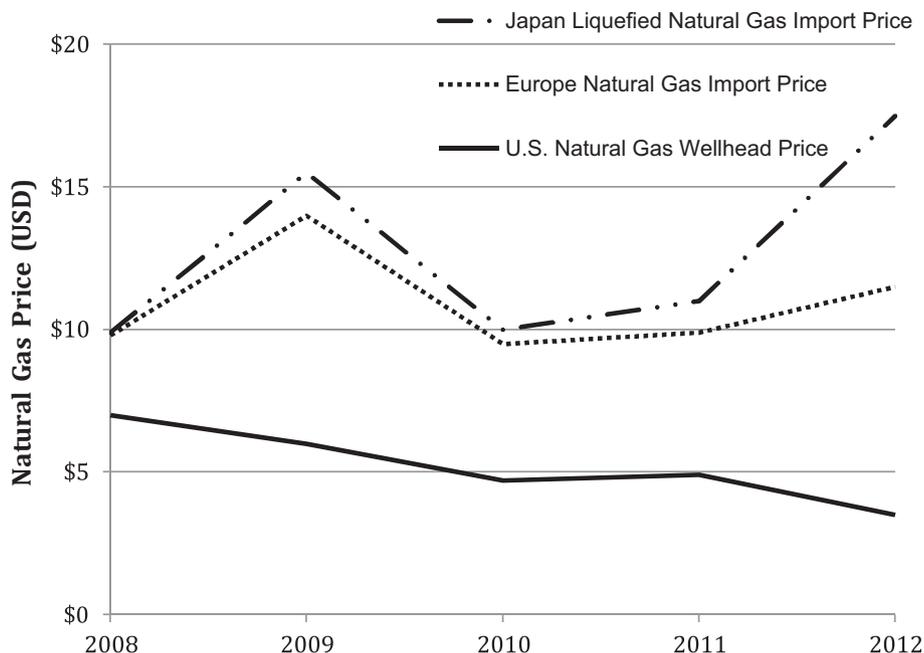


Figure 3. Natural gas prices (in U.S. dollars)



Source: Data from YCharts (www.ycharts.com)

oil lessens. As increasing numbers of production processes are converted to natural gas from oil, and as natural gas reserves escalate, total costs wane. With an increasing reliance on natural gas, ever-larger numbers of American manufacturing firms are able to operate leaner as compared to international competitors. In contrast, China, Mexico, and India continue their dependence on expensive oil, with heightening consumption. Figure 3 provides a meaningful comparison, illustrating that the price of natural gas in the United States is less than 16% the cost of natural gas in Japan.

In related developments, firms in the chemicals industry are activating plans to build and expand chemical plants in the United States, which will result in a significant increase in ethylene production, the most produced organic compound in the world. Consider the following:

- Dow Chemical will complete a new ethylene plant on the Gulf Coast by 2017.
- Exxon Mobil has multimillion-dollar plans in place to build factories in Texas to produce ethylene and plastics from natural gas. Starting in 2016, a new plant at the company's Baytown complex will produce 1.5 million metric tons of ethylene annually.
- Chevron Phillips Chemical is investing billions of dollars in the U.S. in ethylene projects to

use gas-based raw materials, providing a major cost advantage over the oil-based production methods used in Asia.

- Royal Dutch Shell is building an ethylene plant in Beaver County, Pennsylvania, to take advantage of abundant, domestically produced natural gas.

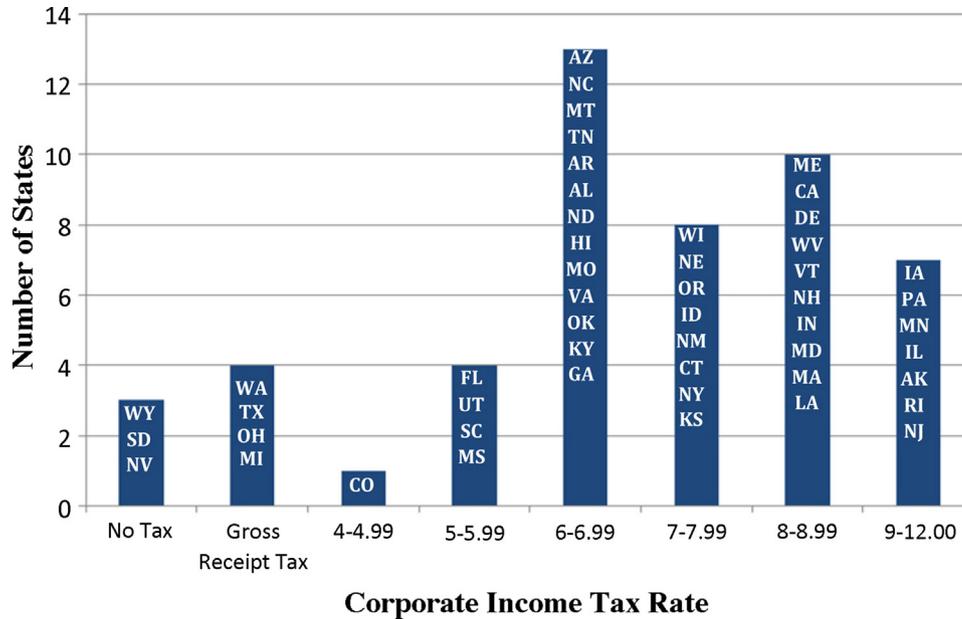
Evidence of the overall efficiency of producing in the U.S. is becoming more publicized. The results of a recent survey show that 60% of manufacturing firms have found that their total cost of manufacturing in the U.S. is less than it was or would be in China (Markowitz, 2012).

3.4. Incentives from federal, state, and local governments

Federal, state, and local governments in the United States offer a range of incentives, including reduced taxes and subsidies, to attract and retain businesses. As overviewed in Appendix A, federal and state governments provide over 1,000 grant programs and access to approximately \$500 billion in awards annually. A wide range of business and other types of organizations are eligible to apply for different government grants.

Appendix A presents businesses with lists and descriptions of incentives and research tools that are offered by the 50 states, the District of Columbia, and U.S. territories. Although the offerings differ, especially when combined with incentives

Figure 4. Corporate income tax rate varies among U.S. states



Sources: U.S. Bureau of Labor Statistics, China National Bureau of Statistics, Haver Analytics; data analysis by T. Rowe Price

provided by local government, they all reveal an eagerness to attract business activity across industries. Examples of companies that have already claimed these incentives suggest their impressive value:

- Ameritas Technologies, a domestic outsourcing firm, is opening an IT center in Baton Rouge, Louisiana. The company received a 10-year, \$125,000-per-year grant from LED FastStart, as well as tax breaks from Louisiana to build the facility.
- Georgia gives a tax credit of up to \$4,000 per job created for up to 10 years.
- Indiana offers a tax credit of 50% of a company's approved relocation costs into the state. Between 2005 and 2012, more than 200 companies relocated to Indiana, showing that this tax tactic plays a role in corporate outsourcing decisions.
- By operating in Louisville, Kentucky, GE receives U.S. federal incentives for producing energy-saving products.

Also playing a role in attracting manufacturing business is the corporate income tax rate that is set by each state. Three states charge no corporate income tax (Nevada, South Dakota, Wyoming) and four have rates that vary with a company's gross

sales receipts (Michigan, Ohio, Texas, Washington). The remaining states have rates that vary between 4.0% and 12.0%. The details of these rates are shown in Figure 4.

3.5. Improved synchronization of manufacturing with other business functions

When a number of factors associated with manufacturing in the United States are considered simultaneously—including higher worker productivity, lower transportation and distribution costs to reach prime markets, attractiveness of government incentives, and other positive production factors—many firms are finding that it is cheaper to manufacture in the U.S. than in other countries, most particularly China. Google, Caterpillar, General Electric, and various small companies have moved manufacturing back to America, highlighting competitive advantages they gain by improving the synchronization of manufacturing activities with their other business functions.

Some firms find that their decreased manufacturing costs alone, achieved through optimal capacity utilization, justify the decision to outsource their production domestically. Wham-O, the toy company, partnered with Manufacturing Marvel to increase its production of Frisbees in California and Michigan, having previously produced the item in China and Mexico. Wham-O reduced costs through this move to domestic outsourcing despite higher

labor costs because the production of the Frisbees was combined cost effectively with other products that Manufacturing Marvel makes for Wham-O.

Since Americans consume 70% of all goods manufactured domestically, and because the United States leads the globe with 18.2% of manufacturing output, locating production facilities close to the U.S. consumer makes good business sense. Caterpillar, for example, moved from international outsourcing to domestic outsourcing, shifting production from Japan to a plant in Victoria, Texas. Caterpillar relocated its production of smaller track-type tractors to the U.S., citing the advantages of close proximity to its customer base as a leading motivation.

NCR elected to bring production back to the U.S. from China to reduce time-to-market while improving internal collaboration of production processes and ultimately reducing operating costs. NCR chose to locate in Georgia because of its nearness to major transportation hubs and its innovation center in Duluth, Georgia.

The proximity of domestic manufacturers to the world's highest-value customers also attracts foreign firms to use U.S. manufacturers for their outsourcing needs. Honda and Yaskawa Electric Corporation both benefit from decreased time-to-market by producing in the United States. In 2012, Honda increased production capacity at its Greensburg, Indiana, plant by 250,000 vehicles to be near its largest American market. Similarly, Japan's Yaskawa decided to produce electric motors in the U.S. despite the prevailing higher wages in order to increase customization and quicken delivery time. While the Buffalo Grove, Illinois-based cost of producing the electric motor controls for heating and ventilation is 10% higher than if performed in China, Yaskawa calculates that the benefits derived from speedy deliveries and lower inventories outweigh the production costs.

Similarly, Lenovo—China's largest PC maker—is moving desktop, laptop, and tablet production to North Carolina to increase speed-to-market and to be more flexible in responding to U.S. corporate clients. Lenovo also expects that the positive publicity of producing in the U.S. will outweigh increased expenses in production.

Moving manufacturing to the United States has also been credited with facilitating an improvement in the firm's creativity process. Process improvements designed in America for large equipment products can take a full year or more to be implemented by the firm's international outsourcer. By reducing the lag between innovation and execution, firms can maximize the benefits of R&D investment. For example, Ford elected to domestically outsource

production of its F-650 and F-750 commercial trucks to Avon Lake, Ohio, rather than continue a joint venture with Blue Diamond Truck in Escobedo, Mexico. The move allowed Ford to streamline and strengthen its engineering process and get improved trucks to market more quickly.

Increased innovation can also be achieved by having a firm's product engineers located closer to the manufacturing process. To improve the efficiency of its manufacturing processes, GE moved its production of water heaters from China to Louisville, Kentucky, resulting in per-unit cost reductions of \$20. Even access to markets can be fostered by physical relocation, as Unilife showed when it moved production from China to York, Pennsylvania, to win regulatory approval to market one of its core products in the U.S.

Similarly, Google found that having its engineers close to the production plant for its Nexus Q, a media-streaming device, increased departmental collaboration. Google credits the increased communication with cost reductions that completely offset the higher labor costs associated with relocating production to America.

Additionally, the cost of shipping goods manufactured internationally to the United States for distribution and sale is often staggering. From 2002 to 2008, shipping costs from China to the U.S. increased tenfold, and there is evidence that this trend will continue. As a consequence, increasing numbers of small American manufacturers are shifting production back to the U.S. from China to reduce shipping and transportation costs. Evidence of the growing popularity of domestic outsourcing is the fact that 40% of small manufacturers in the U.S. reported receiving outsourcing work in 2012 that had previously been done abroad. Examples from 2012 include LightSaver Technologies, which shifted manufacturing from China to Carlsbad, California, to slash transportation costs; and Ultra Green Packaging, which moved production from China to Devils Lake, North Dakota, to reduce freight costs (Rocks & Leiber, 2012).

While the main thrust of this U.S.-based manufacturing renaissance centers on the physical production function, a similar rationale explains the first wave of information technology businesses flowing into America. The cost advantages and ease of outsourcing that were once associated with shipping IT work to India have diminished, resulting in the repositioning of many of these activities. In recent years, firms with IT operations in India have found that the outsourcing firms in the U.S. offer more business understanding and a greater level of innovation. While U.S. companies could save 6% by contracting IT service to India, the lack of innovation

and English-speaking capabilities found there is compelling firms to reverse course and choose domestic outsourcing (Overby, 2012).

Global IT services provider Icreon Tech expects this trend to continue in 2013, as firms move from international outsourcing to domestic outsourcing in effort to capitalize on core capabilities and opportunities in the U.S. market. For example, General Motors (GM) announced a 3-year plan in 2012 to move 90% of its IT department back to America from India, to drive down cost of operations. The move allows GM to reduce the number of data centers from 23 to 2 while consolidating all of its data marts to one data architecture, allowing the firm to gain a better understanding of its customer.

4. Labor cost leaders cannot be one-trick ponies

A corporation's decision to outsource production activities to a domestic or international manufacturer is complicated by the many criteria to consider and the fact that the importance of each criterion is subject to change. The added difficulty for the U.S. firm is that such partners always exhibit undesirable characteristics which partially or completely counterbalance their advantages. For example, low-cost labor is often available in geographically disadvantageous locations—where the

labor resides—from which there are high transportation costs. Foreign nations with weak patent enforcement can endanger a U.S. company's massive R&D and marketing investments. Therefore, the overall balance of the decision-making scale can swing rather quickly if one selection criterion changes in a major way or if several move slightly in the same direction.

U.S. firms that domestically outsource key functions, such as manufacturing and information technology, profit most when long-run savings derived from the package of benefits outweigh the added labor costs of performing work in America. Evidence is mounting that when a U.S. firm chooses international outsourcing as its means of securing low-cost labor, it wins the tactical skirmish but loses the strategic battle.

The evidence provided herein suggests that the disadvantages from other non-wage rate factors—specifically employee productivity, overall production costs, government incentives, and improved function integration—frequently more than counterbalance the labor cost advantage of some international manufacturers. This conclusion supports domestic outsourcing as the preferred choice alternative for U.S. firms. As we have seen, an increasing number of American executives are deciding that by absorbing higher U.S. labor costs, they can utilize domestic outsourcing to secure a host of cost-effective and benefit-producing advantages.

Appendix A. Federal programs and incentives for business

Grants.gov is the source to find and apply for federal grants. Grants.gov is a central storehouse for information on grants from multiple federal agencies. Grants.gov lists over 1,000 grant programs and provides access to approximately \$500 billion in awards annually.

Industries

Companies operating in any of a wide range of industries can find U.S. federal grants for which they may be eligible.

Agencies

The federal grant programs are sponsored by a number of federal agencies, including the following U.S. departments: Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, Housing and Urban Development, Interior, Justice, Labor, Small Business Administration, State, Transportation, Treasury, and Veterans Affairs.

Tools

SelectUSA (<http://selectusa.commerce.gov/tools>) provides several tools that companies can use to help determine the package of government incentives that best match their objectives when locating a new production facility in the U.S. These tools include the following:

- Cluster Mapping Tool—This project aims to provide policymakers and development practitioners across America with the data and tools for assessing regional cluster strengths, business environment characteristics, and innovation assets; with case studies on and toolkits for formulating development strategies; and with a directory profiling active cluster initiatives throughout the country.
- Data.gov Manufacturing Portal—A collection of manufacturing-related government data. Includes the U.S. Trade Overview Presentation, Korus Industry-by-Industry factsheet, and FTZ Manufacturing Database.

- International Trade Administration (ITA) Databases—This query of the Data.gov portal displays DOC's ITA databases. Includes the TradeStats Express, Exporter Database, State Imports, Metropolitan Export Series, FTZ Board Federal Register Notices, and U.S. Top Trade Partners databases.
- National Atlas (USA)—Allows a company to create its own customized map views of the United States and each state with parameters pulled from the following categories: Agriculture, Biology, Boundaries, Climate, Environment, Geology, Government, History, Map Reference, People, Transportation, and Water.
- SizeUp—A business intelligence tool that uses data from hundreds of sources to provide a comprehensive overview to small- and medium-sized business about its competitiveness and where to find resources to improve.
- ZoomProspector.com—A website that provides a way for new and expanding businesses to find, compare, and deeply analyze communities and available properties nationwide.

Source: Excerpted from Grants.gov

References

- Banister, J., & Cook, G. (2011, March). *China's employment and compensation costs in manufacturing through 2008*. *Monthly Labor Review*, 39–52.
- Dolega, M. (2012, October 15). Offshoring, onshoring, and the rebirth of American manufacturing. *TD Economics*. Retrieved from http://www.td.com/document/PDF/economics/special/md1012_onshoring.pdf
- Eichler, A. (2012, April 20). Manufacturing companies considering moving jobs back to the U.S. from China, survey finds. *Huffington Post*. Retrieved from www.huffingtonpost.com/2012/04/20/manufacturing-companies-move-us-china_n_1441587.html
- King, R. (2008, April 7). The new economics of outsourcing. *Bloomberg BusinessWeek Online*. Retrieved from www.businessweek.com/stories/2008-04-07/the-new-economics-of-outsourcingbusinessweek-business-news-stock-market-and-financial-advice
- Markoff, J. (2012, June 28). Google tries something retro: Made in the U.S.A. *New York Times*, p. A1.
- Markowitz, E. (2012, March 23). Made in USA (again): Why manufacturing is coming home. *Inc.com*. Retrieved from www.inc.com/eric-markowitz/the-long-journey-home-why-manufacturing-is-returning-to-the-usa.html
- McCormick, T. (2011). Outsourcing onshore or offshore? *Accountancy*, 43(2), 20–22.
- Overby, S. (2012, September 24). U.S. beats India for IT outsourcing innovation and understanding. *CIO*. Retrieved from www.cio.com/article/717067/U.S._Beats_India_for_IT_Outsourcing_Innovation_and_Understanding_?page=1&taxonomyId=3195
- Rocks, D., & Leiber, N. (2012, June 21). Small U.S. manufacturers give up on 'Made in China.' *Bloomberg BusinessWeek Online*. Retrieved from <http://www.businessweek.com/articles/2012-06-21/small-u-dot-s-dot-manufacturers-give-up-on-made-in-china>
- Rugaber, C. S. (2012, October 22). Why it matters: Outsourcing. *AP*. Retrieved from <http://bigstory.ap.org/article/why-it-matters-outsourcing>
- Sirkin, H., Zinser, M., Hohner, D., & Rose, J. (2012, March 22). U.S. manufacturing nears the tipping point: Which industries, why, and how much? *Boston Consulting Group Perspectives*. Retrieved from https://www.bcgperspectives.com/content/articles/manufacturing_supply_chain_management_us_manufacturing_nears_the_tipping_point/