

# Current Economic Conditions

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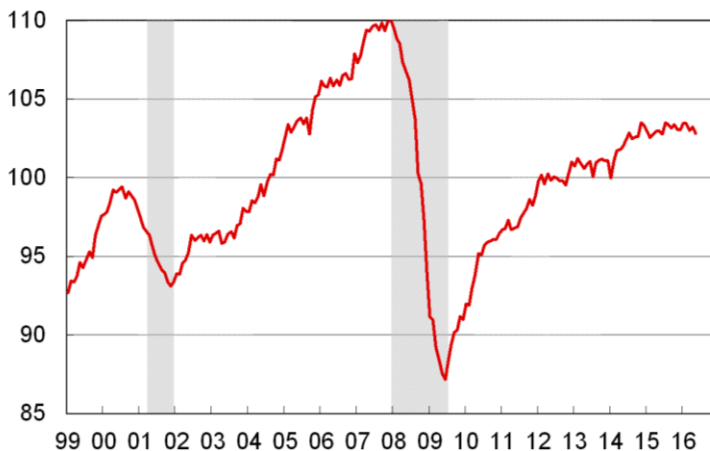
June 17, 2016

## AN UPDATE ON U.S. MANUFACTURING

U.S. industrial production declined 0.4% in May, leaving it down 2.9% since its November 2014 post-recession peak. While the decline over the last 18 months is mostly the result of a big decline in mining production (down 17.6% from December 2014 to April 2016), the May decline was led by manufacturing. (Mining production actually rose slightly!) Industrial production in manufacturing fell 0.4% in May, and data for the prior two months were revised down, leaving production down 0.6% since July 2015. While an inventory-driven decline in the volatile motor vehicle and parts industry accounted for much of the May decline, industrial production was down in most manufacturing industries. I refuse to call such a small cumulative decline a “manufacturing recession”, but declines in March and May certainly raise concerns. Further declines could get me to soften my resistance to the “recession” label.

Monthly movements in industrial production reflect a mix of short-term fluctuations and long-term trends and a mix of economy-wide forces and industry-specific factors. Some of the short-term fluctuations reflect statistical “noise,” so it’s useful to look at growth over a longer time period. Over the last twelve months, industrial production in manufacturing is down 0.1%; essentially flat. Of the 20 major industry groups for which industrial production is reported, five show year-over-year declines of more than 3%:

**US Industrial Production: Manufacturing**  
Index, 2012=100



fabricated metal products, machinery, apparel and leather goods, paper, and “other manufacturing”, which includes logging and publishing. Declines in drilling activity in response to falling oil prices have hit production of fabricated metal products (e.g., steel pipe for well casings) and oil-field machinery. Digitization of reading material has sent the paper and publishing industries into long-term declines. Apparel and leather goods are also in a long-term decline. Only three industries show growth of more than 3%: nonmetallic mineral products, computers and electronics, and miscellaneous manufacturing, a grab-bag that includes sporting goods, toys and games, and medical products. The remaining 12 industries are clustered around zero growth.

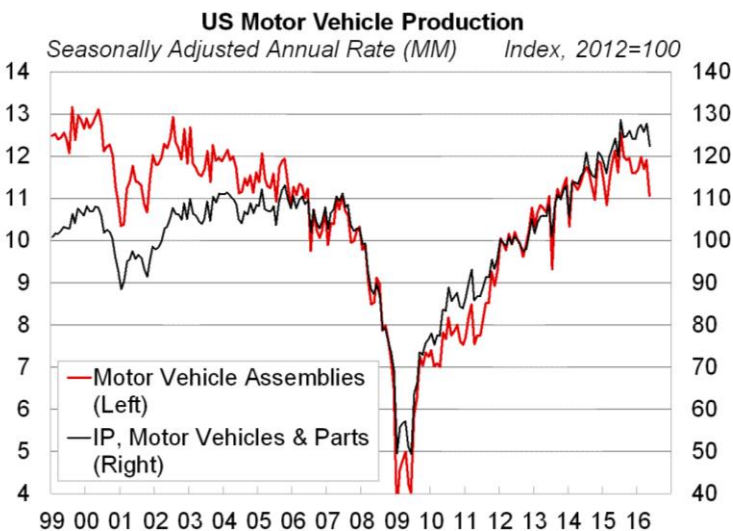
Looking forward, my leading index for U.S. industrial production, which signaled a small decline in industrial production in the first half of 2016, is signaling a similarly small recovery in the second half, but generally continues to point to a flattish short-term outlook for U.S. manufacturing. Looking out further, expect strength in wood products (e.g., lumber), nonmetallic mineral products (including stone, clay, and glass products used as building materials) and furniture, as housing construction and household formation continue their long, slow recovery from the housing crisis of the last decade. The housing recovery has been frustratingly slow, but is likely to persist for several more years. Chemicals and plastics and rubber products should experience strong growth as plants built to take advantage of abundant natural gas liquids from shale formations come on line over the next few years. However, this growth will not be as strong as it would have been if oil prices had not collapsed. North American chemical producers, which use natural

gas liquids as a feedstock, still have a cost advantage over their foreign counterparts, which use naphtha as a feedstock, but that advantage has shrunk as oil prices have declined, meaning that prices and profit margins received by American chemical companies won't be as large as expected before oil prices fell.

Several industries are likely to see either negligible growth or further declines. Apparel and leather goods production, which has shrunk so much that it accounts for less than 0.3% of value added in U.S. manufacturing, continues to shrink. Textile production declined 56.7% from an all-time high in November 1997 to a cyclical trough in July 2009. It rose 15.1% over the next year, presumably as inventories were rebuilt, but has declined slightly since then. The long-term decline may have ended, but there is no sign of a recovery. The paper and publishing industries show similar trends; big declines through the Great Recession, no recovery afterwards. It's hard to believe they will grow in an increasingly digital world.

The food, beverage, and tobacco industries, which account for almost 15% of value added in manufacturing – more than any industry except chemicals – is likely to grow, but only at a 1-1.5% rate. Given slowing population growth, the aging of the population (adults generally eat less as they age) and health-related moves to less-processed (single-ingredient) foods, food is not a growth industry. (In the context of data on industrial production, "food" is a manufacturing industry. Think of it as food processing.)

That leaves several major durable goods industries: primary metals, fabricated metal products, machinery, electrical equipment and appliances, motor vehicles and parts, and aerospace and miscellaneous transportation equipment. Motor vehicle production is likely at or near a peak, related to a similar peak in vehicle sales. I expect a flattening in vehicle production, not a downturn, but those expecting significant further growth after the strong rebound of the last seven years are likely to be disappointed.



Industrial production of motor vehicles and parts is likely to drift upward due to quality adjustments – the Federal Reserve counts improvements in vehicle quality as increases in industrial production – but builds probably won't rise much from current levels. Aircraft production will continue to grow very slowly. Global production is dominated by two producers – Boeing and Airbus – that prefer to keep prices high by restricting growth in production. Forecasts of strong growth in aircraft production always turn out to be too optimistic.

Production of metals will certainly reflect production of vehicles and aircraft, but will also depend on trade policy, the strength of the dollar, and oil and gas drilling. Given the degree of uncertainty about these factors – nothing is harder to forecast than exchange rates – it's hard to accurately forecast U.S. production of metals and metal products. I would expect some rebound in 2017 unless oil prices fall again, but long-term trend growth rates for these industries are likely to stay close to zero. Production of machinery, electrical equipment, and commercial vehicles will also depend these factors and on the level of capital spending. Business investment in equipment, which has been disappointing throughout the recovery that began in mid-2009, has actually declined the last two quarters. As business economists know (but the Fed apparently doesn't), low interest rates do little to boost investment spending.

In the economy more broadly, consumer spending has picked up in response to rising wages and salaries, but employment growth has slowed, giving the Fed an excuse not to raise short-term interest rates at its June meeting. Growth for the remainder of the year will be stronger than in the first quarter, but there will be no significant acceleration in growth without tax and regulatory reform. The Fed's decision not to raise rates in June makes the medium-term outlook for growth worse, not better.