V. Globally Engaged U.S. Companies Create American Jobs That Are Connected to the World

The balance of research to date shows that global demand growth and global supply networks tend to create American jobs. Expansion abroad by U.S. companies tends to complement their U.S. operations, with more hiring and investment abroad tending to boost hiring, investment, and R&D in their U.S. operations. Globally engaged U.S. companies also create jobs in America in other companies. In particular, they create jobs in SMEs within their global supply networks. Many SMEs thrive because their partnership with globally engaged U.S. companies generates not just revenue but also ideas and best practices that enhance their competitiveness.

How Globally Engaged U.S. Companies Create American Jobs When They Expand Abroad: Important Concepts

How are American jobs created that are connected to the global demand growth and supply networks discussed above? It is important to understand that jobs are created not just by exporting goods and services to these markets but also by producing and selling in the world's markets through FDI in foreign affiliates.

The link between exports and American jobs is clear: When companies in America gain new customers abroad for their goods and services, meeting this demand creates new American jobs in these companies. Because of the rich variety of goods and services America exports and the rich variety of production methods used by companies in America, the link from exports to jobs varies across companies, industries and time. That said, research has documented the many ways in which exporting companies tend to be stronger than nonexporters — even in the same detailed industry. Exporters tend to have about twice as many employees and sales. On a per-worker basis, they tend to be about 10 percent more capital and skill intensive. Their productivity and wages are also about 10–15 percent higher — much like the premium documented in Section II for jobs at multinationals.

The case study on page 42 highlights how globally engaged U.S. companies help American SMEs expand their business globally.

Less well understood is the link between jobs in America and investment and other business activities abroad. Much of the public policy discussion surrounding U.S. multinationals assumes that engagement abroad necessarily substitutes for U.S. activity — in particular, for employment and capital investment. This substitution concern misses the several channels through which the global engagement of U.S. multinationals tends to support, not reduce, their operations in America. Foreign-affiliate activity tends to complement, not substitute for, key parent activities in the United States. Three crucial features of how multinationals actually work that belie the substitution idea are complementarity, scale and scope.

CASE STUDY: FedEx and OtterBox

Integral to the success of many small and medium-sized U.S. businesses is their collaboration with large globally engaged U.S. companies. With similar standards in areas such as innovation and commitment to the customer, Memphis-based FedEx Corporation and Colorado case manufacturer OtterBox have benefited each other over the years.

Based in Fort Collins, CO, OtterBox is a well-known name providing premiere protective solutions for handheld technology. Despite the stagnant U.S. economy of recent years, OtterBox has experienced dramatic growth: From 2008 to 2011, the company increased revenue by more than 3,000 percent. The City of Fort Collins economic advisor, Josh Birks, noted that "[i]n the midst of the Great Recession, they were buying up property in downtown, hiring dozens of employees a month, and all of that has had a very stabilizing effect on our economy." As a result, OtterBox has been ranked as one of the fastest growing private companies in America by *Inc. Magazine* every year since 2010 and was recognized among the best medium-sized businesses to work for by *Entrepreneur* magazine in 2011 and the Great Place to Work Institute in 2012.

During its dramatic surge in demand, OtterBox quickly identified FedEx as a key ally to help create and expand its production network. With more than 300,000 team members and a vanguard reputation, FedEx provides businesses around the world with a broad portfolio of transportation, e-commerce and business services. FedEx ships an average of 9 million packages a day to more than 220 countries and territories via its 660 aircraft and more than 90,000 motorized vehicles; in 2012, it generated $42.7 billion in revenue.

Since 2010, the demand for OtterBox has accelerated abroad. FedEx has helped OtterBox meet this global growth thanks to its deep global expertise on the regulatory, customs and overall business environment in many world markets that were new to OtterBox. Today this relationship spans three continents and nearly every operating company in the FedEx portfolio — all to better enable OtterBox to secure its materials to manufacture, complete its quality-assurance checks and deliver the right product to the right customer at the right time.

The success from this strategic alliance supports many jobs at both companies. FedEx employees worldwide touch or support the OtterBox account in many ways, and in its hometown of Fort Collins OtterBox has created more than 600 jobs since 1998. Yet OtterBox Founder and Chairman Curt Richardson strives for success to signify something even greater: "For OtterBox, I want us to stand for so much more than just a case. It's how do we give back, how do we treat each other, and not only how do we treat our customers, but how do we treat our communities." That commitment to community runs deep at FedEx as well.

- For some given level of firmwide output, when firms employ many kinds of workers and many nonlabor factors of production, affiliate and parent labor can often be complements in which more hiring abroad also means more hiring in the United States. Complementarity is quite common in global production networks, in which U.S. workers operate not in isolation but rather in close coordination with colleagues around the world.
- When affiliates are expanding abroad to boost their revenues, the resulting reduction in costs and boost in profits (thanks to greater scale and richer networks) often spurs higher output in the company around the world, which can mean more U.S. hiring.
- Affiliate expansion often not only boosts firm scale but also, as discussed previously, refines the mix of activities performed across parents and affiliates. U.S. parents' employment can rise as they shift their scope into higher value-added tasks such as R&D, finance, and general management.

How Globally Engaged U.S. Companies Create American Jobs When They Expand Abroad: Academic Evidence

The concern that global expansion tends to hollow out U.S. operations is not supported by the facts. Rather, the scale and scope of U.S. parent activities increasingly depends on their successful presence abroad. Aggregate, industry and company-level research to date shows that foreign-affiliate expansion tends to complement U.S. parent employment, investment and sales.

One such recent study examined industry-level data for 58 U.S. manufacturing industries from 2000 through 2007. It found that the productivity gains and cost savings from expanding global production networks tended to boost overall U.S. employment in these industries — albeit with changes in the scope of U.S. activities being performed. It also found that more immigrants working in the United States in those industries boosted their overall U.S. employment.[21]

Another study examined industry-level data for dozens of U.S.-based multinational companies in services over recent decades. It found that greater foreign-affiliate employment and sales correlated with greater U.S. parent employment as well, consistent with the idea that affiliate and parent activity tend to, on net, complement each other.[22]

A third important study, conducted at the level of individual companies, carefully analyzed all U.S. multinationals in manufacturing from 1982 to 2004. It found that a 10 percent increase in foreign-affiliate capital investment causes a 2.6 percent increase, on average, in that affiliate's U.S. parent capital investment. It similarly found that a 10 percent increase in foreign-affiliate employee compensation causes a 3.7 percent increase, on average, in that affiliate's U.S. parent employee compensation. These links were clearest when analyzing the changes in affiliate jobs and investment driven by changes in affiliate sales — the surge in which was documented previously.

How do these percentages translate into actual dollars? Strikingly, each additional dollar in an affiliate's employee compensation generates an average increase in its parent employee compensation of about $1.11. And each additional dollar in an affiliate's capital investment causes an average increase in its parent's capital investment of about $0.67. Accordingly, more affiliate activity tends to cause more, not less, parent activity. The authors of this study concluded, "These results do not support the popular notion that expansions abroad reduce a [multinational] firm's domestic activity, instead suggesting the opposite."[23]

The perspective of a fixed number of jobs being reallocated between America and the rest of the world is not accurate. Rather, the correct perspective is one of parallel changes over time in both affiliates and parents — driven by the dynamism of complementarity, scale and scope.

This is not to say that global expansion has never substituted foreign workers for American workers. This substitution has surely happened and surely will continue to happen. But situations in which foreign and domestic labor substitute for each other often evolve into relationships of complementarity. Within global production networks, once different tasks and stages have located in different parts of the world, coordinating these stages to make final products means they tend to expand (or contract) together. And even if an American company relocates abroad some labor-intensive assembly tasks, the resulting cost savings may boost that company's order book so much that its net U.S. employment still rises as the reduced assembly jobs are more than offset by jobs in design, testing, logistics and customer support — new jobs in that company and, as will be discussed in the following section, in other companies as well.

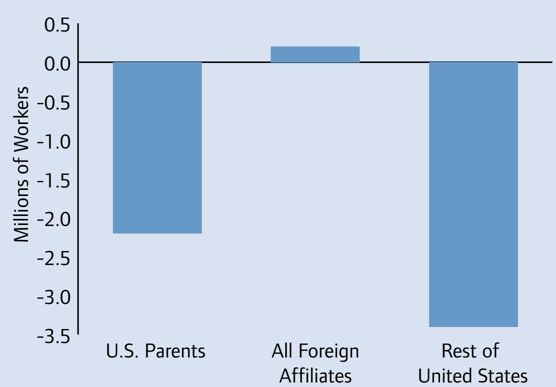
How Globally Engaged U.S. Companies Create American Jobs When They Expand Abroad: Recent Evidence

How multinationals expanding abroad helps create American jobs can also be seen in the most recent publicly available data.

Start with manufacturing: Figure 14 reports the 1999–2009 changes in employment for U.S. parents of U.S.-based multinational companies in manufacturing, the foreign affiliates of these companies in manufacturing and the rest of the U.S. manufacturing sector outside of the U.S. parents.[24]

Figure 14

Change in Manufacturing Employment, 1999–2009



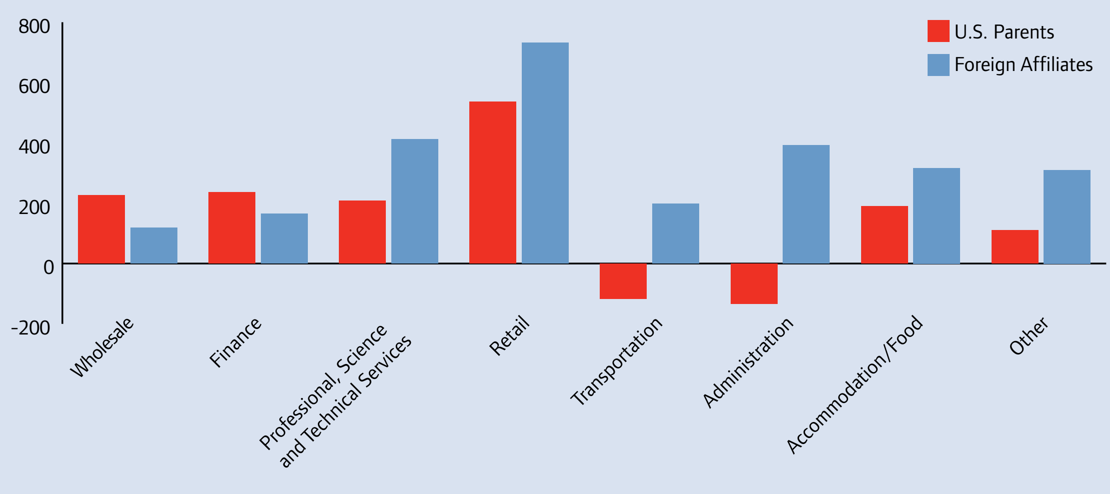
Between 1999 and 2009, U.S. parent employment in manufacturing fell by 2.16 million, or 23.9 percent. Is this evidence of jobs being outsourced to foreign affiliates? No. Manufacturing employment in foreign affiliates increased over that same period by only 181,600, just 4.2 percent — far too small to explain the much larger parent decline. Moreover, U.S. manufacturing employment excluding U.S. parents of U.S. multinationals — i.e., employment in the U.S. manufacturing companies that are not part of multinational companies — fell by 3.4 million, a remarkable 40.7 percent.

It is critical to stress that the percentage decline in U.S. manufacturing jobs was larger among those companies that were not part of a U.S.-based multinational company — 40.7 percent — than among the U.S. parents in U.S. manufacturing — 23.9 percent. A smaller employment decline in the U.S. parents is entirely consistent with their U.S. jobs being supported (not harmed) by the global engagement of their overall companies. Domestically focused manufacturers might not have had the opportunity to create or maintain U.S. jobs that are connected to expanding global markets or supply networks.

What explains the large overall U.S. employment declines in manufacturing in Figure 14, if the answer is not jobs being somehow shifted to the foreign operations of U.S.-based multinationals? Surely one important factor behind the decline in U.S. manufacturing employment was strong productivity growth driven by technological change — e.g., by becoming more specialized on core strengths and innovations. For generations across all industries, rapid innovation has often reduced employment in the innovating companies — even as it creates employment elsewhere in the economy among suppliers and customers alike. For the U.S. manufacturing sector overall, productivity growth has long exceeded that of the rest of the U.S. economy. From 1999 through 2009, the average annual growth rate in U.S. manufacturing was 3.3 percent versus just 2.5 percent for the overall nonfarm U.S. business sector. During that time the value-added output of the parent operations of U.S. multinationals in manufacturing grew by nearly 200 percent despite the 23.5 percent drop in their employment, consistent with strong productivity growth.

Figure 15

Change in Services Employment, 1999–2009



The employment data for services show strong evidence of complementarity between U.S. parents and foreign affiliates. Between 1999 and 2009 parent employment in services rose by 1.26 million. During the same period, affiliate employment in services also increased strongly, by 2.64 million. Figure 15 disaggregates these increases by reporting the 1999–2009 changes in employment for U.S. parents and their foreign affiliates in eight major sectors within services.[25]

Figure 15 shows that for six of the eight sectors within services, employment rose both in foreign affiliates and U.S. parents. As discussed previously in this section and in Section II, this complementarity is not surprising for many services that require a company's employees to be located near its customers. Employment in services affiliates grew so dramatically in large part to meet surging demand in fast-growth foreign markets. Consistent with this finding, it is notable that the four BRIC countries of Brazil, Russia, India and China accounted for 47.1 percent of total affiliate employment growth even though they accounted for only 8.9 percent of total affiliate employment in 1999.

For any given company within the industries shown in Figures 14 and 15, how exactly its worldwide employment has evolved depends on a myriad set of opportunities and challenges. Indeed, critical features of the dynamic evolution of global business lie within these aggregates. Between 1999 and 2009 the number of U.S.-based multinational companies actually declined by 9.9 percent, from 2,605 enterprises to 2,347. This decline was predominantly in manufacturing: The number of U.S.-based multinationals rose for companies whose main line of business is information; finance and insurance; or professional, scientific and technical services. Companies stop being U.S.-based multinationals for several reasons. Some are acquired by foreign-based multinationals, some remain globally engaged but switch to other channels such as exporting or arm's-length partners, some choose to refocus on only the U.S. market, and some struggling companies shut down altogether.

At the same time that some companies cease being multinational, dynamic fast-growth companies are being "born" into the group of U.S.-based multinationals as they choose to establish their first foreign affiliate. For example, in 2009 613 U.S.-based multinationals employed fewer than 500 people in America — and thus, as discussed in Section II, fit the U.S. government definition of being an SME. And from 1999 to 2009, the affiliates of these SME multinationals had the fastest growth in affiliate employment — an annual average of 9.2 percent, in contrast to an annual average of 3.1 percent for all affiliates. The fact that 26.1 percent of U.S. multinationals are SMEs speaks to how dynamic these companies are.

These many transitions across company size and status have long been integral to how companies succeed by continually innovating. On net, all this dynamism and global engagement tends to create U.S. jobs connected to growth abroad. Indeed, from 1999 to 2009 U.S. parents' per-company average employment increased by 7.6 percent — from 9,200 to 9,900.

How Globally Engaged U.S. Companies Create American Jobs in Their Supplier Companies

As just described, globally engaged U.S. companies do create the jobs that America needs: They create jobs in America connected to their global demand growth and jobs in America connected to their global supply networks. But globally engaged U.S. companies create jobs in America in another equally important way: not just in themselves but also in the companies that supply their intermediate inputs.

To make globally competitive goods and services, successful American companies rely on a wide range of intermediate inputs — i.e., goods and services made by and purchased from other companies to help produce their own goods and services. Indeed Section IV documents that for the U.S. parents of U.S.-based multinationals, a high and rising share of their total sales are accounted for by intermediate inputs rather than by their own value added — consistent with the growing role of global supply networks. And Section II documents that in America, all multinational companies together purchase a remarkable $9.3 trillion in intermediate inputs — of which more than $8 trillion are bought from other companies in America.

Integral to the success of globally engaged U.S. companies is purchasing trillions of dollars in goods and services every year from other businesses in America. The essential point for job creation is that when globally engaged companies grow, they create jobs in other companies, not just their own. When their expanding sales require them to buy more intermediate inputs, these supplier companies may hire new workers to meet the new orders. Even when the global companies that tend to coordinate these networks drive growth — for example, through a new marketing campaign — the employment gains do not accrue just to them. Looking for job creation only in global companies themselves misses the reality that their dynamism often catalyzes job creation in many of their supply-network partners.

Beyond jobs, suppliers to globally engaged companies often gain a wealth of knowledge about technology, management and many other productivity-leading practices that successful large companies tend to excel at and share with suppliers through formal and informal channels. Indeed, in some situations these other exchanges of ideas and best practices can be critical for suppliers' long-term success — and for that of the globally engaged companies as well.

The synergies in these partnerships often mean that innovation and productivity gains in the globally engaged companies result in employment gains largely, if not entirely, in their suppliers. New products discovered and designed by global firms may be produced entirely by suppliers. New processes that boost efficiency in global firms may result in their supplier firms assuming tasks they previously performed. Indeed, in dynamic cases like these net job creation in America may entail job reductions in globally engaged firms accompanied by even larger job expansions in their supply-network partners.

One especially notable supply-network partnership is between larger globally engaged companies and their SME suppliers. SMEs do not operate in a vacuum. Rather, they are connected to global companies in several ways — and their health often depends on their connections to large companies. One important link between small business and big business is time: The small businesses of today can grow to become the big businesses of tomorrow. Many of America's largest and most successful companies started small. This dynamic perspective is very important. The distinction at any point in time between small and large businesses is *not* permanent. Many small businesses aspire to grow large, and many innovative firms manage to do just that — often quite quickly.

Another important link between small business and big business is their supply-network partnership. Of the more than $8 trillion in intermediate inputs that larger multinational companies buy from other companies in America, how much is bought from SMEs? Unfortunately, this question cannot be answered by any data collected by the U.S. government. To overcome this gap, a recent study surveyed Business Roundtable members to find the following important connections.[26]

- The U.S.-parent enterprise of the typical U.S. multinational buys goods and services from more than 6,000 American small businesses.
- That typical U.S. multinational buys a total of more than $3 billion in inputs from these small-business suppliers.
- That typical U.S. multinational relies on these small-business suppliers for more than 24 percent of its total input purchases.
- Collectively, U.S. parents of U.S. multinationals purchase an estimated $1.52 trillion in intermediate inputs from U.S. small businesses, which is about 12.3 percent of their total sales.

This extensive supply-network partnership means that the direct global engagement of American worldwide companies fosters indirect global engagement for American SMEs. Even if these SMEs do not directly sell to foreign customers, they do so indirectly by serving globally engaged U.S. companies. This dynamic connection means that many SME jobs are linked to the world thanks to their customers: Global growth in customers creates jobs in these SMEs.

The case study on page 49 highlights how globally engaged U.S. companies partner with American SMEs to become more competitive by inventing new production processes.

CENTRAL MESSAGE OF SECTION V: *Expansion abroad by globally engaged U.S. companies tends to complement their U.S. operations. More hiring and investment abroad tends to boost hiring, investment, and R&D in their U.S. operations. Globally engaged U.S. companies also create jobs in America in other companies. In particular, they create jobs in SMEs within their global supply networks.*

CASE STUDY: Coca-Cola

The Coca-Cola Company touches the world's consumers like almost no other business. Underlying its 2011 worldwide revenues of $46.5 billion was an average of more than 1.7 billion servings every day in 206 countries. Fundamental to Coca-Cola's success in the United States and around the world has been innovation that achieves both environmental benefits and financial goals. In 1969, it commissioned the first-ever environmental life-cycle assessment of packaging. In 1991, it introduced the first plastic beverage bottle with recycled material. And in 2009, it introduced PlantBottle packaging: the world's first recyclable beverage bottle made partially from plants. Coca-Cola's PlantBottle packaging initiative demonstrates how research and innovation in global companies often foster innovation and support jobs in younger small businesses that are part of Coca-Cola's international supply chain.

PET (which stands for polyethylene terephthalate) is one of the world's most widely used plastics, but historically it has required petroleum and other fossil fuels as a key ingredient. In their ongoing efforts to improve the company's packaging, Coca-Cola researchers discovered how to produce PET from plant material rather than fossil fuels — without sacrificing performance characteristics such as recyclability. This bio-based plastic could be made in laboratories, but the challenge became making this scientific breakthrough commercially scalable. A first success was building a viable global supply chain that used plant materials for one of the two key ingredients used in PET plastic. After careful study, Coca-Cola chose to use locally sourced sugarcane and sugarcane waste from Brazil, a source of biomass widely recognized for its favorable environmental footprint and its sustainability outside of the food stream.

Since the package launched in 2009, PlantBottle packaging has eliminated the equivalent of almost 100,000 metric tons of carbon dioxide emissions — the equivalent of 200,000 barrels of oil. Coca-Cola is moving the global PET market with PlantBottle packaging by setting a goal of expanding from 30 percent plant-based plastic to 100 percent plant-based plastic by the year 2020.

To achieve this goal, Coca-Cola turned to highly specialized research partners that are each young small businesses. In December 2011, Coca-Cola's R&D team announced multimillion-dollar partnership agreements with three leading biotechnology companies to accelerate development of 100 percent PlantBottle. Virent, located in Madison, WI, was founded in 2002 and employs about 120 colleagues; Gevo, located near Denver, CO, was founded in 2005 and also employs 120 people; and Europe-based Avantium was founded in 2000. Each company is pursuing different technologies, but the research efforts of all three have been boosted by Coca-Cola's investments.

These breakthroughs demonstrate the symbiotic collaboration between large and small businesses. Coca-Cola is relying upon the ingenuity and breakthrough technical skill of these entrepreneurial businesses, and these businesses are enabled through the resources of their larger partner. Said Gevo CEO Patrick Gruber, "New technologies need champions. The Coca-Cola Company is in a unique position to drive and influence change in the global packaging supply chain with this development. You cannot ask for a better champion."