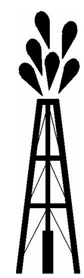
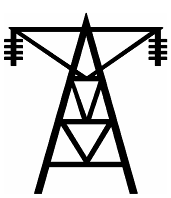
Spotlight

LONG-TERM OUTLOOK FOR MANUFACTURING

Nationally, manufacturing employment posted positive growth for two consecutive quarters in 2004, the first time this has occurred since 1997, and the number of manufacturing jobs is expected to grow slowly until the end of 2007, when Global Insight forecasts this expansion will end. Despite the loss of over 3 million jobs in this sector since 1998, output has continued to rise, due to strong **productivity** growth. This is true of Mississippi as well as of the U.S. as a whole. Output per hour in manufacturing rose at an average annual rate of 5.4% nationally between 1999 and 2004. This tremendous growth of productivity has been critical to the continued profitability of the sector, which has faced rising costs and falling real prices or its products.

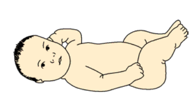


Rising **prices of oil and natural gas** have hit manufacturing hard, since it is more energy-intensive than other industries. The price of natural gas in Q1 of 2005 was 75% higher than in Q1 of 2000, although this price has fluctuated, while the price of oil (per barrel of West Texas intermediate) was 73% higher. The price of steel (per ton of hot-rolled steel) was more than twice as high in April this year than in June of 2003. The long-term trend in the prices of oil and gas is upward, so rising energy costs will continue until alternative energy sources become more available and cost-efficient.



The price of **steel** may moderate some, but future prices depend largely on developments abroad -- high global demand, particularly from China, is expected to keep the pressure on for the foreseeable future. Also, rising energy prices, linked to world demand, increase the cost of steel production, and so the cost of the final product. Finally, the falling value of the dollar is another factor affecting steel prices, driving up the cost of imported steel.

Other cost factors hurting U.S. business in general also affect manufacturing – most notably rising **health care costs**. The National Association of Manufacturers (NAM) found that only 10% of members surveyed had increases in health care costs of less than 6%, while about 80% had increases of 6% to 19%. Cost pressures from regulations, litigation and taxes also impact manufacturing.



An expected **shortage of workers** is another issue facing corporations. The U.S. labor force grew at an average annual rate of 1.1% during the past ten years, but this growth rate is projected to shrink to 0.3% and falling by 2015 – a result of demographic changes including lower birth rates. At the same time, demand for U.S. products will be rising, driven in part by an expected 50% increase in the world's population (2000 - 2050), and the increasing incomes of many of the world's economies. To meet the demand, U.S. corporations expect to draw on the international labor force, hiring immigrant workers and expanding their presence abroad. As of 2000, about 30% of U.S. population growth was due to immigration, and future immigration policies will be critical to the industry.

MANUFACTURING FACING STRUCTURAL CHANGE

The key role that manufacturing plays in the economy cannot be understood simply by looking at the percentage of employment in manufacturing or the percentage of gross domestic product (or gross state product) due to manufacturing.[1] The new technologies upon which most of U.S. GDP growth is based are generally embodied in manufactured goods. The development of new products and technologies in manufacturing, the marketing, financing, transportation and distribution of manufactured products; training and administration; computer programming and servicing, facility design and other activities serving manufacturing account for more employment and value-added than the production of manufactured goods itself. Even when U.S. companies produce abroad, many of these related jobs remain in the U.S.

The role of manufacturing in the U.S. economy will remain vital and irreplaceable, but manufacturing, both in Mississippi and nationally, is facing structural change. The average skill and educational levels required of production workers in the U.S. have been increasing and will continue to rise. As the National Association of Manufacturers (NAM) notes, the composition of manufacturing products in the U.S. is shifting towards five types: 1. Complex, value-added products and systems; 2. High-tech, higher (profit) margin products; 3. Production serving protected markets; 4. Big, bulky items that are costly to ship; and, 5. Perishable items, such as bread.

Issues and Implications

Issues that concern NAM include health care, social security, national energy policy, immigration policy, tax reform, regulation, and the value of the dollar (lowering the value of the dollar boosts manufacturing exports).

Some implications for Mississippi include: 1. Many of the jobs created by manufacturing are not directly in production, but are in related activities. The state's ability to provide more of the goods and services needed before and after production will enhance the impact of its manufacturing sector. 2. In fact, to thrive, manufacturing states must focus not only on production itself, but also on the development of those services (finance, marketing, product development, facility design) that enable participation in cutting-edge competition, and 3. Policies that address the issues facing the industry – from immigration to energy policy -- also warrant attention.

Note

[1]The decrease in the size of the manufacturing sector in Mississippi, the U.S. and abroad is due in large part to increasing productivity per worker, although in several industries the relocation of plants abroad and increased global production are also factors. Recall that a hundred years ago, a third of the U.S. workforce was employed in agriculture, compared to less than 3% today. Real output per worker-hour in manufacturing today is over three times what it was as recently as 1969, so it is not surprising that the percentage of the labor force employed in manufacturing has dropped to 11%, less than half the percentage of thirty years ago, and is not expected to increase.

Between 1995 and 2002, 23% of the state's manufacturing jobs were lost, and for the U.S., the drop was 11%. The global decline was 11%. Even in China, where many jobs have emigrated from Mexico, the percentage loss was a surprising 15% as new technologies were introduced, according to the Global Economic Research department of Alliance Capital.

A 2004 survey by the Mississippi Manufacturers Association found that, when a reason was given, the most common reasons for plant closings here in 2004 were "consolidation" (25%), followed by "business slow" (21%), "foreign competition" (11%), and "moved out of the U.S." (6%). Other reasons, cited less frequently, were lost contract, increased health care costs, facility burned and Federal regulations. Rising productivity and output globally are likely behind many of these closings.