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

# **Comments by Kristin Forbes Council of Economic Advisers**

# Conference organized by the Federal Reserve Bank of Dallas "Framing the Future: Tomorrow's Border Economy"

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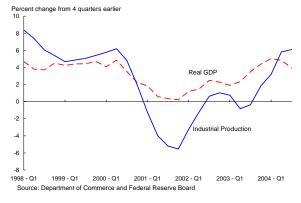
## I. Introduction

Lewis and Clark. Ben and Jerry. Batman and Robin. Black and Decker. Thelma and Louise. Abbott and Costello. Simon and Garfunkel. The Lone Ranger and Tonto. Bonnie and Clyde. Frodo and Sam. Gilbert and Sullivan. History and legend are filled with examples of pairs whose fates are closely linked and in which the combined entity is something greater than the sum of the individual parts. Similarly, the performance of the maquiladora industry is tightly linked to the performance of U.S. manufacturing, and these two industries each benefit from their close links. A summary of a conference on the maquiladora industry last December concluded: "The U.S. economy, particularly industrial production, is the No. 1 determinant of performance, and the recent maquiladora downturn has largely been a reflection of poor conditions in the United States." Therefore, understanding the recent challenges facing U.S. manufacturing—the focus of my comments—is critical to understanding the outlook for the maquiladora industry and border economy—the focus of this conference.

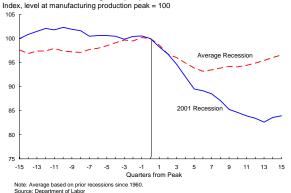
There is no doubt that U.S. manufacturing has faced a challenging few years. Although the recession in the United States was fairly mild (as measured by the contraction in GDP from its peak), the recession was not mild for manufacturers. Manufacturers felt the economic slowdown earlier, longer, and harder than the rest of the economy. Slide 1 shows the much sharper decline in industrial 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 2.7 million over the period from February 2001 to February 2004, reaching its lowest level since 1950. The recent drop in manufacturing employment was the biggest cyclical decline since 1960. Even as the U.S. economy recovered from the recession and growth surged, employment in the manufacturing

## 1: U.S. GDP and Manufacturing Output



## 2: U.S. Manufacturing Employment

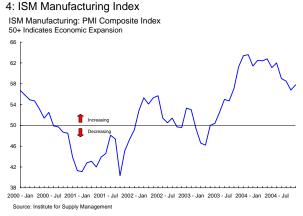


sector was still slow to recover. Slide 2 shows this unusually slow recovery in manufacturing employment compared to past recessions.

On a more positive note, over the past year as the U.S. recovery has strengthened, the manufacturing sector has also shown signs of strength. Slide 3 shows that industrial production in the manufacturing sector rose over 6 percent in the past year, the fastest four-quarter growth rate in over four years. Slide 4 shows that in November the ISM manufacturing index showed its 19<sup>th</sup> straight reading at or above 50—the level indicating expansion. After hitting its third-consecutive all-time high in June, the Manufacturers Alliance/MAPI Business Outlook Survey remains elevated. Since February, employment in the manufacturing sector has increased by over 86,000.

But will the current recovery in U.S. manufacturing continue? Should the maquiladora industry prepare for another downturn in this closely related sector? Will the relationship between the maquiladora industry and U.S. manufacturing end on a negative note alá the pair of Thelma and





Louise? Or will it continue to be a positive relationship alá Black and Decker or Frodo and Sam? To answer these questions, I'll begin by discussing the challenges facing the U.S. manufacturing sector, focusing on whether the recent declines in employment were caused by short-term cyclical factors or longer-term structural factors. Then, based on this analysis, I'll evaluate some of the different proposals to strengthen 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.

## II. Causes Behind the Employment Decline in Manufacturing

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

#### A. Short-term factors

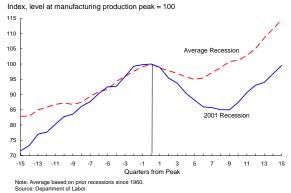
First, the disproportionately large impact of the recent recession on the U.S. manufacturing sector largely stems from the nature of the recent recession. During this recession, the U.S. experienced an unusual weakness in business investment and exports—two components of GDP

that are closely tied to manufacturing. Nearly all business investment goods and most nonagricultural exports are manufactured products.

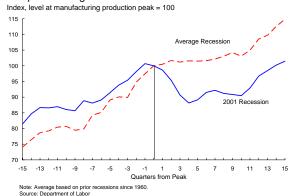
Investment growth was unusually rapid prior to the recession, and the overhang from this rapid investment delayed new investment when growth slowed. The pace of new business investment was further delayed by the series of corporate governance scandals and the uncertainties following the 9/11 terrorist attacks. All of these factors caused investment to decline much more than during past recessions, as shown on Slide 5, as well as to recover more slowly after the recession ended.

Similarly, exports were unusually weak during the most recent recession. Slide 6 shows that exports have been fairly stable during recent recessions, on average, helping support growth. In contrast, during the most recent recession exports fell by over 10 percent. Exports declined largely due to slower growth among our major trading partners, such as Japan and continental Europe.

## 5: Investment during Recessions



#### 6: Exports during Recessions

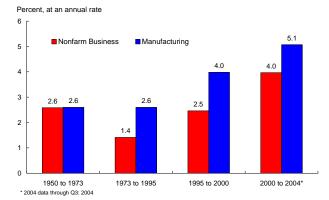


#### **B.** Longer-term trends

Lower investment and export growth during the most recent recession, however, 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 2 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. Slide 7 shows that productivity growth has continued to increase since 2000, surpassing even the rapid rates of

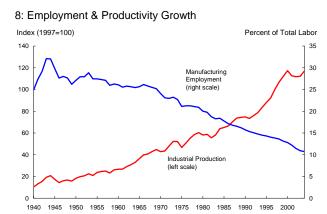
7: U.S. Productivity Growth

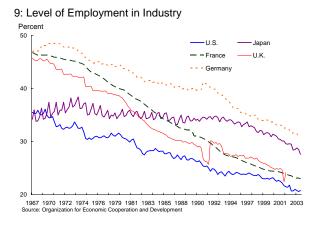


the later half of the 1990's, and that productivity growth in manufacturing has continued to exceed that in the overall economy. For example, manufacturing productivity growth increased from 4.0% between 1995 and 2000 to 5.1% between 2000 and 2004.

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 Slide 8. The share of U.S. employment in the manufacturing sector has fallen dramatically over time. For example, the percentage of workers employed in manufacturing declined from a recorded peak of 32 percent in the early 1940s to just below 11 percent in 2004. But over this period, U.S. manufacturing output has actually increased dramatically, more than eleven-fold from 1940 to 2004. Moreover, as shown in Slide 9, this trend of a declining share of employment in the manufacturing sector is not unique to the





United States and is also shared by other developed economies.

## C. 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. It is also true that this can impact 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. Any job losses—due to import competition or any other reason—can be extremely difficult and painful, not only for workers, but also for their families and communities.

Although China is often blamed for many of these difficult job losses, there are several reasons why the impact of China on U.S. manufacturing job losses has been overstated. First, although Chinese imports and exports have surged, Slide 10 shows that most of this increase is fairly

recent. In fact, U.S. imports from China were fairly small before the mid-1990's, suggesting that earlier declines in manufacturing employment were caused by factors other than trade with China.

Second, data on the sectors in which the most have recent job losses occurred manufacturing indicate that China is 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 US manufacturing have been mainly in industries in which imports from China are small. In fact, formal regression analysis (which controls for a number of other factors) does not find a significant positive correlation between imports from China and job losses by industry in the United States.

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,

Billions USD
600
500
400
300
Exports

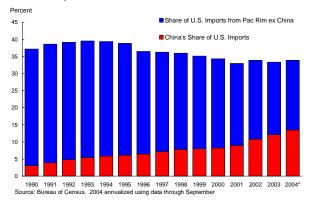
1993

1991

2001 2003

11: U.S. Imports from the Pacific Rim

10: China's Trade in Goods



Slide 11 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.

1983

#### **III.** Policy Recommendations

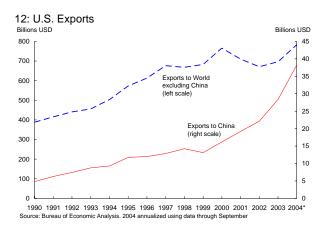
Based on this assessment of the key forces driving the recent decline in manufacturing employment – namely a combination of the characteristics of the recession and relatively strong productivity growth (but not increased trade with China)—what should and should not be done to strengthen the U.S. manufacturing sector?

#### A. 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% 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 Asian countries. Therefore,

restrictions on imports from China would tend to increase imports from other low-cost Asian producers, rather than to increase production and employment for American manufacturers. Moreover, to the extent that restrictions on imports from China worked, they would result in higher prices to American consumers on clothing, sporting goods, and other consumer items.

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. Slide 12 shows that exports to

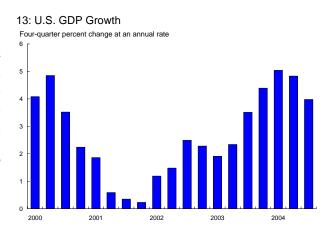


China have more than doubled since 2000, while exports to the rest of the world have basically stagnated. One in five U.S. factory jobs directly depends on trade. Any isolationist policies that threaten the ability of the United States to trade with the world would hurt, rather than help, the U.S. manufacturing sector—as well as the entire U.S. economy.

#### B. Good ideas

On a more positive note, there are a number of more promising proposals to help the U.S. manufacturing sector. During the summer and fall of 2003, 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 my comments, 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 manufacturing output and employment, one of the most effective strategies to help manufacturing is to raise growth and spur investment in the United States. This process is already under way. Slide 13 shows the strong recovery in GDP growth since the recession. Real GDP has grown at a 4.0 percent annual rate during the

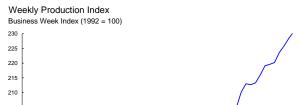


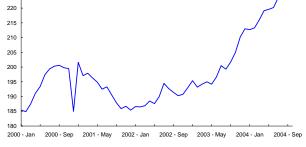
last four quarters – above its average pace during the 1970s, 1980s and 1990s. Slide 14 shows that business investment has surged since the summer of 2003, with nonresidential investment growing at an annual rate of about 12 percent in the second half of 2004. The most effective way to strengthen the U.S. manufacturing sector is to continue this strong economic recovery in investment spending and the overall U.S. economy.

Not only is growth in the U.S. economy critically important to the manufacturing sector, but also 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 recent job losses in U.S. manufacturing. Opening foreign markets, especially if combined with higher growth abroad, would increase U.S. exports. Slide 15 shows that only 5 percent of the world's population is in the United

States. That means that 95 percent of the potential customers for U.S. manufacturing goods are in other countries. It will be important to remove barriers to trade in these countries and ensure that countries comply with existing trade agreements in order to ensure access for U.S. companies to these large markets. 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 2003.

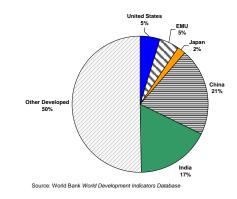
This has been an important priority of this Administration, and we have already made substantial progress. Slide 16 shows that we have recently completed free-trade agreements with Singapore, Chile, Australia, Morocco, Bahrain, and Central America (through CAFTA)—although some are still awaiting congressional approval. We are in the midst of negotiating several additional bilateral free-trade agreements as well as multilateral agreements with the South African Customs Union and the entire





## 15: World Population in 2003

14: U.S. Business Investment



#### 16: Free-Trade Agreements

- Completed FTAs
- ■Israel (1985)
- ■Mexico and Canada NAFTA (1994)
- ■Jordan (2001)
- ■Singapore (2004)
- ■Chile (2004)
- ■Australia (2004) ■Morocco (2004)
- ■Bahrain (2004)
- Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua-CAFTA (2004)
- In negotiation and/or announced intent
- ■Free-trade area of the Americas FTAA (34 nations)
- ■Botswana, Lesotho, Namibia, South Africa, Swaziland SACU
- ■United Arab Emirates (UAE)
- ■Thailand
- ■Columbia, Bolivia, Peru, Ecuador

Americas through the FTAA. We are also actively working with countries around the world to encourage progress in the Doha Development round to reduce global barriers to trade. As a specific example of how these agreements can help manufacturing, consider the free-trade agreement with Australia. 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 5.4 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. Slide 17 shows several of the Administration's key proposals:

17: Improving U.S. Competitiveness

•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

•Streamline regulations to ensure that they are reasonable and affordable

- o 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.
- o 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 legal protection 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.
- o 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 nominal 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.
- o *Make Health Care Costs More Affordable*: Health care costs have risen from about 9 percent of GDP in 1988, to 13 percent in 2000, and are expected to be 16 percent of GDP within five

years. They have been rising by 10 percent per year since 2000. 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: medical liability reform that would reduce the costs from frivolous litigation, Health Savings Accounts that would help individuals save for future health expenses, and Association Health Plans that would allow small businesses to pool to purchase health coverage at lower costs.

o Ensure an Affordable, Reliable Energy Supply: This is vital for manufacturing, which makes up about 15 percent of nominal GDP but accounts for around one-quarter of energy use in the United States. This proposal aims to make the United States less dependent on foreign sources of energy through a comprehensive national energy policy which includes modernizing the electricity grid and streamlining the process of acquiring permits for natural gas exploration.

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

#### 18: Training & Adjustment Assistance

•Trade Adjustment Assistance (TAA)

•Jobs for the 21st Century
•Community college programs

Personal Reemployment Accounts

 Over \$20 billion in 2005 budget for worker training and reemployment opportunities

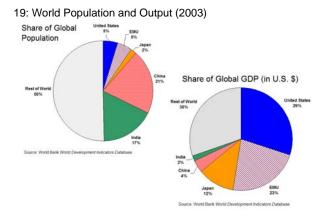
can adapt to structural shifts in the dynamic U.S. economy. Slide 18 shows several initiatives to accomplish this goal. For example, the recent expansion of Trade Adjustment Assistance provides funding for training, moving expenses, and a tax credit for certain health care costs after a job loss due to international trade. The President's "Jobs for the 21<sup>st</sup> Century" initiative will support students and workers by improving high school education and strengthening post-secondary education and job training. In order to help workers find better, higher-paying jobs under this initiative, the President has proposed to double the number of people served by our principal job training program and to increase funding for community colleges.

Another proposal for Personal Reemployment Accounts, which just received funding for an initial trial program, will provide individuals who lose their job with a certain amount of money that they can use in the manner 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. Finally, to help workers in poor communities and communities that have lost manufacturing, textile and other jobs, the President has proposed the creation of opportunity zones. These zones will include special tax relief and other incentives to attract new business and to improve housing, job training and high-tech infrastructure in order to assist these communities. 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 for worker training and employment programs in the 2005 budget.

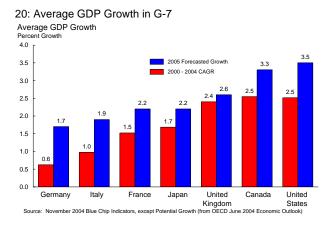
## IV. Conclusions

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. Many of the challenges facing U.S. manufacturers 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 more than 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).

Even more important, although the U.S. economy has recently had a challenging 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 on Slide 19, although the United States comprises only 5 percent of the world's population, it is responsible for almost 30 percent of the world's total output. In comparison, the eurozone also comprises about 5 percent of the world's population, but produces only 23 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 next year—yet growth in the United States is still expected to exceed that in most major economies. In fact, as shown in Slide 20, despite the challenges that the United States has faced over the past few years, it is still expected to be tied with Canada for the highest average growth rate from 2000 to 2004 in the G-7. In 2005 growth in the United States is expected to be 3.5 percent—not only



stronger than in every other member of the G-7—but double the expected growth rate in Germany and over a percentage point higher than in Italy, France, and Japan.

Therefore, although there is a tendency to focus on the challenges facing manufacturing in the United States, it is important to remember the fundamental strength of our economy. As we discuss different proposals to shape the future, 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 competitiveness of the United States. The Bush Administration plans to continue in these efforts. As a result, the relationship between the

maquildora industry and U.S. manufacturing should continue to be one of strength and mutual reinforcement. Returning to the famous pairs that I mentioned in the beginning of my comments, this relationship should be grouped in the sets where the partnership yielded positive benefits—such as for Lewis and Clark, Ben and Jerry, and Gilbert and Sullivan—instead of the pairs that had more unfortunate endings.

i "Maquiladora Downturn: Structural Change or Cyclical Factors." El Paso Business Frontier. Issue 2, 2004.