



# Economic Environment

## Worldwide Demographic Trends: Competitive Strategies for High-Wage Countries

by Al Schuler

How the U.S. fits into the global labor picture and implications for component manufacturers.

**H**ave you overheard talk of or experienced first-hand a shortage of qualified, skilled labor in the U.S? Know any manufacturers who have outsourced truss design work to parts of Asia or Central America? The premises that I will address in this paper address each of these questions by examining four conditions: (1) world demographic trends suggest that there are some regions (most are “high wage” countries) that have or will have structural or long-term labor shortages; (2) other regions have an abundance of labor, which they are using to capture world commodity markets as globalization and free trade expose high-cost regions to intense competition; (3) Thomas Friedman notes in his book *The World Is Flat*: “high wage countries have to figure out how to move up the value chain by developing special skills that allow them to create superior products for which they can charge extra”; and (4) high-wage countries need to invest more in education and R&D, and become innovative to continue to attract investment capital needed to maintain their standard of living. If they continue to produce commodities (and provide “commodity type services”), they will continue to lose markets to countries where labor supply is abundant.

The implications of these four conditions for *SBC* readers are the subject of two articles. In the first, I look at global labor trends and discuss implications for manufacturing and service providers in high-wage countries like the United States. In the second article (in *SBC*'s November issue), I will focus on U.S. labor shortages and immigration and how these issues affect the domestic construction industry.

### Background

World trade as a percentage of world GDP has grown from ten percent in 1960 to 15 percent in 1985, and increased to 30 percent in 2005 (“Globalization: It’s an Inflation-busting Superhero,” Neil Reynolds, ). The value of global trade in manufacturing has grown from \$1 trillion in 1980 to \$5 trillion in 2002, an annual growth rate of nearly seven percent (see Figure 1). Although annual growth in global trade in the services sector also is growing seven percent, the value of global trade has increased only by \$1.2 trillion, about one-quarter of the increase in value of global manufacturing trade. Globalization reduces inflation. In the past five years, inflation has averaged ten percent among the least “globalized” countries (bottom 25 percent); 6.2 percent for the next quartile of nations; 3.1 percent for the third quartile; and 2.3 percent for the most globalized quartile, or the top 25 percent. Further, investment capital is the most mobile factor of production, followed by labor. This means countries must control inflation or risk losing access to lower cost investment capital (internal and/or external sources). Translation—control inflation or pay higher interest rates—the choice is yours. Labor and capital are the key factors of production. Production and services will gravitate to countries (and industry sectors) where the return is greatest.

Off-shoring (services performed in another country or the same country by wholly owned captive unit) and outsourcing (purchasing a service from a third party) of service-sector jobs will have less impact on service employment than the decline in manufacturing employment according to a study by McKinsey & Co. (The Emerging Global Labor Market ([www.mckinsey.com/ideas/mgi/index.asp](http://www.mckinsey.com/ideas/mgi/index.asp))). For example, the U.S. manufacturing sector’s share of overall employment fell from 32

to 21 percent from 1972 to 2002. By contrast, the McKinsey study suggests that the U.S. service sector job loss over the next 30 years will be considerably less. Nevertheless, the impacts of outsourcing and off-shoring can vary considerably among industries.

### World Demographics Trends

How does the U.S. size up to the rest of the world in terms of available labor and cost of labor? Europe and Japan will face more serious labor shortages than other high-wage countries like the U.S. and Canada (Figure 2). Countries with a labor surplus—Philippines, India, Mexico, Brazil and China\*—will supply labor to Europe,

North America and Japan through outsourcing and off-shoring options. Countries with labor shortages have high labor costs, while countries with labor surpluses have cheap labor (Figure 3). One consequence of these trends is that high-wage countries have seen their manufacturing job base shrink while the service sector (often more value added) has grown in importance (Figure 4 on page 24).

### Future Strategies for High-wage Countries<sup>1</sup>

One of the challenges facing manufacturing in particular is producing to demand, i.e., meeting customers’ unique needs and wants rather than simply producing to capacity in the hope that a market will be there. For instance, the global automotive industry faces this paradox annually and must offer deep discounts and purchase incentives to move excess capacity in inventory.

Producing to demand requires a more integrated, responsive and shorter supply chain. In practice, this means “moving up the food chain” by adding more net value to the product mix and providing additional “value enhancing” services. The key to this strategy for component manufacturers is getting closer to core customers by helping them solve problems: dealing with labor shortages, site waste, and customer callbacks. Such approaches can yield better opportunities for margin improvement, return on investment, and overall profitability.

How does this affect building component manufacturers? Consolidation in the residential construction industry has resulted in fewer builders producing a larger share of houses. The top ten builders now produce 22 percent of the single-family homes in the U.S., up from ten percent a decade ago. The larger builders are leading the transition toward more factory-manufactured components and are demand

Continued on page 24

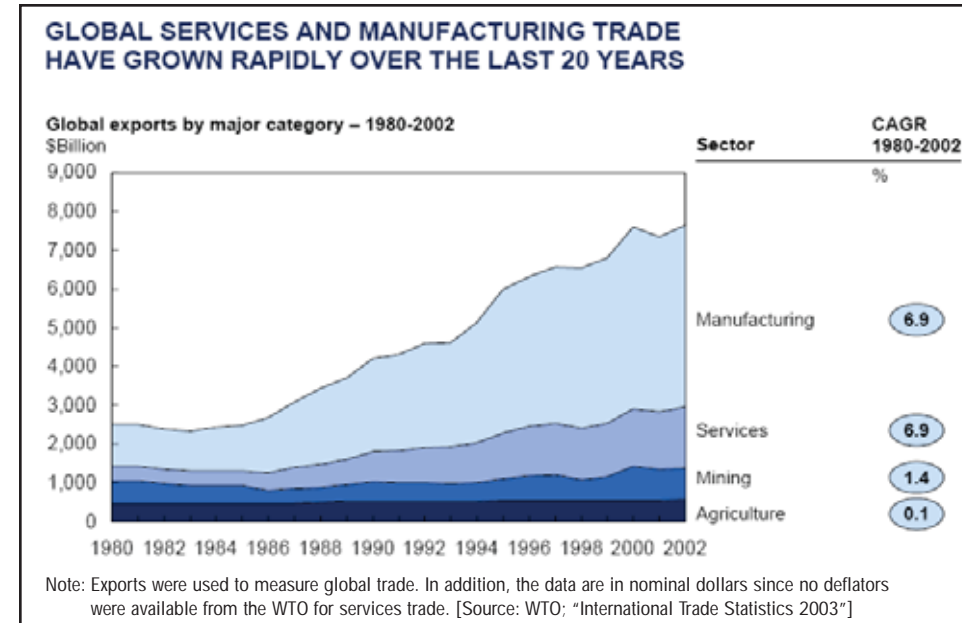


Figure 1. Global trade in manufacturing and services has been growing at seven percent annually for past two decades. (Source: McKinsey & Co., 2005)

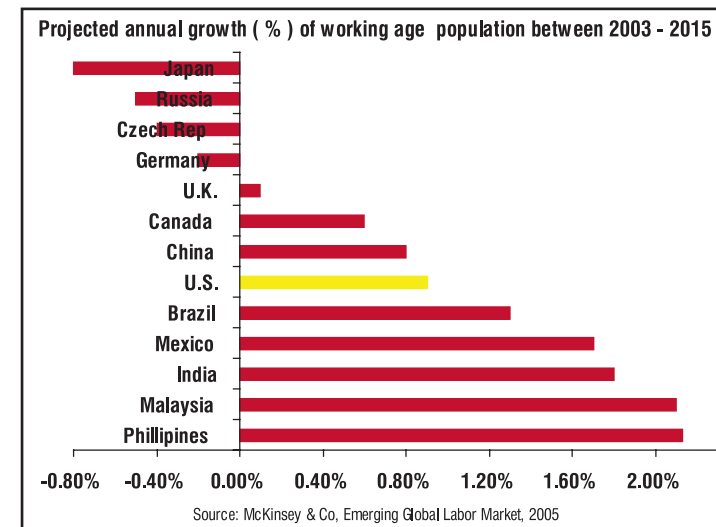


Figure 2. Europe and Japan will face serious labor shortages while India and Mexico will have a labor surplus. (Source: McKinsey & Co., 2005)

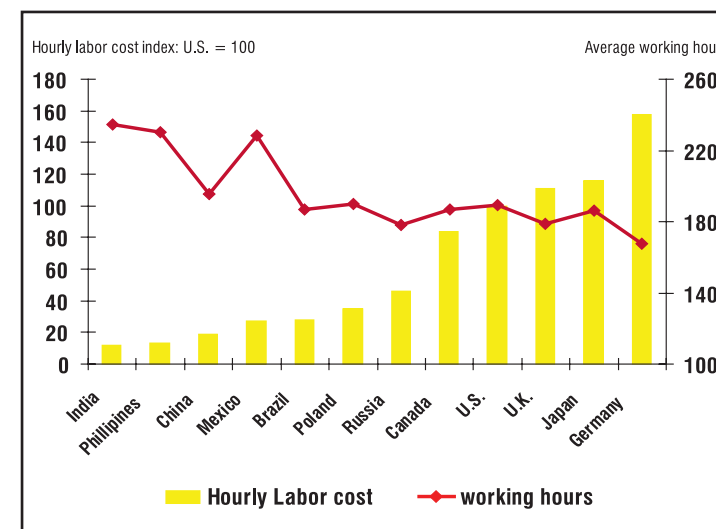
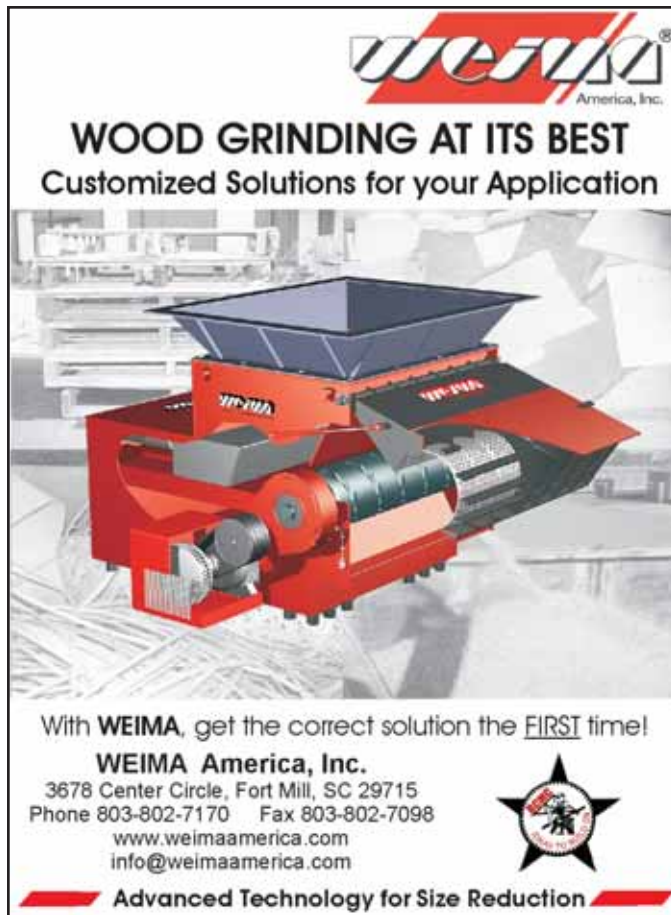


Figure 3. India, Philippines & China are the most attractive with respect to labor cost while Europe, Japan & the U.S. have expensive labor. (Source: McKinsey & Co., 2005)

\*China is a special case—if its economy continues to grow at current rates, they too could face skill shortages.



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## Economic Environment

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ing more services from their suppliers, like installed sales of trusses, wall panels, windows, and doors and price smoothing and complete framing packages cut to specification. And, the increasing damage and dollar losses caused by hurricanes and earthquakes are forcing the insurance industry to rethink property and casualty insurance coverage. Builders will be required to build homes that better withstand the damage. As a result, the strict enforcement of building codes are evolving to address these challenges. The end result is that builders will want "supply partners" to share litigation exposure and help them build houses that meet the tougher codes.

Critical to moving up the food chain is also research and development in support of product innovations. For example, it is important to work with the building code authorities (and perhaps the insurance industry) to ensure that building materials (wood, steel, concrete, etc.) are code compliant and address insurance industry concerns. Innovation and education will also be critical for North American manufacturing industries to gain a competitive advantage over global forces with low manufacturing wages, fewer environmental and

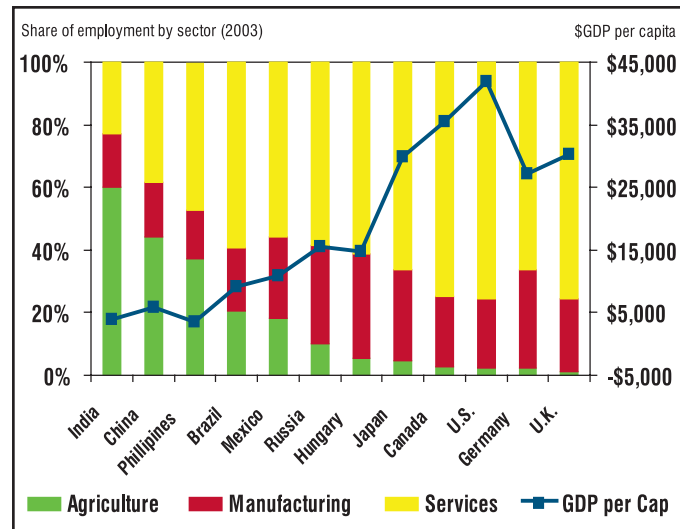


Figure 4. Service sector provides bulk of employment in high-wage countries. (Source: McKinsey & Co., 2005).

other regulations, less tort litigation, and an increasingly world-class manufacturing workforce.

Can education and innovation overcome competitive pressures on our manufacturing base? We can draw on good examples from the U.S. metalworking industry, where the National Institute for Metal Working Skills<sup>2</sup> is committed to a globally competitive American workforce by developing skill standards and implementing certification and accreditation programs. As noted by the 2004 Commerce Department study, *Manufacturing in America*, (<http://bookstore.gpo.gov>), "new processing technologies, removal of trade barriers, and innovations in computing, communications and distribution have accelerated the design, production, and delivery of goods." The study goes on to state: "these factors equate to unprecedented global competition for capital and markets and accelerate the competitive pressures to lower costs, improve productivity, and increase value."

Success strategies for high-wage countries include developing a competitive workforce through investment in education at all levels, encouraging innovation throughout the supply chain, investing in research and development of products, systems, and manufacturing, and responding more fully to the special product and service needs of core customers.

In the next issue of *SBC*, I will discuss labor shortages in the U.S. construction sector, how they are being met, and offer suggestions on how best to survive in an environment where skilled labor shortages are expected to worsen. **SBC**

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<sup>1</sup> Some of this material originally appeared in APA's *Engineered Wood Journal*, "Challenge and Response," by Schuler, et al, fall 2005, p. 23-25.

<sup>2</sup> <http://www.nims-skills.org/home/index.htm>



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