

MENDING MANUFACTURING

Reversing poor policy decisions is the only way to end current crisis

by Josh Bivens, Robert Scott, and Christian Weller

The plight of the U.S. manufacturing sector has finally attracted notice from policy makers, most notably President Bush, who mentioned manufacturing prominently in a Labor Day address in Ohio. This belated attention is welcome, although manufacturing's troubles began well before the onset of the 2001 recession (and may well have been a major factor in causing it) and have accelerated since. Between January 1998 and August 2003, manufacturing employment dropped by three million, and its share of total gross domestic product (GDP) fell from 16.3% in 1998 to 13.9% in 2002.

Any serious plan for aiding U.S. manufacturing will contain the following elements:

- First and foremost, relief from the ballooning trade deficit.
- Relief from the increasing burden on U.S. firms' retiree health and pension costs ("legacy costs") caused by the rapid job loss resulting from the rising trade deficit.
- Initiatives to aid workers in acquiring the skills needed in manufacturing.

The rapid decline of U.S. manufacturing was a policy-induced crisis that warrants policy solutions. For too long, dollar and trade policies have hurt domestic manufacturing. In the short run, improving the state of the manufacturing industry requires alleviating the external pressures on manufacturing. In practice, this means first engineering a gradual but substantial decline in the value of the U.S. dollar. It also means toughening future trade agreements (including labor and environmental standards) to protect the U.S. manufacturing sector from unfair foreign competition.

The overvalued U.S. dollar has been the single greatest contributor to the crisis in manufacturing. The dollar's value rose by 25% between July 1995 and September 2003. This rise in the dollar's value led to an increase of \$408 billion in the manufacturing trade deficit from the first quarter of 1995 to the second quarter of 2003, displacing millions of workers from U.S. manufacturing jobs (Scott 2002). The overvalued dollar presents risks for the wider economy as well because the resulting trade deficit has led to an unsustainable rise in the foreign debt position of the United States. Any policy initiative that does not address this overriding problem is wholly insufficient for the short-term resuscitation of the manufacturing sector and risks the health of the wider economy.

The precipitous employment loss in manufacturing has raised the ratio of retirees to workers by not only lowering the number of workers but also forcing eligible workers into early retirement. Because many eligible workers opted for early retirement as job prospects in manufacturing dried up, the problem of "legacy costs" (i.e., retiree pension and health benefits) has been exacerbated for manufacturing firms offering decent benefits. This further threatens firms' solvency and the retirement security of manufacturing employees and retirees. Because the sharp rise in legacy cost burdens is a direct result of the rapid job loss associated with the policy failure of allowing the dollar to become overvalued, public policy should offer manufacturing firms relief for these burdens.

Beyond this immediate relief, turning the corner in manufacturing and ensuring that it once again becomes an important pillar in the larger economy will require more wide-ranging policies along a number of dimensions (identified in Weller, Scott, and Bivens (2003), forthcoming). Chief among these are initiatives to provide training programs to aid workers in manufacturing so that workers have the skills to fill the jobs that become available when the competitive position of U.S. manufacturers improves, allowing manufacturing firms to actually take advantage of new opportunities.

External pressures on manufacturing

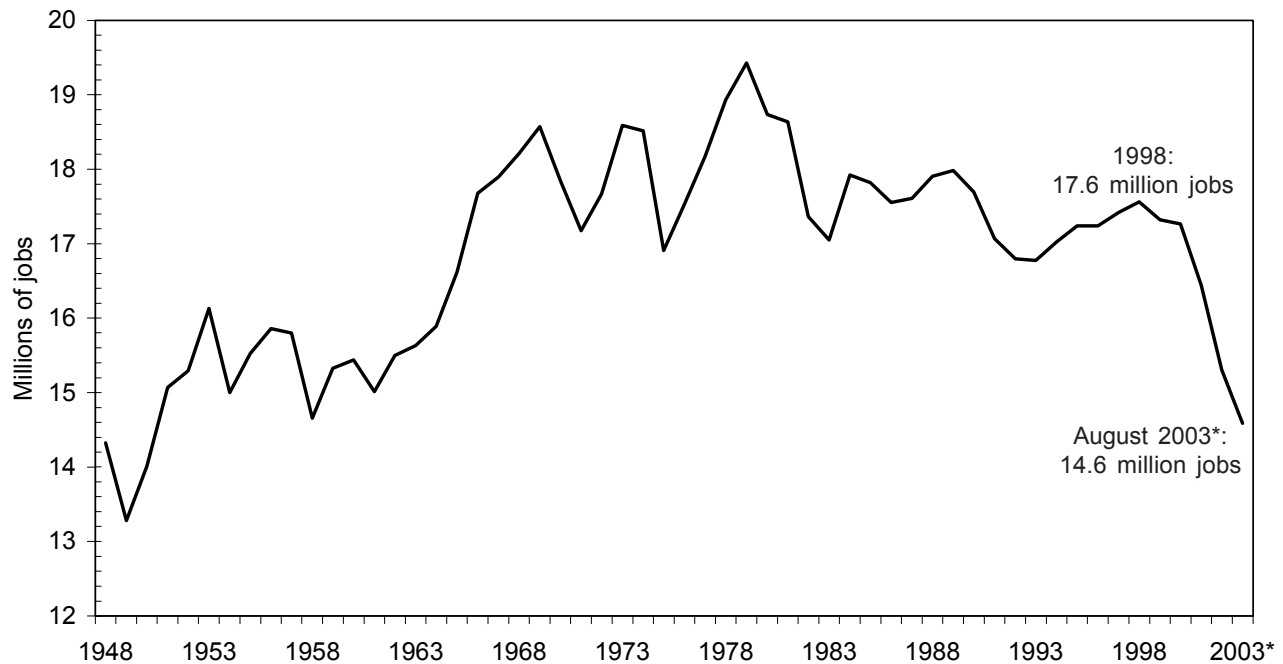
The manufacturing sector occupies a special place in the U.S. economy. Productivity growth in manufacturing has historically been much faster than in the rest of the economy, driving increases in national living standards; this productivity differential persisted throughout the 1990s economic boom. Further, manufacturing has historically been a primary source for middle-class jobs characterized by decent wages and benefits, especially for workers without a college degree (still over 70% of the workforce). Manufacturing fosters solid supply-and-demand growth, providing the base for durable economic growth for the wider economy.

Total employment in manufacturing in the United States cycled around 18 million workers between 1967 and 1998, ranging between 16.5 and 19.5 million. However, manufacturing employment has since plummeted from 17.6 million in 1998 to 14.6 million in August 2003. This record low level of manufacturing employment coincides with the largest trade deficits ever recorded. **Figure 1** shows manufacturing employment from 1948 to 2003, highlighting the unprecedented low level of manufacturing employment reached during the past four years.

The employment loss that started in early 1998 was largely driven by the rising value of the U.S. dollar. The most comprehensive measure of the dollar's value (the real, broad, trade-weighted measure calculated

FIGURE 1

U.S. manufacturing employment, 1948-2003



* August, seasonally adjusted rate.

Source: EPI calculations of BLS data.

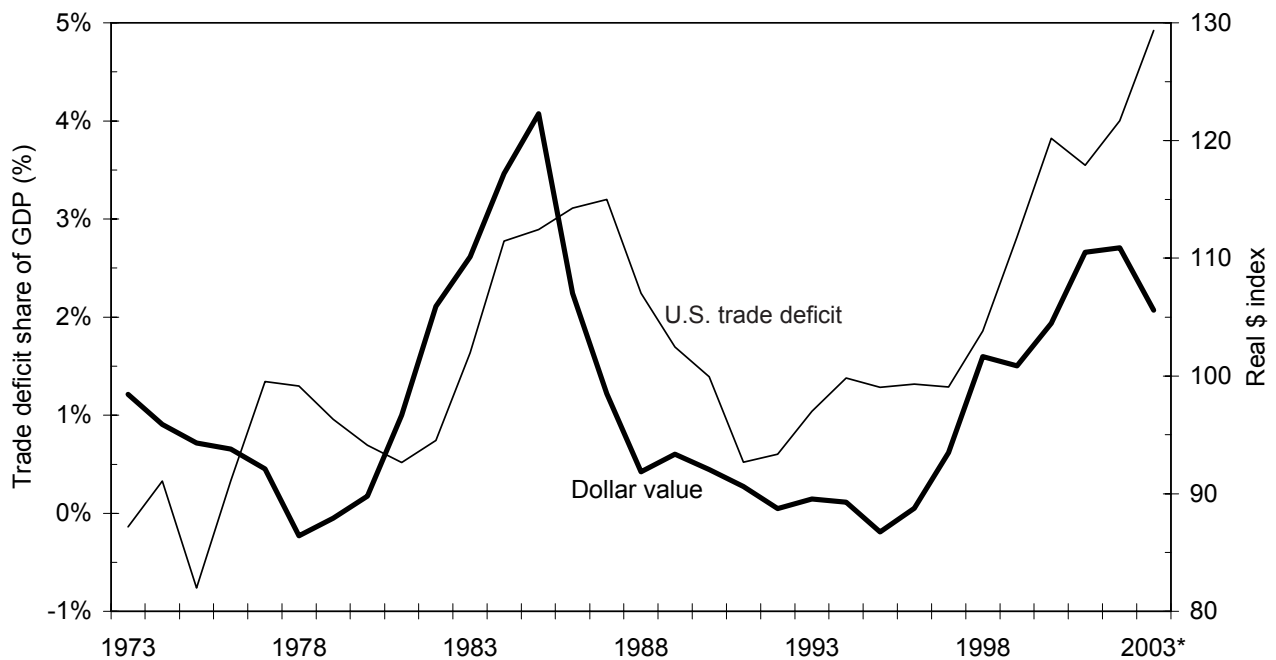
by the Federal Reserve) rose by 25% between July 1995 and September 2003. While some of the dollar's ascent was spurred by currency crises in other parts of the world, the increase started before these crises began and continued well after they passed. The overvaluation of the dollar increased the price of U.S. exports on world markets and lowered the price of foreign imports into the United States, undermining the competitiveness of U.S. producers.

Over the 1995-2002 period, *unit labor costs* in U.S. manufacturing (a widely used yardstick of international competitiveness that measures labor efficiency relative to wage costs, where a negative number implies a more cost-competitive workforce) fell by more than 2%, a larger decrease than unit labor costs in the majority of other nations tracked by the foreign labor statistics division of the Bureau of Labor Statistics. This slow growth of unit labor costs should have increased the competitiveness of U.S. products on world markets because domestic production costs rose more slowly than for many U.S. competitors. However, the overvalued dollar offset the competitive advantage of the falling unit labor costs, and U.S. products remained uncompetitive in the international market.

Eroding competitiveness led to a staggering rise in the U.S. trade deficit, which is the difference between the volume of a nation's exports and imports. Between the first quarter of 1995 and the second quarter of 2003, the overall trade deficit rose by \$411 billion, dominated by the \$408 increase in the

FIGURE 2

Real, broad, dollar index and the U.S. trade deficit as a percentage of GDP, 1973-2003*



* Estimated

Source: Real, broad dollar index from the Federal Reserve; trade deficit and GDP numbers from the Bureau of Economic Analysis.

deficit in manufactured goods. In economic terms, the trade deficit represents domestic demand for manufacturing goods that is satisfied by foreign producers. This means that rising manufacturing consumption in the United States does not translate into increased domestic employment or sales.

Figure 2 shows the relationship between the trade deficit measured as a share of total U.S. GDP and the value of the dollar. Large spikes in the value of the dollar clearly preceded large trade deficits, as the experiences of the early to mid-1980s and late 1990s show. Conversely, the trade deficit's decline in the late 1980s was led by a substantial devaluation of the dollar. Annual measures of the *overall* trade deficit actually understate the pressure on manufacturing because the United States runs slight surpluses in service trade. Every year since 1988, the *manufacturing* trade deficit alone has been larger than the overall measure.

Compounding the dollar's overvaluation was the failure of new trade agreements to contain provisions for enforcing internationally recognized labor standards. Following the new trade agreements, imports from these countries grew quickly. For instance, the largest U.S. trade deficit since 2000 has been with China, amounting to \$103 billion, or 22% of the total trade deficit in 2002 alone. And because many trade agreements included investment provisions to ease relocating production facilities abroad, manufacturing firms increasingly moved jobs out of the United States.

The effects of a trade deficit of this magnitude on manufacturing output and employment in the United States are enormous. The manufacturing trade deficit reached \$491 billion by the end of 2002. This trade deficit represents domestic demand for manufacturing output that does not translate into increased domestic production and employment. Given this information, a rough calculation for the effect of the deficit on domestic production and employment can be obtained.

Every dollar of manufacturing final output represents about 70 cents of production value-added created by the manufacturing sector (the remaining 30 cents represents labor and materials requirements drawn from other sectors of the economy such as services and retail trade). This implies that the manufacturing trade deficit represents roughly \$345 billion in manufacturing value-added produced abroad instead of domestically. Total domestic manufacturing value-added in the United States stood at \$1.42 trillion in 2002, meaning that total domestic manufacturing output lost to the trade deficit represented about 24% of its 2002 total. Balancing the trade account of the United States thus implies that domestic production in U.S. manufacturing would rise substantially.¹

This 24% increase in manufacturing production translates into an employment gain of 3.6 million jobs. There are a number of reasons to suppose that the employment gain will be slightly smaller: first, manufacturing may be characterized by economies of scale, meaning that employment growth will not keep pace with output growth, and second, some of the increased output may translate into more hours worked by existing manufacturing employees, rather than new hires. However, these numbers undoubtedly show that any substantial improvement in the U.S. balance of trade will have significant employment effects on U.S. manufacturing.

Further consequences of trade deficits and job loss

Many commentators and policy makers have displayed little concern about the connection between large trade deficits and the resulting job losses in manufacturing. This attitude is far too sanguine, for a range of reasons. First, the overvalued dollar is not sustainable; its legacy has been accelerated trade deficits and an unsustainable increase in the foreign debt obligations of the United States. A nation's trade balance is the difference between what a nation produces (exports) and consumes (imports). Like a household, a nation can only consume (import) more than it produces (exports) through borrowing. The trade deficits of the late 1990s have been accompanied by a rapid run-up of foreign debt by the United States.

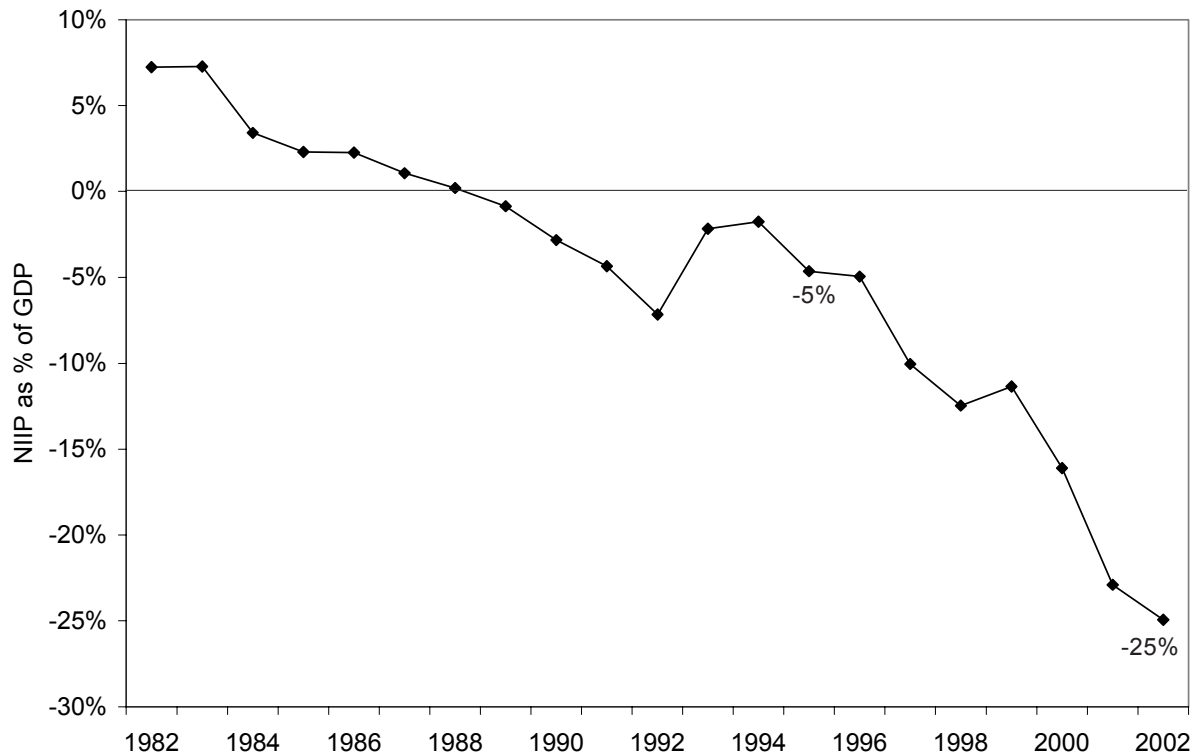
The deterioration of the U.S. foreign debt position has attracted the attention of many policy makers. In its September 2002 *World Economic Outlook*, the International Monetary Fund said of the U.S. foreign debt position that "large external adjustments would be needed to stabilize net foreign asset positions as a ratio of GDP" (IMF 2002). In regards to the trade deficit's implications for the foreign debt position of the United States, Federal Reserve Chairman Alan Greenspan, in his April 17, 2003 testimony in front of the Senate Banking Committee remarked: "I've been worried about the trade deficit for many years."

Figure 3 shows the U.S. net international investment position (NIIP), the most commonly accepted metric of U.S. foreign indebtedness. As illustrated in the figure, the NIIP has deteriorated from -5% of GDP in 1995 to -25% of GDP in 2002.

A second reason for concern about large trade deficits is that the hollowing-out of the manufacturing sector means that manufacturing faces a much greater burden from "legacy costs" for its retirees, primarily

FIGURE 3

Year-end net international investment position (NIIP) as a percentage of U.S. GDP, 1982-2002



Source: Bureau of Economic Analysis. Net international investment position at market value.

for health care. Legacy costs are obligations by firms to pay contractually agreed-upon pension and health benefits to retirees. Because manufacturing firms are more likely than firms in other industries to offer adequate retirement benefits, they generally face larger costs for retired employees. As the employment, production, and pricing power of domestic manufacturing has been eroded by the overvalued dollar, so has the ability of domestic firms to continue paying for these legacy costs. Further, large employment losses in manufacturing have led many eligible workers to retire early, putting further legacy cost pressure on manufacturing firms.

Offering good benefit packages for retirees is a policy that should be encouraged. The policy neglect that has led to the overvalued dollar disproportionately harms many “good employers” who have agreed to pay decent retirement benefits and threatens the retirement security of those workers who thought their benefits were assured. Again, it should be emphasized that, while those aspects of competitiveness that are under the control of manufacturing firms and workers (i.e., unit labor costs) have remained cutting edge, the competitive position of U.S. firms in international markets has been undermined by the high value of the dollar, an external development completely beyond the control of manufacturing firms.

A real plan for U.S. manufacturing

The first (and most pressing) order of business is to give manufacturing firms in the U.S. relief from the overvalued dollar. Removing this external pressure is an absolutely necessary first step in aiding U.S. manufacturing. In addition, a number of other initiatives could be considered to help secure the future of U.S. manufacturing. Chief among these initiatives are measures aimed at helping manufacturing firms with legacy costs, which have increased substantially as a result of the external pressures of the last six years.

Dollar relief

Since its peak in February 2002, the dollar has fallen by 6.9%; however, this decline is far too small to substantially affect the trade deficit. Projections in Bivens (2003) imply that a decline of about 40% in the dollar's value would be needed to balance trade. While perfect trade balance may not be a necessary goal, a dollar devaluation of at least 25% is necessary for long-term foreign debt sustainability. O'Neill and Hatzius (2002), writing for the Goldman-Sachs economic research group, forecast that an even larger devaluation of 43% is necessary to approach long-term foreign debt sustainability. Palley (2001) identifies a devaluation of 20% to 25% as the minimum necessary for long-term sustainability. A devaluation of these orders of magnitude would go a long way toward allowing manufacturing employment to recover from its present historic low. Given that the dollar has reversed only 2.4% of its earlier fall in the past three months, it seems safe to say that international currency markets cannot be counted on to make this adjustment in a timely way.

There are both short-term and long-term policy options for the problems posed by the U.S. trade deficits that resulted from the overvalued dollar. In the short term, the U.S. dollar should fall against a broader range of currencies, especially those that are currently pegged to the dollar (China, Malaysia, and Taiwan). In the long-term, the United States should adopt exchange rate policies that keep large trade deficits from recurring.

Current U.S. law addresses the currency manipulation that has kept the dollar from falling against some of its most important trading partners. Under the auspices of the 1988 Omnibus Trade and Competitiveness Act, the Treasury Department is bound to submit a biannual review of international economic and exchange rate policy to the U.S. Congress. In it, the department is required to investigate whether U.S. trading partners manipulate their currencies for competitive advantage. The trade deficit between the United States and China rose by \$69.3 billion between 1995 and 2002, even as Chinese rates of economic growth surpassed those of the United States. Also during this time, China accumulated \$210 billion in international currency reserves (with reserve growth running at more than double the rate of import growth), signaling that it has been buying dollars on world markets to keep its own currency from appreciating. These trends signal that an exchange rate adjustment is desirable.

The need for nations that peg their currency to allow the dollar to depreciate is widely recognized, even by policy makers who were formerly dismissive of such a policy. In May of this year, U.S. Treasury Secretary Snow remarked that "devaluation strategies are not well calculated to breed long-run domestic prosperity" (Beattie 2003). Yet, Secretary Snow, during a September visit to China and Japan, stated that a yuan revaluation was necessary "so the U.S. manufacturers will have a fair opportunity to compete on a

level playing field.” The Bush Administration’s success on this issue has so far been lacking. In a meeting with Secretary Snow, Chinese Premier Wen Jiabao brushed aside these concerns by saying, “Maintaining the stability of the exchange rates of the yuan benefits both China and the United States” (Bodeen 2003). This dismissal cannot be the end of the issue. As C. Fred Bergsten of the Institute for International Economics writes in the September 10, 2003 issue of *The Washington Post*: “If the results of the past week are permitted to stand, the United States will lose additional high-paying manufacturing jobs.”

A common objection to calls for a fall in the dollar’s value is that the boost to the U.S. economy will come at the expense of its trading partners, many of which have sluggish economies as well. There are a couple of counter-arguments to this. First, the dollar’s devaluation between 1985 and 1989 did not appreciably harm the economies of our major trading partners. As the European and Japanese currencies rose, policy makers in these nations realized it was necessary to spur domestic sources of demand growth to make up for the external shortfall. Such an adjustment must come about one way or the other, as large and growing trade deficits and foreign indebtedness in the United States simply cannot be sustained. It is better that this adjustment happens through a managed policy maneuver rather than be driven by unstable international currency markets. Second, some of the nations with the currencies that need the greatest adjustment (for example, China, Taiwan, and Malaysia) have posted fast growth rates far higher than the United States or regions whose currencies have appreciated the most to date (Canada and the euro area, for example). These nations should bear some of the burden of reconciling an unsustainable U.S. trade deficit as well.

Once the current high deficit is unwound, international coordination should aim to keep it from rising to destructive levels again. There are several current proposals that could achieve this goal. All of them involve some sort of international coordination to manage the value of exchange rates within a reasonably flexible band, as in the European Monetary System, which was the precursor to the European Monetary Union (Weller and Singleton 2002).

Trade policy relief

Enforceable labor and environmental standards codified in trade agreements would keep U.S. manufacturing firms and workers from being undermined by trading partner countries that gain advantages through the exploitation of their human and natural resources. Comparative advantages based on wage differentials resulting from different levels of national productivity are a valid basis for trade; comparative advantages gained through cost savings gleaned from the absence of acceptable labor and environmental standards are not. On the issue of labor and environmental standards, the provisions of the U.S.-Jordan Free Trade Agreement of 1999, while far from optimal, were a small step in the right direction. Even this progress was rolled back in the bilateral agreements the United States signed with Chile and Singapore in the past year, which included no enforcement lever in the main body of these treaties. This is clearly a move in the wrong direction.

Legacy cost relief

Many firms in the manufacturing sector face large legacy costs for their retirees, primarily for health care. This burden has been magnified by the hollowing-out of the manufacturing sector caused by the dollar’s

overvaluation. Public initiatives could help to ease the burden of these legacy costs by, for instance, lowering the age of eligibility for Medicare for retirees, including prescription drug coverage for retirees under Medicare, or offering public subsidies for firms with large legacy costs. This is not unprecedented; similar policy initiatives have been proposed before, although usually on the sectoral level (U.S. Congress 2002).

Health care costs have outpaced inflation for a number of years. In particular, costs for prescription drugs and hospital visits have increased rapidly. Both items are also of special importance to manufacturing firms that offer benefits to retirees because older workers and retirees are more likely to utilize these costly benefits. Consequently, initiatives that would help to contain costs in the health care sector in general, specifically in the delivery of prescription drugs and hospitalization services, would be especially beneficial to the manufacturing sector.

Additionally, many manufacturing firms offer defined benefit pensions to their employees. However, in recent years, funding of pension plans has become increasingly burdensome as plans lost money in the stock market decline, as liabilities rose due to declining interest rates, and as employers had lower earnings resulting from the weak economy. Since this combination of factors is likely to recur in future recessions as well, pension funding rules should be rewritten to give employers short-term funding relief and to stabilize pension funding in the long run. Both short-term relief and future pension stability can be achieved by changing the rules governing interest rate and asset return assumptions that firms currently must use (Weller and Baker 2003).

Rebuilding labor capacity in manufacturing

As short-term relief from external pressures is provided, U.S. manufacturers will face the problem of finding labor with appropriate skills. The results of a survey conducted by the National Association of Manufacturers in conjunction with Grant Thornton, LLP in 1997 showed that 88% of American manufacturers experienced a shortage of qualified workers in at least one category. The entire range of manufacturing industries, from the most labor-intensive (apparel) to the most technology-intensive (medical instruments manufacturing) experienced a significant increase in the skills requirements of their workers (Appelbaum et al. 2000). Training that can help to develop these skills is crucial for manufacturing to expand in the face of intense competition.

Firms generally tend to undersupply workforce training. This is largely because individual firms have no guarantee that they will be able to capture the economic returns on training. Workers can always leave an individual firm and use their new skills to help their competitors. In this way, investments in workers' skills can result in substantial positive externalities (spillovers) for the economy at large. Policy initiatives aimed at upgrading workers' skills—especially initiatives targeted at production workers, a group that often goes lacking in terms of employer-provided training—would have a significant effect on filling new manufacturing job opportunities.

Conclusion

Employment in the U.S. manufacturing sector declined for four straight years between 1999 and 2002. In the first eight months of 2003, manufacturing has shed 431,000 jobs and will almost surely extend the annual streak of employment loss to five straight years for the first time since World War II. Only once before has

employment in the manufacturing sector fallen for four straight years (the other period was 1990-1993).

Manufacturing has borne the brunt of the recent recession and post-recession job losses; 90% of total job losses since March 2001 have been in the manufacturing sector. Many of manufacturing's current woes are policy-induced (a more detailed account of the policy failures that have led to this point can be found in Hersh and Weller 2003).

The most important issue for manufacturing, by far, is the overvalued dollar. Despite attracting much attention, recent declines in the dollar have been small, concentrated in a certain narrow set of trading partners, and have been reversed in recent months (Bivens 2003). The current high value of the dollar is still a huge competitive drag on U.S. manufacturers. With an appropriate (and sustainable) dollar value, these manufacturers could be on the leading edge of competitiveness. Any plan proposing to help U.S. manufacturing that will not lead to timely, significant declines in the value of the dollar and substantial improvement in the trade balance is simply not credible.

As the hemorrhaging job loss in manufacturing is stemmed, a number of problems that were exacerbated over the last six years could be profitably addressed through policy initiatives, especially regarding the negotiation and enforcement of trade agreements (including internationally recognized labor standards), legacy costs, pension reform, health care cost containment, and skills enhancement. Addressing these issues is important for the wider economy and would provide aid to manufacturers that have been competitively constrained in the past six years by misguided dollar and trade policies.

Endnote

1. This production boost may be slightly offset by lower domestic consumption of manufacturing goods if the trade deficit decrease is driven by a dollar devaluation, as this will increase the price of imported manufactured goods. However, it is generally recognized that the price elasticity of demand for manufacturing output is quite low (Appelbaum and Schettkat 1995).

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