MANUFACTURING MATTERS

The notions of "A Post-Industrial Society" and of "A Service Economy" are simply wrong.

To maintain and improve the U.S. standard of living we have no choice but to keep manufacturing here because it generates the "good" service jobs.

A permanently falling dollar translates into continually impoverishing America.

The only route is to improve productivity and hence competitiveness through every means at our disposal.

Fortunately, there are good new tools at hand and preliminary results of their application are encouraging.

Manufacturing’s Remarkably Stable Share of GNP

- Popular opinion says that manufacturing’s importance to the economy has seriously declined in the past decade.
- The fact is that manufacturing’s share of GNP (gross national product) has remained remarkably stable, at 20 to 23 percent, for more than 45 years.

Source: Department of Commerce, Bureau of Economic Analysis

Manufacturing as a Percentage of GNP, 1948–1990
Manufacturing's Total Contribution Is Much Higher

- Beyond what manufacturing adds directly to GNP through final sales, many goods are produced at the intermediate level for use in producing other goods and services.
- Add up all of this intermediate production and you find that manufacturing accounts for 39 percent of intermediate activity.
- Taking a weighted average of final sales and intermediate activity, manufacturing comes to 31 percent of total economic activity.

Source: Department of Commerce, Bureau of Economic Analysis
Manufacturing’s Multiplier Effect on the Economy

- Manufacturing stimulates a good deal of activity in other sectors through its demand for intermediate products.
- The stimulus of manufacturing on total activity is greater than from all other broadly defined sectors of the economy.
- A change in manufacturing output of $1 results in a total increase in output throughout the economy of $2.30.


Manufacturing’s Multiplier: Change in Total Output from $1.00 in Final Sales
Manufacturing's Significant Contribution to Low Inflation

- From 1981 onward, the rate of inflation for goods has been significantly lower than for services.
- Indeed, the inflation rate for goods has averaged exactly half that for services in the 1982–1993 period: 2.4 percent versus 4.8 percent.

Source: Bureau of Labor Statistics

Inflation in Goods and Services, Annual Average 1982–1993
Productivity: Manufacturing's Commanding Lead

- Manufacturing productivity growth is the primary factor that sustains and increases the U.S. standard of living and economic growth.
- Manufacturing productivity growth averaged almost 3 percent during the 1980s and early 1990s, nearly three times as high as in the non-farm business sector.
- Productivity gains also help to restrain cost increases and hold down prices to consumers.

Source: Bureau of Labor Statistics

Manufacturing and Non-Farm Productivity Growth, 1985–1993 (change from the previous year)
Manufacturing's Productivity Lead Soars as a Result of Technology

- When productivity is measured in terms of output per unit of labor and capital, manufacturing productivity is six times greater than productivity in the non-farm business sector overall.
- This broader measure, total factor productivity, mainly reflects technological advance.

Total Factor Productivity, 1979–1990 (annual average growth rate)
Manufacturing Performs Most of the Nation’s R&D

- Over the period 1970–1993, 68 percent of total R&D was performed in industry.
- Ninety percent of all industrial R&D is conducted by manufacturers.

Industrial and Total R&D Spending, 1970–1993
Quality Improvement Noted by Majority of American Public

- By a significant majority (66 percent), the public believes the quality of American manufactured goods has improved over the past five years.

Assessment of American Products' Quality Over the Past Five Years

Source: Pew Research Center, 1994
Dramatic Comeback in Three Key Industries

AUTOS
- Detroit's share of the U.S. market was edging close to 75 percent in 1994, up from just more than 70 percent in 1991.
- American automakers are now among the world's leaders in low-cost production and in design, and they have made dramatic improvements in quality.
- The productivity increase in 1992 was a very healthy 8.2 percent.

SEMICONDUCTORS
- In 1992, U.S. semiconductor makers regained the number one spot in the $77-billion global semiconductor business.
- In 1993, U.S. chip makers expanded their lead by growing 35 percent, with nearly every producer earning record profits.

STEEL
- Work-hours per ton of production have shrunk dramatically, from almost 12 in 1950 to 4.5 in 1992.
- Productivity in 1992 grew a strong 8.9 percent.
- Exports since 1985 have quadrupled.
American Unit Labor Costs Have Fallen Relative to Competitors

- As line A indicates, the United States has steadily lowered its unit labor costs relative to the other industrial countries.
- As line B indicates, in the early 1980s, the overvaluation of the dollar made the United States temporarily uncompetitive. Once the dollar was properly valued after 1987, competitiveness was restored.
- If the dollar had never become overvalued, the United States would have been highly competitive the entire time.

Source: Bureau of Labor Statistics

Ratio of Unit Labor Costs in the United States to Weighted Average of 11 Other Industrial Countries