

## Industrials Year End Overview and Trends for 2008

**November 30, 2007** – We at Booz Allen Hamilton wish you and your family a very happy holiday season and a prosperous and peaceful New Year. As we approach 2008, we thought it would be useful to reflect on 2007 and to offer our perspective about the major dynamics we foresee in the industrials sector for the coming year.

### Reflections and Prognostications

On balance, 2007 has been a solid year for industrial manufacturers, despite a slowing U.S. economy in the second half and fear of a 2008 recession. As of late November, the Dow Jones Industrial Average and the Standard & Poor's 500 Index had both gone up 4 percent. Unfilled orders for U.S. manufactured goods reached their highest levels in 15 years this fall, with export sales rising almost 14 percent for the year, according to the U.S. Bureau of Economic Analysis. However, industrial production fell by 0.5 percent in October, with U.S. capacity utilization declining to 81.7 percent from September's 82.2 percent.

More ominously, however, global prices for essential raw materials such as copper, steel, and plastic resin resumed their upward climb following a pause in 2006, while oil prices rose nearly 50 percent between January and November. Oil prices in excess of US\$90 per barrel hit U.S. manufacturers especially hard, because the price is denominated in U.S. dollars, which have lost more than 25 percent of their value against the euro since 2000. Given the enormous U.S. current account deficit, the real surprise may be that the dollar's decline did not begin sooner. Meanwhile, credit market jitters and declining U.S. home values shook the confidence of consumers and businesses alike. With more than 70 percent of the U.S. economy being consumer driven, it is only a matter of time before consumers' diminished net worth and their mounting concerns about the future begin to dampen the overall economy, impacting industrial production.

These twin prospects – slow or negative economic growth coupled with the likelihood of further declines in the dollar – form the backdrop for our views about important industrial manufacturing trends in 2008.

We believe the U.S. companies that will emerge as winners in the coming year will be those that best prepare for both:

- a harsh economic environment that will challenge every North American business to achieve greater end-to-end efficiencies, and
- expanding export opportunities via the cheaper dollar that will alter manufacturing strategies and global trade patterns for years to come.

## The Good News About Bad News

The silver lining in an increasingly cloudy economic season is the incentive it provides to prepare for the next surge in growth. Well-managed companies respond to an economic slowdown by fixing inefficiencies, lowering costs, and becoming more competitive. The coming slowdown should be no different, because industrial manufacturers have ample opportunities to make themselves leaner and more globally competitive. Managing industrial companies through a period of slowing sales and rising commodity prices will be challenging because they are capital-intensive enterprises with high fixed costs. Even so, most could do a far better job of managing their operations.

Finding more creative ways to manage SG&A and IT costs will likely prove to be an important lever. Many companies in this sector are conglomerates that have grown through serial acquisitions. Often the holding company attempts to preserve the autonomy of each business, rather than overhauling and rationalizing key support activities. The evolution of shared services techniques provides more sophisticated ways to consolidate common functions and streamline SG&A – without damaging the individual business unit's autonomy, flexibility, and customer focus. SG&A spending can be pared substantially through outsourcing or by creating shared services for such functions as IT, human resources, finance, and legal.

Another big lever for industrial companies will be the streamlining of working capital. Many publicly traded industrial manufacturers pay scant attention to the details of balance sheet management. By contrast, private equity investors have shown many enterprises how the simple act of bringing accounts payable and receivables into balance – say, by imposing 60-day settlement terms for both – can rapidly turn a company from cash negative to cash positive, yielding substantial savings in borrowing costs and creating greater financial flexibility. Enhanced rigor and greater transparency of current assets and liabilities will be of critical importance in a deteriorating business climate.

Better rationalizing of product and service offerings is another area of opportunity. Our past letters have discussed what we call Smart Customization – which means responding *selectively* to customer demands for increased customization of products and services. Put simply, companies need to ask themselves, Is each customer really paying for all the complexity we create in our operation in order to serve that customer's unique needs? The same principle applies when manufacturing companies provide customers with tailor-made *solutions* as opposed to products. By providing solutions without requiring that a customer pay for the additional expertise and service involved, manufacturers sacrifice efficiency and erode their margins, often without realizing the magnitude of the impact on customer profitability.

For example, one midsized industrial company sells only bare-bones products to a giant discount retailer, knowing that the retailer pays only rock-bottom prices. Such a policy makes sense for the largest customers that have the scale and the resources to perform machinery installation, maintenance, and other after-sales support services for themselves. By contrast, when dealing with smaller retailers, the same industrial manufacturer provides highly tailored solutions that include extended warranties and financing, for which smaller companies are willing to pay a premium.

Finally, in a slowing economy with increasing competition for basic resources, winning companies will be those that become more adept at hedging strategies on the back end and at managing customer expectations on the front. They will also focus on developing more recession-resistant products made with fewer of the most costly resources. Many such products will feature reduced complexity, making them less expensive to produce and operate.

## Expanding Global Opportunity

The declining U.S. dollar has positive implications for U.S. manufacturing. U.S. exports have already strengthened as a result of the weakened currency, and the nation's trade deficit has begun to improve as well. In 2007, Europe's exports to China actually fell, while U.S. exports were up 15 percent. In recent years, the U.S. consumer has been the most important driver of the global economy, despite short-term fluctuations in currency values. Given the phenomenal economic growth of India, China, and other emerging economies, the U.S. is unlikely to maintain such a central role in the future. The U.S. consumer's diminished purchasing power, coupled with the declining dollar, points to a permanent shift in the global marketplace. For industrial manufacturers and many other sectors, globalization must now become the top priority. Currently, 45 percent of the earnings of the S&P 500 are already from non-U.S. sources, and this proportion will likely grow in coming years as exports expand. The dollar value of non-U.S. earnings will grow as well, if the greenback continues its slide, as is expected.

For years, most American manufacturers have talked about globalization as a strategic focal point, but relatively few have actually reoriented themselves to become export-driven. For many, it is now imperative to do so. As part of that reorientation, U.S. manufacturers must begin developing localized capacity to service overseas markets. A major finding of Booz Allen's third annual analysis of the world's 1,000 largest corporate R&D spenders has important implications for all manufacturers: The most significant differences in returns on R&D investments are based on the extent to which companies directly engage customers to develop new products. Companies that focus on obtaining direct customer insight throughout the innovation process reported more than three times higher operating income growth, 75 percent higher total shareholder return, and more than two times greater return on assets than companies less focused on direct customer input.

While this finding applies to companies' engagement with virtually all targeted customer groups, it is particularly relevant to customers and potential customers in developing economies. Just as Japanese auto manufacturers had to understand and master U.S. consumer tastes and behaviors as a prerequisite for growing their U.S. market share, U.S. industrial manufacturers must become truly embedded into foreign markets, and they must bring indigenous expertise into R&D efforts to ensure that they are actually designing for non-U.S. needs and tastes.

This year's Global Innovation 1000 study also reinforced an important finding from last year: The relative handful of companies that we call High-Leverage Innovators – those that consistently outperform peers while simultaneously spending less on R&D as a percentage of sales – have three things in common, regardless of which industry they're in. They share a well-integrated, end-to-end approach to innovation at each step in the process; a strong understanding of the needs and desires of customers and end-users; and transparency throughout the innovation process, so that investment decisions and assumptions can be understood, debated, and anticipated across the enterprise.

The rapid expansion of global opportunities has further implications for top leadership. American manufacturers tend to house most of their top leaders within a single U.S. headquarters location, a practice that unfortunately hinders the adoption of a truly global mind-set. To be successful in the future, companies must abandon highly centralized management models and create senior management teams

that are genuinely global in both structure and outlook. Companies can no longer afford to view international assignments as valuable developmental experiences for promising up-and-comers. Instead, as exports and global value chains become increasingly important, companies must assign their best and most experienced executives to operations in fast-growing markets – both because these markets are more volatile and because they represent the company's greatest future growth potential.

Even among industrial companies that have taken tentative steps toward truly globalizing, the primary footprint usually remains regional, not global. To be sure, expanding into Brazil or Mexico entails numerous challenges – not only in redeploying the company’s own operations but also in terms of persuading critical suppliers to move as well. Sourcing materials and the logistics of ocean and rail freight pose significant challenges, as does navigating the complexities of tariff and tax rules. For example, even under NAFTA, a U.S. company that shifts operations to Mexico may fail to qualify for tariff exemptions if the savings in labor costs cause the total value-added to fall short of certain regional value-added requirements.

In addition, American industrial manufacturers must learn to view the domestic market in the same way that global competitors do. The declining dollar will make it easier and more attractive for foreign competitors in a widening array of product sectors to invest in U.S. operations, putting still more pressure on companies whose primary focus remains domestic. The Detroit Three U.S. auto manufacturers learned years ago that foreign auto companies could manufacture in the U.S. more profitably than they could. That same principle now applies to a growing array of companies making items such as recreational vehicles and large, hard-to-ship appliances.

Finally, globalization is increasing the burden on most companies to ensure product quality and sustainability. The lead paint found in Chinese-manufactured toys this year, along with tainted Mexican, Chinese, and Southeast Asian food exports, is making consumers in developed nations more wary of almost any product originating in distant, low-cost countries. There is also mounting concern among developed nations about the full spectrum of green issues – especially energy efficiency and carbon emissions. For example, Australia, California, and the U.S. Congress have all introduced legislation to ban the common incandescent lightbulb in favor of new, energy-efficient, compact fluorescent bulbs, and governments will soon focus on consumer appliances such as computers and televisions. It is only a matter of time before industrial products receive the kind of environmental scrutiny previously reserved for passenger vehicles.

With 2007 drawing to a close, we are pleased to share these thoughts with you, and we would welcome your response and comment. Let us close by reiterating our commitment to supporting you and your organization as you pursue your goals and strategies in the year ahead. On behalf of Booz Allen, we wish you a successful and prosperous 2008.

Sincerely,

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