Economic and Manufacturing Outlook

The “Great Recession” ended in June 2009, but the economy expanded by just 2.1% over the past year.

Real gross domestic product

GDP is forecast to grow near trend in 2012 and slightly above trend in 2013.

Business cycle recovery path

Employment fell by over 8.7 million jobs between December 2007 and February 2010, but began to rise and has added 1.8 million jobs over the past 12 months.

After peaking in October 2009, the unemployment rate has fallen by 1.9 percentage points.

Economic and Manufacturing Outlook
Okun’s Law: for every percentage point that GDP growth deviates from its trend – leads to a half percentage change in the unemployment rate in the opposite direction.

The unemployment rate is forecast to edge lower.

Inflation has risen.

In large part due to the movement of oil prices. However, adjusted for inflation, current oil prices are below the levels that existed thirty years ago.

Natural gas prices have fallen sharply.

Expenditures on energy are below the historical average.
Removing the volatile food and energy components from the PCE, “core” inflation remains contained

Personal consumption expenditure - less food and energy - chain price index

Inflation is anticipated to rise 2.2 percent this year and next year

Consumer price index

European countries tend to export a larger share of their GDP (countries ranked by GDP)

Exports as a share of GDP (2000-2010)

European vs. U.S. Exports (What Happens in Europe Stays in Europe)

But trade that takes place within the United States is not counted as an export

Trade that remains within the EU is counted as an export – 67% of EU exports remain within the EU
Most of the exports of the United States go beyond NAFTA.

Excluding exports to trade-zone countries leads to a very different view.

The export comparison between the U.S. and other countries is not as extreme.

Is the U.S. Losing Its Manufacturing Base?

Manufacturing output peaked in December 2007 and fell 20.4% over the following 18 months.
Manufacturing capacity utilization collapsed to the lowest rate in 70 years.

Job declines in the manufacturing sector were significant, with over 2.0 million jobs lost over that same period.

How has Manufacturing Performed Over the Past Sixty Years?

Manufacturing employment as a share of national employment has been declining for over 60 years.

The number of jobs in manufacturing has been relatively stable over this period, edging lower on average by -0.3% per year since 1947.

Not to make a mountain out of a molehill, but manufacturing employment was increasing up until 1979 and has been moving lower over the past 30 years.
William Strauss, Senior Economist and Economic Advisor
Federal Reserve Bank of Chicago

However, service sector employment has grown more than fourfold over this period, averaging growth of 2.3% per year since 1947.

While manufacturing employment growth has been edging lower over the past 63 years, manufacturing output increased by 3.1% per year.

This translated into an almost 600 percent increase in manufacturing output over this time period.

The increase in output can be attributed to strong productivity growth experienced by the manufacturing sector.

What took 1,000 workers to produce in 1950 takes 170 workers today.

Manufacturing productivity growing faster over the past 40 years.
The divergence in productivity appears to have occurred around the mid-1970s.

This divergence is especially apparent in durable manufacturing.

Strong productivity growth had allowed the manufacturing sector to grow faster than the overall economy.

However, lower relative prices in the manufacturing sector has led to manufacturing comprising a smaller share of GDP over time.

How profitable is manufacturing?

While more cyclical, profits in manufacturing have outperformed returns in nonfinancial corporate businesses.
The Manufacturing Sector Continues to Re-invent Itself

Over the last twenty years the fastest growing sector, not surprisingly, has been computer and electronic components.

There has been a large number of industrial sectors that have risen and fallen over the past twenty years.

The collapse in manufacturing experienced in 2008-2009 is closely linked with the economic recession.

Declines in manufacturing output were broad-based during the Great Recession – especially in vehicle and primary metals manufacturing.

The recovery has also been broad-based with motor vehicles and primary metals manufacturing leading the way.
Manufacturing workers have suffered steep employment declines over the current cycle. The overall economy's employment growth also struggled.

When changes in nonfarm employment are considered, the most recent manufacturing employment downturn is not unprecedented.

The financial crisis and its aftermath has hampered the current economic expansion.

The recovery in manufacturing output is in-line with past industrial recoveries. Productivity in the overall economy has grown at a rate near the low-end of previous expansions.
However, productivity within the manufacturing sector has grown at a much faster pace.

Manufacturing employment losses have occurred across numerous countries – among 20 big economies, 22 million jobs were lost.

Is the U.S. positioned to continue its strong productivity gains?

The vast majority of U.S. research and development is being privately funded.

Lessons from the farm sector.
We are producing more in our farm sector than at any time in our history.

Real gross value added: farm business
Billions of chained 2005 dollars

And we are accomplished this remarkable feat with less than 2.0% of our employment devoted to farming.

Share of total employment
percent

Real gross value added: farm business

China has risen to number one in terms of U.S. imports, representing 18.1% of all imports in 2011.

Trade with China

While China has risen to be our third largest export country, it represents only 7.0% of U.S. exports.

Trade balance (customs value)
Billions of dollars

This difference has led to China having the largest trade deficit with the U.S.
William Strauss, Senior Economist and Economic Advisor
Federal Reserve Bank of Chicago

China has certainly increased the amount of goods flowing into the U.S.

Imports (customs value)
Index 1990=100

Exports (f.a.s.)
Index 1990=100

While China has increased its share of imports to the U.S., the Pacific Rim as a whole has had a declining share since the mid-90s

The Current Expansion

Beginning in July 2009, manufacturing output in the United States has been increasing at a 6.5% annualized rate and has recovered 74.8% of its drop in output

Manufacturing capacity utilization has been rising since June 2009
And while manufacturing jobs have been rising, they have only recovered 21.1% of the jobs lost during the downturn.

Manufacturing employment

Manufacturing output is in the process of recovering its losses. The most recent decline in manufacturing was cyclical, not structural.

Profits in manufacturing have outperformed profits for the rest of the nation.

The trends that have dominated manufacturing for the past 70 years are suggestive of the future for U.S. manufacturing: ever increasing output with employment representing a smaller share of total employment.

Summary

Industrial production is forecast to rise at a solid pace.