Supplementary Reading for

Chapter 5　Fast Track to Lost Jobs

Shifting blame for manufacturing job loss

Effect of rising trade deficit shouldn't be ignored

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April 8, 2004 | EPI Briefing Paper #149

Many economic observers have recently exonerated international trade flows for the hemorrhaging job losses in the manufacturing sector of the United States, generally claiming that either *changing demand patterns* or *rapid productivity growth* are the cause of manufacturing's decline. But the evidence shows that trade imbalances in manufacturing have accounted for 59% of the decline in manufacturing employment since 1998. A close examination of net imports, demand for manufactured goods, and productivity growth reveals that these three factors influence the U.S. manufacturing industry in the following ways:

• U.S. consumers and businesses have not shifted their purchasing away from manufactured goods. In fact, demand for manufactured goods as a share of total demand in the United States has actually grown over the past 10 years.

• The rising trade deficit has led to an unprecedented divergence between domestic manufacturing output and demand. Domestic output is now just 76.5% of domestic demand, nearly 14% less than the 1987 to 1997 average. Raising output closer to this previous relationship with demand (around 90%) would generate millions of jobs in manufacturing.

• The rising trade deficit in manufactured goods accounts for about 58% of the decline in manufacturing employment between 1998 and 2003 and 34% of the decline from 2000 to 2003. This translates into about 1.78 million jobs since 1998 and 935,000 jobs since 2000 that have been lost due to rising net manufactured imports.

The manufacturing sector lost more than three million jobs between 1998 and 2003, with 2.7 million lost since the immediate pre-recession year of 2000. Roughly coinciding with this manufacturing employment loss, the trade deficit in manufactured goods increased by over $230 billion. The synchronicity of large-scale manufacturing job loss and growing trade deficits has led to a debate about whether international trade flows have contributed to the loss of manufacturing jobs.

Those economic observers that dismiss trade as a primary driver of manufacturing job loss claim that either changing consumer and investment demand patterns and/or fast productivity growth in the manufacturing sector is the culprit for this job loss. These analyses share two underlying messages: that there is little that policy makers can do to avert manufacturing's employment decline, and more specifically, that international trade is not a contributor to this decline because it has been driven mostly by domestic factors (i.e., demand and productivity).

In reality, the manufacturing jobs crisis in the United States can be resolved, and to do so, it is crucially important for the trade account to move closer to balance through rising exports and/or falling imports. The single best way to influence these import and export flows is by encouraging a further (and wider) depreciation of the U.S. dollar to make domestically produced goods more competitive on global and domestic markets.

Accounting for manufacturing job loss

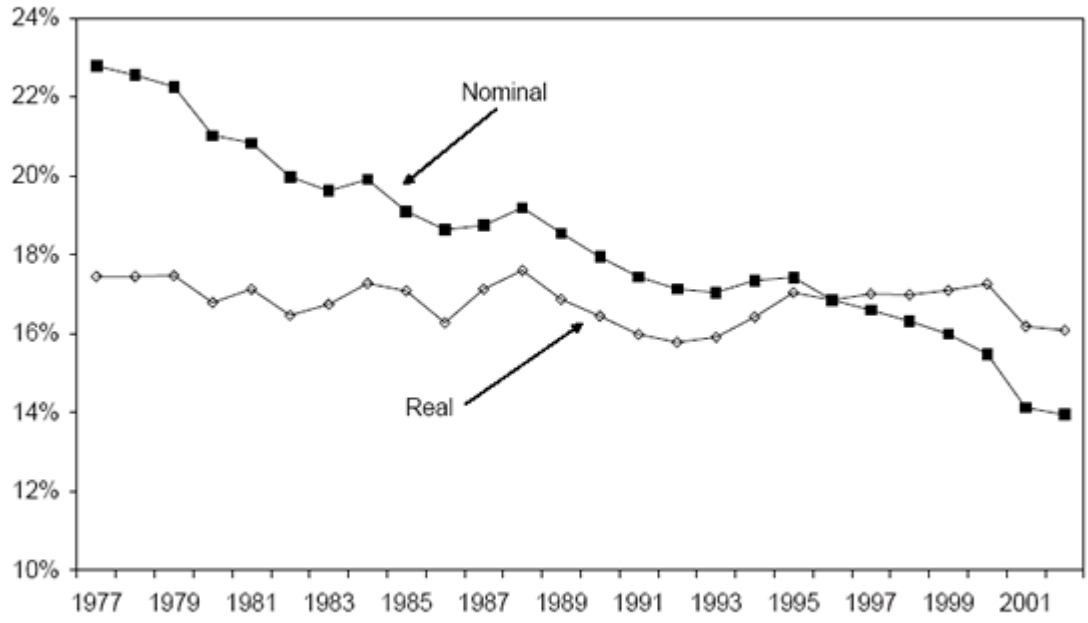
Changing demand patterns

The decline of manufacturing as a share of total GDP over the past 30 years is often highlighted as evidence of a long-term trend away from consumer and business demand for manufacturing output. However, while manufacturing's share of GDP has fallen steadily and rapidly over the past couple of decades, this has been largely caused by lower inflation for manufactured goods than for services, driven by higher productivity growth rates in manufacturing.

A different pattern emerges when using the share of *real* (inflation-adjusted) manufacturing output in *real* GDP. Real measures account for the faster price declines for manufacturing goods. In real terms, manufacturing's share has actually been quite stable over the past 25 years. Since 2000, however, it has dropped a full percentage point. A portion of this drop is surely reflecting the large fall in business investment that began in 2000. **Figure 1** shows trends in manufacturing's share of real and nominal GDP.

FIGURE 1

Real and nominal shares of manufacturing output in GDP



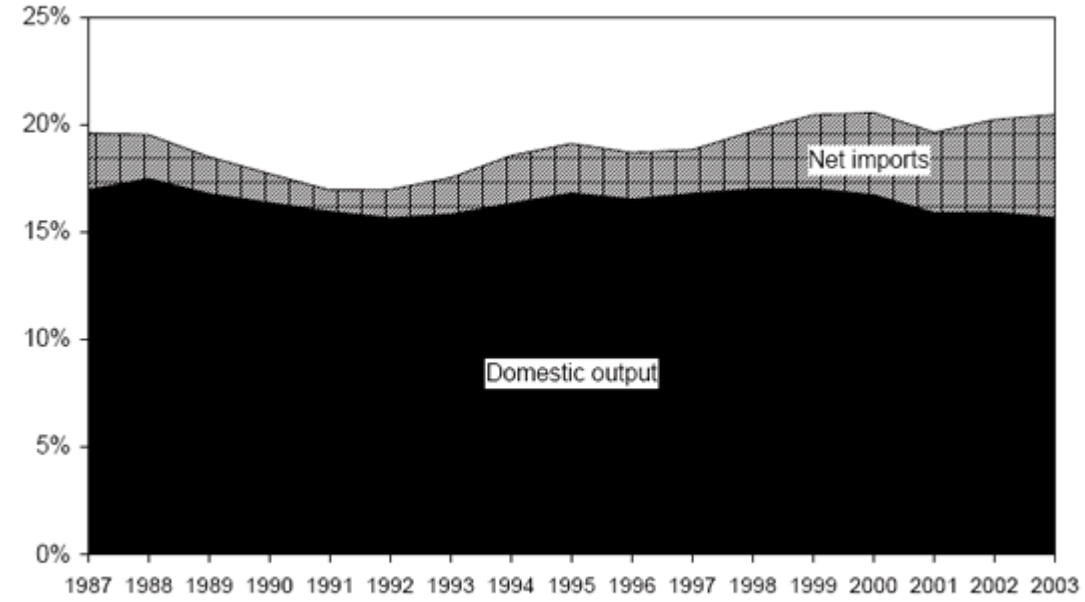
Source: GDP series from the Bureau of Economic Analysis (BEA).

Even given the relative stability of manufacturing's share of total (real) GDP, it could be argued that Americans have begun demanding less in the way of manufacturing output in the very recent past (since 2001), and that this shift in demand explains a good portion of both manufacturing job loss and the entire jobless recovery, as aggregate job loss has been driven by the manufacturing sector.

A recent Congressional Budget Office (CBO) report on manufacturing employment presents evidence on a long-term shift in demand away from manufacturing goods by referencing the relationship between real manufacturing output and real GDP. This, however, is the wrong comparison. **Figure 2** shows that there has actually been very little change in the domestic demand, properly measured, for manufactured goods in the U.S. economy in the recent past.

FIGURE 2

Manufacturing as a share of total demand: domestic output plus net imports



Source: Trade data from the Census Bureau. Output data from the Bureau of Economic Analysis. Manufacturing output for 2003 is a projection based on past relationships with manufacturing and aggregate output.

While domestic manufacturing *output* has declined as a share of GDP, there has been an enormous surge of net imports in the manufacturing sector. To measure whether or not consumers and businesses are really demanding less in the way of manufactured output, net imports as well as domestic production must be included. Figure 2 shows the share of domestic manufacturing demand as a share of total domestic demand for all goods and services in real terms. Manufacturing demand is the sum of domestic manufacturing output plus net manufactured imports into the United States (i.e., imports minus exports). Total domestic demand is GDP plus net imports of all goods and services.

Gross domestic product and the net imports of goods and services are much better representations of demand. This properly measured series is remarkably stable over time, and even increases in recent years, refuting the widely held view that there is a long-term demand shift away from manufactured goods on the part of U.S. consumers and businesses.

Given that the demand for manufacturing output has grown even faster than other demands in recent years, the hemorrhaging of manufacturing jobs has not resulted from long-run trends in spending patterns.

Domestic production as a share of total demand

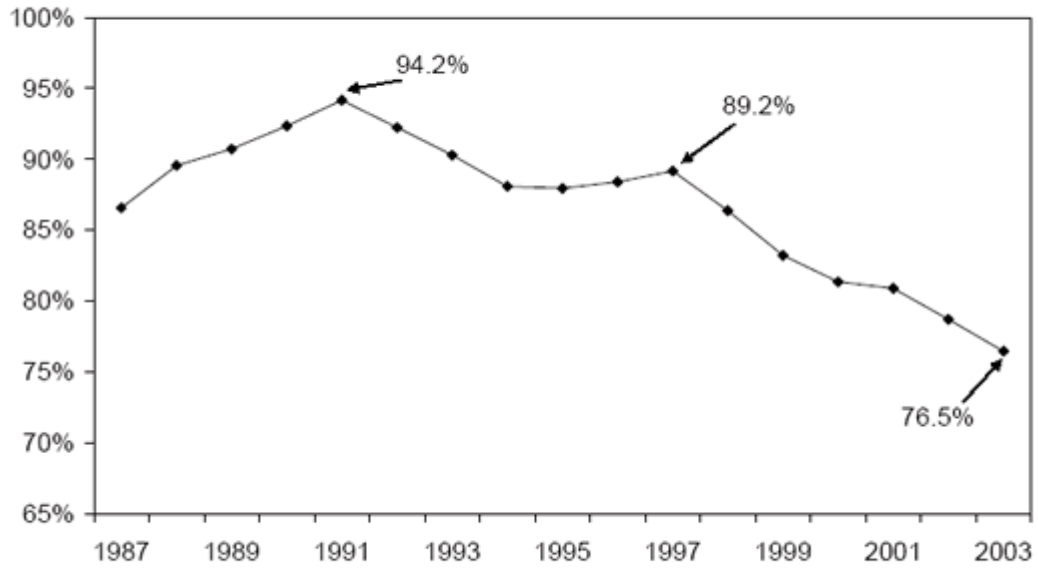
While demand for manufacturing output has remained constant (or even grown) as a share of the U.S. economy, domestic *production* of manufactured goods has lagged this demand by a widening margin in recent years. This "wedge" between demand and production means that manufacturing

purchases by U.S. consumers and businesses do not translate into expanded employment and output.

This wedge is equal to net imports. One way to measure this is to chart domestic manufacturing production as a share of total manufacturing demand over time. This measure varies greatly over the 1987 to 2003 period, but it sets new lows in every year since 1998 (see **Figure 3**). Raising this share back to its more normal historic level (for example, to 90%, the average level between 1987 and 1997) would be the single most effective lever in spurring manufacturing output and employment, with output rising 16% and employment following along closely.

FIGURE 3

Ratio of domestic manufacturing output to demand



Source: Trade data from the Census Bureau. Output data from the Bureau of Economic Analysis. Manufacturing output for 2003 is a projection based on past relationships between manufacturing and aggregate output.

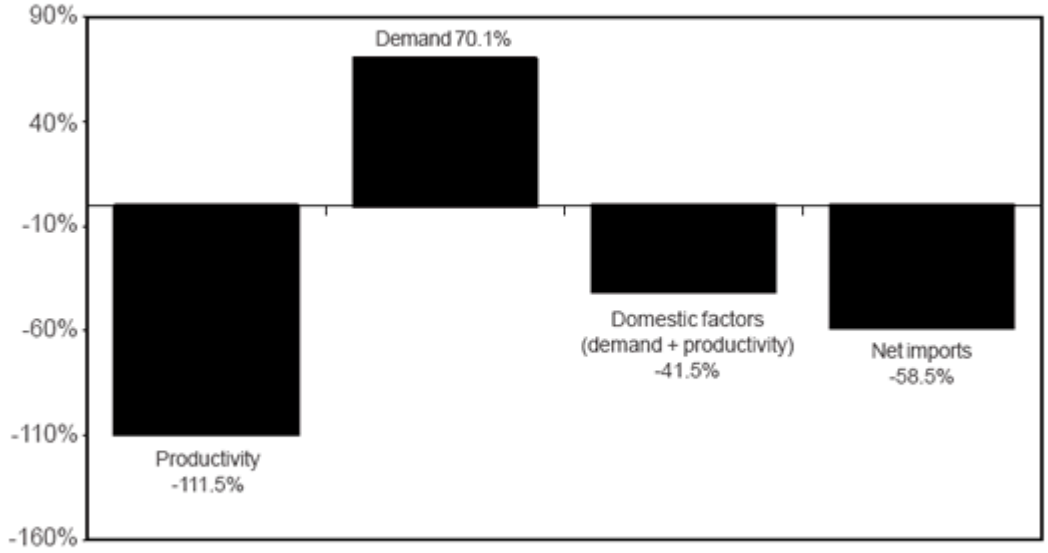
Contributions to manufacturing job loss

Three influences on manufacturing employment have been identified: demand, productivity, and international trade. Examining the aggregate data on these influences reveals how much each factor has contributed to manufacturing's employment decline during various time periods. A formal accounting framework for parsing out these contributions is laid out in the technical appendix. Essentially, employment in manufacturing will rise as demand for manufacturing output rises, but will fall as productivity rises and/or domestic demand is satisfied by manufacturing imports.

Figures 4 and 5 summarize the contributions of demand growth, productivity growth, and net import growth to manufacturing employment over 1998-2003 and 2000-2003.

FIGURE 4

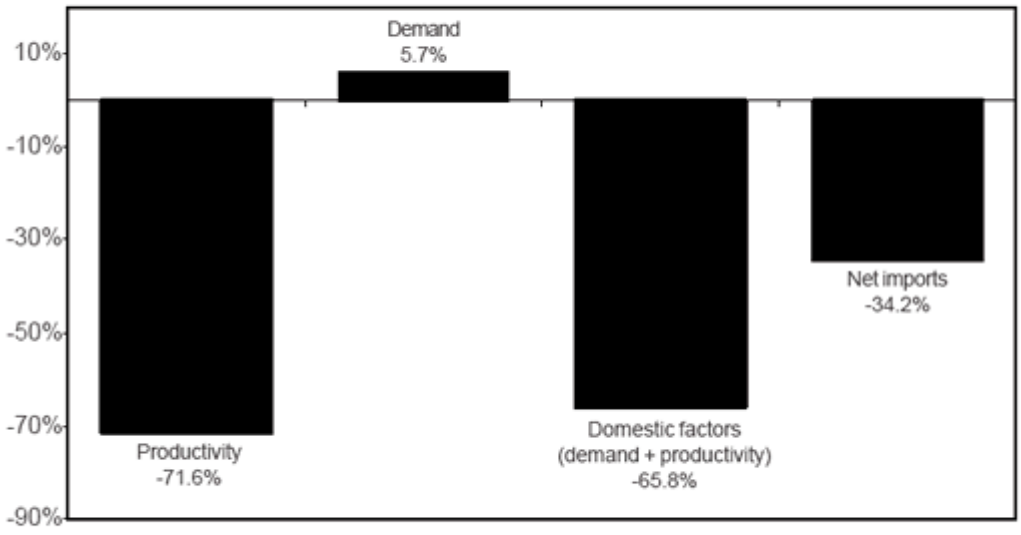
Contributions to manufacturing employment (1998-2003)



Source: See Table A1.

FIGURE 5

Contributions to manufacturing employment (2000-2003)



Source: See Table A1.

Growing net imports in this decomposition explains 59% of the decline in manufacturing employment since 1998 and 34% of the decline since 2000. Domestic factors (demand growth and productivity growth) cannot come close to explaining the total drop in manufacturing employment from 1998 to 2003. Over this period, productivity rose extraordinarily quickly in manufacturing,

but so did domestic demand.[2] Even in the 2000 to 2003 period, when productivity growth was fast and the recession led to sluggish demand growth, domestic factors do not explain a large portion of the total job loss. From 1998 to 2003, 3.04 million jobs were lost in manufacturing, with rising net imports accounting for about 1.78 million of them. Between 2000 and 2003, 2.70 million jobs were lost in manufacturing, with rising net manufactured imports explaining about 935,000 of this decline.

Conclusion

The U.S. economy has been shedding manufacturing jobs since 1998, with the current level of manufacturing employment at its lowest point since 1958. Some have argued that this could be the manifestation of changing demand patterns and rapid productivity growth in this sector. This argument is often linked to admonitions against those who would blame international trade flows for the loss of manufacturing jobs in the United States.

It is premature to shift responsibility for the struggles of the manufacturing industry away from international trade. Demand for manufacturing output, properly measured, remains in line with the historical average of the past couple of decades. There has been no long-term shift away from the relative share of manufacturing goods in total demand. Furthermore, the domestic factors influencing manufacturing employment (demand and productivity) cannot by themselves explain the scale of job loss in manufacturing—rising trade deficits have made a significant contribution to the industry's job loss.

The rising trade deficit in manufactured goods, which has not been compensated for by growth in other sectors' net exports, can explain 34% of the decline in manufacturing employment between 2000 and 2003. Some will argue that the trade deficit in manufactured goods is, in fact, a long-run trend in the U.S. economy that will not be reversed. The idea seems to be that the United States can afford to run large trade deficits in manufactured goods as long as it runs large surpluses in services, reflecting the shift to a post-manufacturing economy. This trade-off between manufacturing and services is theoretically possible, but—given that the U.S. service surplus is 11% the size of its manufacturing deficit and that this service surplus has shrunk by 0.5% of GDP over the past seven years—it is unrealistic to expect that the current enormous trade deficit in manufactured goods can be sustained through burgeoning service exports.

The manufacturing employment situation calls for attention from policy makers. First and foremost, the value of the dollar should be encouraged to fall against a wider range of currencies. In the past year, the dollar has lost almost 40% of its nominal value against the euro. Although this was a necessary adjustment, it is now time for other countries to allow their currencies to fall. A block of East Asian countries (China, Malaysia, and Taiwan) account for 30% of the total U.S. trade deficit by pegging their currencies firmly against the dollar and impeding necessary adjustments. These nations should be pressured to revalue their currencies. If these countries allow their currencies to adjust, this will relieve the competitive pressure on other nations to allow their currencies to move against the U.S. dollar as well.

There are other steps not directly related to trade that can also be taken to aid U.S. manufacturing firms. Given that much of the manufacturing industry's distress is caused by events and policies outside its own control (i.e., the overvalued dollar), it seems appropriate for policy makers to lend support to the manufacturing industry. One way to do this is for the federal government to relieve the burden of the fixed costs of U.S. manufacturing firms by picking up some legacy costs that firms have incurred for retiree health and pension benefits. Manufacturing firms are far more likely to have offered sufficient retiree health and income benefits and are now suffering financially as a result. Firms with large legacy costs should not be punished for being good employers, and workers and retirees should not be punished for economic events outside their purview.

Lastly, the proposition must be abandoned that trade is blameless for the recent loss of manufacturing jobs and that the decline in manufacturing employment is a natural phenomenon that cannot (and should not) be arrested. There is nothing desirable, sustainable, or irreversible about the present enormous trade deficits in manufactured goods that the United States currently carries.

Questions for Discussions:

1. What are the three factors that influence the manufacturing industry?
2. What are the culprits for the manufacturing job loss that some economic observers have recently claimed in opposition to the view that trade has been the primary driver?
3. What has caused the decline of manufacturing as a share of total GDP in the U.S.?
4. While domestic manufacturing output has declined, there hasn’t been a long-term demand shift away from manufactured goods in the U.S. Where can we find proof?
5. Is dollar devaluation a way to solve the manufacturing employment problem?
6. What does “wedge” mean?
7. What steps can be taken to aid U.S. manufacturing firms?
8. Is trade totally blameless for the recent loss of manufacturing jobs?