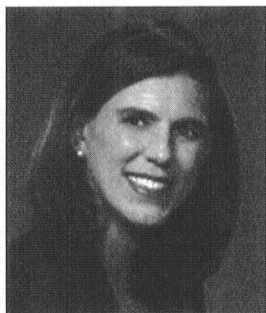


# *U.S. Manufacturing: Challenges and Recommendations*

HOW TO BEST ENSURE THE CONTINUED STRENGTH OF U.S. MANUFACTURING

By Kristin Forbes



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*The U.S. manufacturing sector was hard hit in the recent recession, particularly with respect to employment. This paper examines the recent challenges for U.S. manufacturers, discussing short-term factors related to the characteristics of the recession as well as longer-term structural issues, such as strong productivi-*

*ty growth. It also discusses the role of increased trade with China. Based on this analysis, the paper then evaluates what should, and should not, be done to help U.S. manufacturing. Some proposals could significantly damage the competitiveness of U.S. manufacturers. Instead, the Administration has enacted and proposed a number of policies to ensure the continued strength of the U.S. manufacturing sector, as well as a broader recovery in the U.S. economy.*

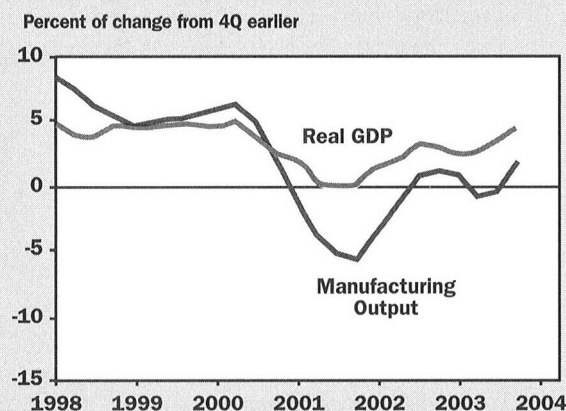
**T**he U.S. economy has experienced a challenging few years—from the terrorist attacks of September 11 and series of corporate governance scandals, to the wars in Afghanistan and Iraq. During this period, the manufacturing sector has been particularly hard hit. Although the recession was fairly mild (as measured by the contraction in GDP from its peak), it was not mild for manufacturers. Manufacturers felt the economic slowdown earlier, longer, and harder than the rest of the economy. Figure 1 shows the much sharper decline in manufacturing output than for the economy as a whole.

The manufacturing sector was particularly hard hit, not only in terms of declining output, but also in terms of declining employment. Manufacturing employment fell by nearly 2.8 million over the three years from January 2001 to January 2004—at which point it reached its low-

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FIGURE 1

## U.S. GDP AND MANUFACTURING OUTPUT

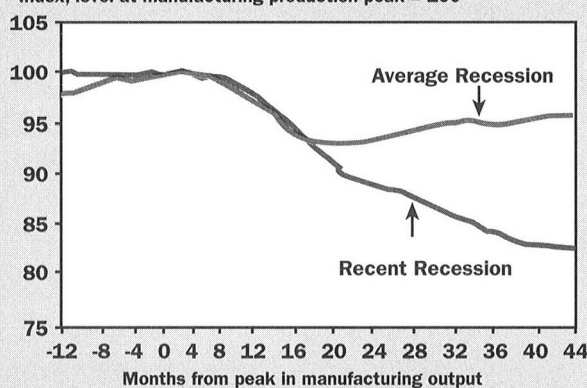


Source: Department of Commerce (Bureau of Economic Analysis) and Board of Governors of the Federal Reserve

FIGURE 2

## U.S. MANUFACTURING EMPLOYMENT

Index, level at manufacturing production peak = 100



Note: Average based on prior recessions since 1960.

Source: Department of Labor (Bureau of Labor Statistics)

est level since 1950. The recent drop in manufacturing employment was the biggest cyclical decline since 1960. Although the recession ended in November 2001 and growth surged in the third quarter of 2003, employment in the manufacturing sector has been much slower to recover. Only in February 2004 did manufacturing employment finally turn the corner and start to increase. Figure 2 shows this unusually slow recovery in manufacturing employment compared to during past recessions.

Many of the challenges facing U.S. manufacturers, however, are not unique to the United States. Other large economies have also experienced substantial job losses in manufacturing over the past few years. For example, manufacturing employment has fallen by about one-sixth in Japan since 1995. Even China—which is frequently cited

as replacing developed economies as a major source of manufacturing production—has lost fifteen percent of its manufacturing jobs since 1995 (equivalent to about 15 million workers).

This sharp decline in manufacturing employment in the United States and other leading economies leads to the critical question: what can and should be done to help the U.S. manufacturing sector? To answer this question, however, it is first necessary to understand the challenges facing U.S. manufacturing, and especially the forces driving the recent decline in employment. After discussing these points, my comments will then evaluate some of the different proposals to help U.S. manufacturing. Some of these proposals would have little benefit and could actually hinder the recovery of U.S. manufacturing, while others could help ensure that U.S. manufacturing continues to be one of the most productive and competitive in the world.

### Causes Behind the Employment Decline in Manufacturing

The recent job losses in manufacturing result from short-term effects from the most recent recession and longer-term trends related to structural shifts in the U.S. economy, especially relatively strong productivity growth.

#### Short-Term Factors

First, the disproportionately large impact of the recent recession on the U.S. manufacturing sector largely stems from the nature of the recession. Over this most recent business cycle, the U.S. experienced an unusual weakness in business investment and exports—two components of GDP that are closely tied to manufacturing. Nearly all business investment goods and most nonagricultural exports are manufactured products.

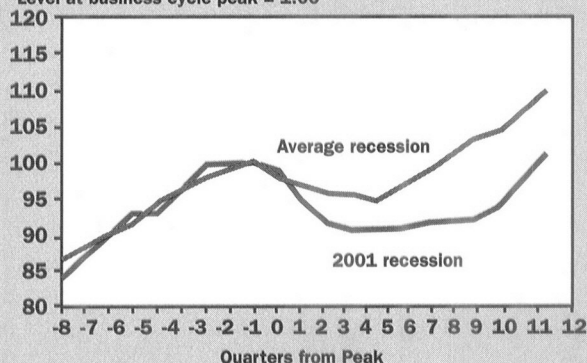
Investment growth was unusually rapid prior to the recession, and the overhang from this rapid investment delayed new investment when growth slowed. The pace of new business investment was further delayed by the series of corporate governance scandals, and possibly the uncertainties following the 9/11 terrorist attacks. All of these factors caused investment to decline much more than during past recessions, as shown in Figure 3, as well as to recover more slowly after the recession ended.

Similarly, exports were unusually weak during the most recent recession. Figure 4 shows that exports usually increase about one year after the start of a recession, while in the most recent recession exports fell by over ten percent. Exports declined largely due to slower growth among our major trading partners, such as Japan and continental Europe.

FIGURE 3

## INVESTMENT DURING RECESSION

Level at business cycle peak = 1.00



Note: Recent peak set at Q4:2000

FIGURE 5

## U.S. PRODUCTIVITY GROWTH

Percent, at an annual rate

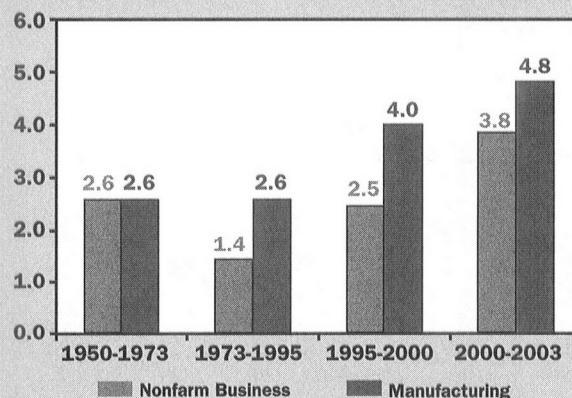
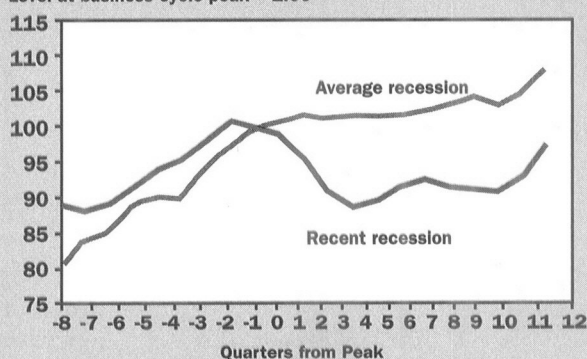


FIGURE 4

## EXPORTS DURING RECESSIONS

Level at business cycle peak = 1.00

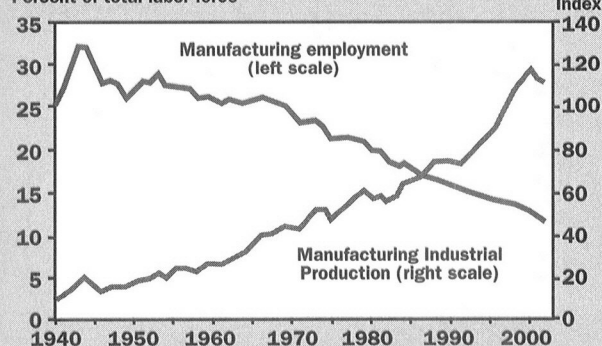


Note: Recent peak set at Q4:2000

FIGURE 6

## EMPLOYMENT AND PRODUCTIVITY GROWTH

Percent of total labor force



Source: Department of Labor (Bureau of Labor Statistics) and Board of Governors of the Federal Reserve

**Longer-Term Trends**

Lower investment and export growth during the most recent recession are not the only factors responsible for the employment decline in the U.S. manufacturing sector. Amplifying these short-term factors was the longer-term trend of strong productivity growth in the U.S. economy, and especially the manufacturing sector.

From 1950 to 2000, output per hour of work increased by about two percent per year in the nonfarm business sector. Compounded over many years, this means that each hour of work now produces about three times as much real value as it did a half-century ago. Over the same period, manufacturing productivity increased even more rapidly—at an average annual rate of 2.8 percent. As a result, an hour of work in manufacturing produced four times as much in 2000 as in 1950. Figure 5 shows that productivity growth

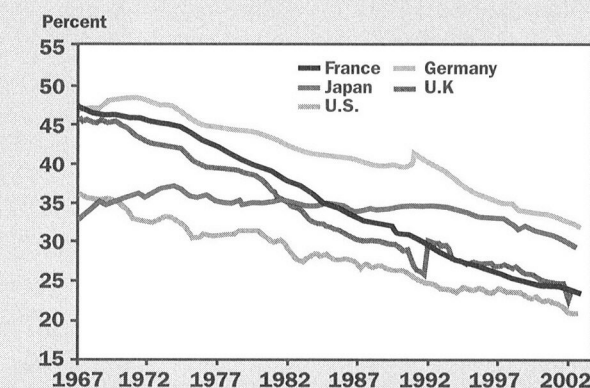
has continued to increase since 2000, surpassing even the rapid rates of the later half of the 1990s. For example, manufacturing productivity growth increased from 4.0 percent between 1995 and 2000 to 4.8 percent between 2000 and 2003.

This rapid productivity growth has substantial benefits. It raises real wages and living standards for American families, so that U.S. workers can buy more for every hour of work. It lowers the cost of production for American firms, improving their competitiveness relative to foreign companies. But rapid productivity growth means that companies can produce more goods without adding more workers.

This rapid growth in manufacturing productivity explains the striking pattern in Figure 6. The share of U.S. employment in the manufacturing sector has fallen dramatically over time. For example, the proportion of workers

FIGURE 7

## SHARE OF EMPLOYMENT IN INDUSTRY



Note: Comprises manufacturing, mining and construction. In 2001, manufacturing made up about 2/3 of industry in each country.

Source: Organization for Economic Cooperation and Development

employed in manufacturing declined from a recorded peak of 32 percent in the early 1940s to just below 13 percent in 2000. But over this period, U.S. manufacturing output has actually increased dramatically, more than eleven-fold from 1940 to 2000.

As shown in Figure 7, this trend of a declining share of employment in the manufacturing sector is not unique to the United States but is also shared by other countries.

### Role of China

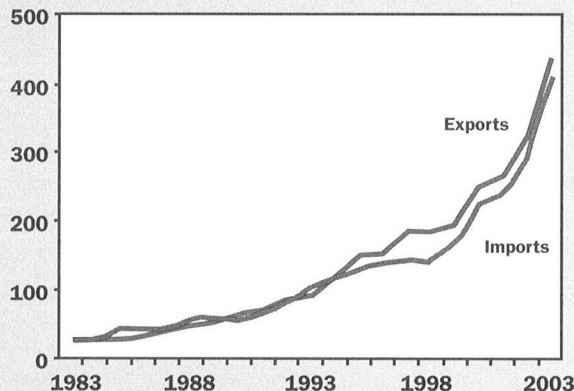
The recent decline in manufacturing employment in the United States, as well as in other countries, has coincided with a sharp increase in China's trade with the global economy. Partly because of the high visibility of Chinese imports, which are primarily everyday consumer goods, this has raised concern that imports of Chinese goods come at the expense of American manufacturing workers. It is true that imports from China affect the prospects for domestic firms with which they compete, and this impact often extends to workers and communities associated with these firms. This is especially relevant for firms that make items that are relatively intensive in the use of less-skilled labor, as these are goods in which China has a comparative advantage. A close look at the data, however, suggests several reasons why imports from China are not a major factor behind the recent job losses in the U.S. manufacturing sector.

First, although Chinese imports and exports have surged, Figure 8 shows that most of this increase is fairly recent. In fact, U.S. imports from China were fairly small before the mid-1990s, suggesting that earlier declines in manufacturing employment were not due to trade with China.

FIGURE 8

## CHINA'S TRADE IN GOODS

Billions of dollars

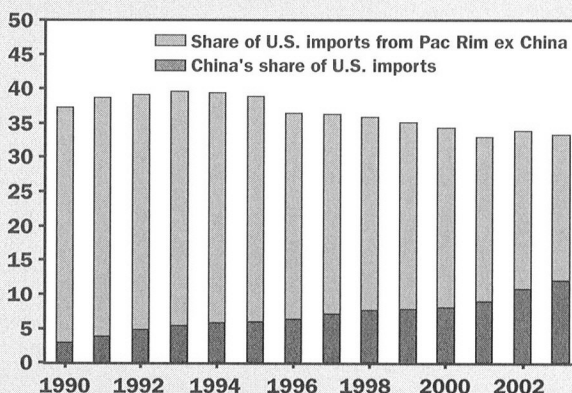


Source: China Customs Statistics

FIGURE 9

## U.S. IMPORTS FROM THE PACIFIC RIM

Percent



Source: Department of Commerce

Second, data on the sectors in which the most recent job losses have occurred in manufacturing indicate that China is also not a primary factor. With the exception of apparel, the largest recent job losses in the United States have occurred in export-intensive industries. Job losses in U.S. manufacturing have been mainly in industries in which imports from China are small. For example, the computer and electronic equipment industry accounts for 15 percent of all manufacturing job losses in the United States since January 2000, but imports from China were only eight percent of U.S. output in this industry in 2002.

Finally, a large share of U.S. imports from China is actually imports that used to come from other countries—instead of being produced in the United States. For example, Figure 9 shows that the share of U.S. imports from the Pacific Rim

as a whole has actually fallen since the mid-1990s. The increase in imports from China is more than made up for by decreased imports from other countries in the region. Therefore, increased U.S. imports from China undoubtedly caused more substantial job losses in other Asian countries that used to provide these U.S. imports, rather than job losses in the United States.

## Recommendations

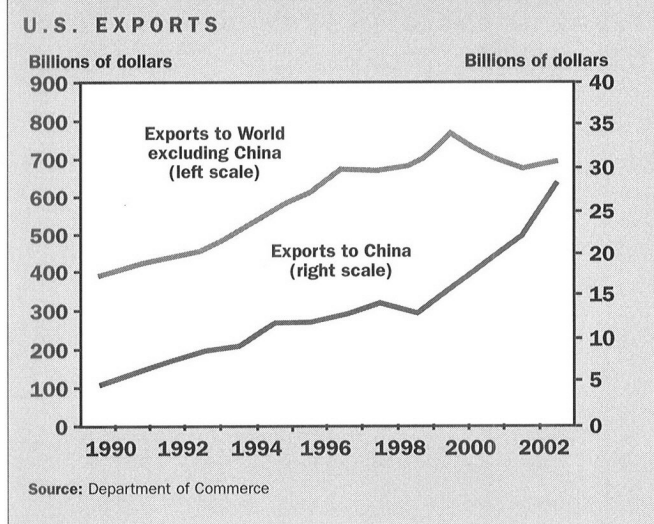
Based on this assessment of the key forces driving the recent decline in manufacturing employment — namely a combination of the characteristics of the recession and relatively strong productivity growth (but not increased trade with China) — it is possible to evaluate the efficacy of several different proposals to strengthen the U.S. manufacturing sector.

### Bad Ideas

Several popular proposals recommend restricting imports into the United States. Most recently, these proposals have focused on restricting imports from China—such as imposing a 27.5 percent tariff on all goods imported from China in order to “compensate for the unfair advantage Chinese exporters gain due to the fixed value of their currency.” Proposals such as this would not only provide little benefit to U.S. manufacturing but would even harm U.S. consumers and the U.S. economy as a whole. As discussed previously, much of the recent increase in U.S. imports from China actually replaces imports that used to come from other countries. Therefore, restrictions on imports from China would tend to increase imports from other low-cost foreign producers, rather than to increase production and employment for American manufacturers. Moreover, restrictions on imports from China would raise the costs of many consumer goods—such as toys, sporting goods and clothing.

Equally worrisome, any such restrictions on imports—whether from China or other countries—would likely lead to retaliation and attempts by other countries to limit imports from the United States. This could substantially hurt U.S. businesses, many of which rely on exports for an important share of their revenues. Retaliation by China would be particularly harmful since China has been one of the few countries to which the United States has actually increased exports in the past few years. Figure 10 shows that exports to China have grown by 76 percent since 2000, while exports to the rest of the world have basically stagnated. One in five U.S. factory jobs directly depends on trade. Any isolationist policies that threaten the ability of the United States to trade with the world would hurt, rather than help, the U.S. manufacturing sector—as well as the entire U.S. economy.

FIGURE 10



### Good Ideas

On a more positive note, there are a number of more promising proposals to help the U.S. manufacturing sector. Last summer and fall the Department of Commerce hosted a series of roundtables across the country in order to talk to manufacturers, learn about the challenges they face, and listen to their suggestions. As a result of this extensive outreach, the Commerce Department released a lengthy report on “Manufacturing in America” early this year. This report includes over 50 specific proposals to help the manufacturing sector. Even before this study was conducted, the Administration already had a number of policies in place, as well as several new proposals, that would directly benefit manufacturing. Covering all of these recommendations is beyond the scope of this paper, but I will highlight a few of the central goals.

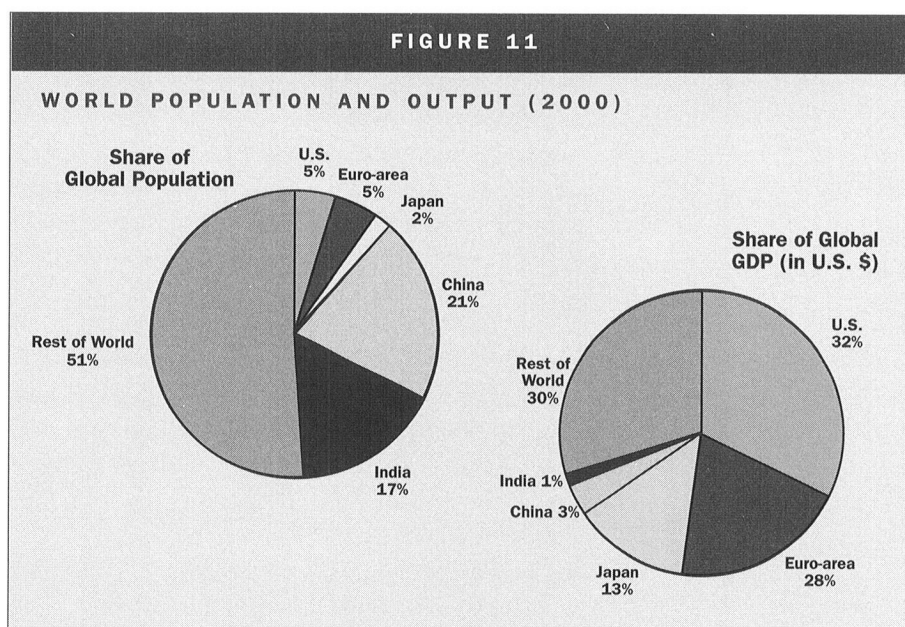
First, since the recession in the United States and especially the sharp decline in investment were important factors behind the most recent decline in U.S. manufacturing output and employment, one of the most direct and effective strategies to help manufacturing is to raise growth and spur investment in the United States. This process is already under way. GDP growth in the second half of 2003 was about six percent—the highest growth rate over any comparable period in almost 20 years. At the same time, corporate profits have steadily increased to record highs. Also, business investment has surged since the summer of 2003, with nonresidential investment growing by about 12 percent at an annual rate in the fourth quarter of 2003. The most effective way to strengthen the U.S. manufacturing sector is to continue this strong economic recovery in the overall U.S. economy.

Not only is growth in the U.S. economy critically

important to the manufacturing sector, but so is growth in U.S. exports to other countries. As discussed previously, the sharp decline in exports during the last recession was a key factor behind job losses in U.S. manufacturing. Opening foreign markets, especially if combined with higher growth abroad, would increase U.S. exports. Figure 11 shows that only five percent of the world's population is in the United States, suggesting that 95 percent of the world's potential customers for U.S. manufactured goods are located abroad. It will be important to remove barriers to trade in these markets and ensure that countries comply with existing trade agreements in order to ensure access for U.S. companies. Opening international markets has become particularly important for the manufacturing sector over time: while exports accounted for about one-sixth of American manufacturing production in 1970, they made up nearly half by 2002.

Opening international markets has been an important priority of this Administration, and we have already made substantial progress. Table 1 shows that we have recently completed free-trade agreements with Chile and

| TABLE 1                                                                                       |  |
|-----------------------------------------------------------------------------------------------|--|
| FREE TRADE AGREEMENTS                                                                         |  |
| ■ Completed FTAs & pending congressional approval                                             |  |
| • Israel (1985)                                                                               |  |
| • Mexico and Canada—NAFTA (1994)                                                              |  |
| • Jordan (2001)                                                                               |  |
| • Singapore (2004)                                                                            |  |
| • Chile (2004)                                                                                |  |
| • Australia (pending)                                                                         |  |
| • Morocco (pending)                                                                           |  |
| • Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua—CAFTA (pending) |  |
| ■ In negotiation and/or announced intent                                                      |  |
| • Free-trade area of the Americas—FTAA (34 nations)                                           |  |
| • Botswana, Lesotho, Namibia, South Africa, Swaziland—SACU                                    |  |
| • Bahrain                                                                                     |  |
| • Thailand                                                                                    |  |
| • Panama                                                                                      |  |
| • Columbia, Peru, Bolivia, Ecuador                                                            |  |



help manufacturing, consider the free-trade agreement with Australia. If the agreement is passed by Congress, almost all U.S. manufacturing exports to Australia will be duty-free immediately. This could increase America's manufacturing sales to Australia by an additional \$2 billion worth of goods every year.

Just as important as opening up markets abroad is ensuring that the United States remains an attractive place for manufacturing companies to operate and a base from which they can compete globally. This is important for domestically-owned companies as well as for foreign-owned companies with operations in the United States. There are about 6.4 million American workers

who are paid by foreign companies. About 34 percent of the jobs in U.S. subsidiaries of foreign companies are in manufacturing. It is important to continue to be engaged with the global economy and not retreat to isolationism in order to continue to receive the benefits from foreign investment in the United States.

There are also a number of additional steps that should be taken to improve the competitiveness of companies based in the United States—steps that would be particularly beneficial to the U.S. manufacturing sector.

These include several of the Administration's key proposals:

- Make tax relief permanent,
- Reduce the burden of lawsuits on the economy,
- Make health care costs more affordable and predictable,
- Ensure an affordable and predictable energy supply, and
- Streamline regulations to ensure that they are reasonable and affordable.

***Make Tax Relief Permanent:*** A series of fiscal packages passed since 2001 have significantly reduced the cost of capital for businesses and spurred investment in the United States—such as lower taxes on dividends and capital gains, as well as lower individual tax rates (which benefit sole proprietorships, partnerships, and S corporations). This tax relief particularly benefits manufacturing companies since capital investment makes up a relatively large share of manufacturers' costs. Moreover, this tax relief also helps manufacturing firms indirectly by lowering the cost of capital throughout the economy, increasing the demand for investment goods produced in the manufacturing sector. In order to ensure that U.S. manufacturers continue to receive these benefits, it will be important to make these tax changes permanent.

***Reduce the Burden of Lawsuits on the Economy:*** This proposal would address the costly burden that lawsuits impose on American businesses, while still ensuring the right to sue when justified. For example, estimates suggest that roughly 60 companies entangled in asbestos litigation have gone bankrupt primarily because of asbestos liabilities, displacing between 52,000 and 60,000 workers.

***Make Health Care Costs More Affordable and Predictable:*** Health care costs have risen from about nine percent of GDP in 1988, to 13 percent in 2000, and are expected to be 16 percent of GDP within five years. Health care costs as a share of total compensation are one-third higher in manufacturing than in service-providing industries. The President's proposals aim to address these high costs by reducing frivolous litigation, helping individuals save for future health expenses, and allowing small businesses to pool in order to purchase health coverage.

***Ensure an Affordable, Reliable Energy Supply:*** This is vital for manufacturing, which makes up about 15 percent of GDP but accounts for around one-quarter of energy use in the United States. This proposal includes modernizing the electricity grid and streamlining the process of acquiring permits for natural gas exploration.

***Streamline Regulations to Ensure that They Are***

***Reasonable and Affordable:*** Research shows that manufacturing bore about 30 percent of the costs of regulation in the United States in 2000—nearly double its share of output. The cost of complying with regulations is particularly severe for small businesses. The Administration has asked the Office of Management and Budget to lead a comprehensive regulatory review to evaluate all the regulations restraining manufacturers.

A final set of recommendations to strengthen the manufacturing sector—and the U.S. economy as a whole—are proposals to ensure that U.S. workers have adequate skills in order to adopt new technologies and succeed in new job opportunities. It is particularly important that workers can receive training so that they can adapt to structural shifts in the dynamic U.S. economy. Several initiatives to accomplish this goal include: Trade Adjustment Assistance (TAA), Jobs for the 21st Century, and Personal Reemployment Accounts.

For example, the recent expansion of Trade Adjustment Assistance provides funding for training, moving expenses, and certain health care costs after a job loss due to international trade. The President's "Jobs for the 21st Century" will support students and workers by improving high school education and strengthening post-secondary education and job training. The President's proposal for Personal Reemployment Accounts would provide certain individuals who lose their job with \$3000, which people can use how they think will best help them obtain a new job, such as for training, transportation, child care, or relocation. Once the individual finds a job, they can keep any remaining funds in the account, thereby providing an incentive to find a job quickly. Although none of these proposals can fully remove the difficulty and suffering for workers and their families when they become unemployed, they should help ease the transition and help provide workers with new skills to find employment. As a strong signal of commitment to these programs, the President has proposed over \$20 billion in the 2005 budget for worker training programs, reemployment programs, and support for technical and vocational education.

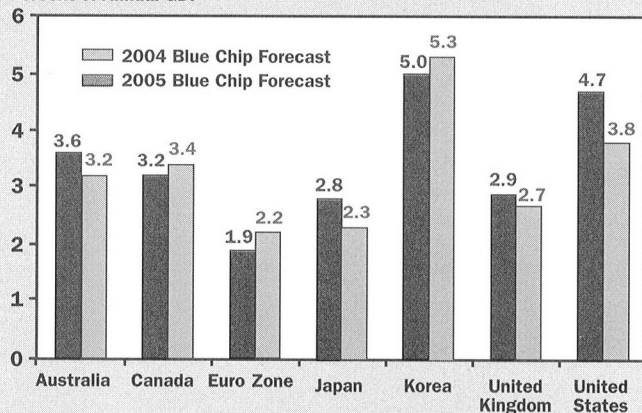
## Conclusions

Although my comments have focused on the recent challenges facing the U.S. manufacturing sector and the different steps that could be taken to strengthen this sector, it is important to put these challenges into context. Although the U.S. economy has recently had a difficult few years, it is still the strongest and most dynamic economy in the world. The U.S. manufacturing sector has been an important part of this success. As shown by Figure 11, although the United States comprises only five percent of

FIGURE 12

## EXPECTED GDP GROWTH

Percent of Annual GDP



the world's population, it is responsible for just over 30 percent of the world's total output (calculated using market exchange rates). In comparison, the euro-zone also comprises about five percent of the world's population, but produces only 20 percent of global output.

Moreover, this strength of the U.S. economy is expected to continue. Growth in most of the major economies of the world is expected to improve this year—yet growth in the United States is still expected to exceed that in most major economies. In fact, as shown in Figure 12, in 2004 growth in the United States is expected to be double that in the euro-zone and almost two percent higher than in Japan.

Although there is a tendency to focus on the challenges and difficulties to doing business in the United States, it is important to remember the fundamental strength of our economy. As we discuss different proposals to shape the future of the United States, we must be careful not to threaten this success with short-term fixes that could damage our long-term competitiveness. Instead, it is important to focus on ways to help the economy evolve as the global economy evolves and ensure that we continue to support and strengthen the impressive competitiveness of the United States. ■

