

Economic Outlook

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- The recovery from the worst global recession since World War 2 continues in most countries, but the strength of the recovery varies greatly across regions. Recovery is strongest in the developing countries of Asia and in Brazil. Recovery is weakest in Europe, and some European countries remain in recession. Recoveries in North America and Japan lie between these two extremes. Global GDP is expected to rise 3.2% in 2010 after declining 2.1% in 2009, the first decline since World War 2.
- U.S. real GDP rose at a 5.9% annual rate in the fourth quarter of 2009, the fastest quarterly growth rate since 2003. GDP growth is expected to continue in 2010, but at a slower rate. Annual GDP is expected to grow by 3.6% in 2010 after declining 2.4% in 2009. Industrial production has risen about as rapidly over the first seven months of the recovery (since June 2009) as it did during the recoveries from the last two severe recessions (1973-75 and 1981-82).
- Real GDP for the European Union (27 countries comprising most of Western and Central Europe) rose just 0.1% quarter-to-quarter (0.2% annualized rate) in the fourth quarter of 2009 after rising 0.3% in the third quarter. Real GDP growth in the Euro-Zone (15 countries in Western Europe sharing a single currency) was similarly disappointing. Of the major European economies, only France posted above-trend growth in the fourth quarter. Growth was negligible in Germany and the UK, and GDP declined in Italy and Spain. Industrial production in European Union manufacturing rose 2.6% from April to November, but fell almost back to its April low in December. However, detailed data by industry for the Euro-Zone show that some cyclical industries (chemicals, rubber and plastic products, motor vehicles) continued to rebound strongly through December.
- Real GDP in Japan rose at a 4.6% annual rate in the fourth quarter, the third consecutive quarterly increase after four consecutive declines. Industrial production in Japan has risen for 11 straight months since hitting a 26-year low in February 2009. Production was up 20% year-over-year in January. Japan's leading diffusion index stood at 81.8 in December, well above the neutral level of 50.
- Industrial production has risen to new record highs in China, India, and South Korea, and is one good month away from a new record high in Taiwan. Year-over-year growth rates are well into double-digits throughout the region.
- Industrial production in Brazilian manufacturing, on a seasonally adjusted basis, rose every month in 2009. It was up 17.9% year-over-year in December, but still below its pre-recession peak. Recovery has been less robust in Argentina, but production was up 6.6% year-over-year in December. Recovery began later in Mexico, but industrial production in Mexican manufacturing rose above year-earlier levels in December for the first time in nearly two years.



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Global GDP Growth

	2006	2007	2008	Forecast					2013
				2009	2010	2011	2012	2013	-2018
North America	2.9	2.2	0.5	-2.7	3.5	3.1	3.1	2.7	2.8
United States	2.8	2.1	0.4	-2.4	3.6	3.0	3.0	2.6	2.8
Canada	2.9	2.5	0.4	-2.5	2.6	3.5	3.6	3.3	2.5
Mexico	5.1	3.3	1.4	-6.6	3.5	3.5	3.4	3.7	4.1
Western Europe	3.1	2.7	0.5	-4.0	1.0	1.6	1.8	2.0	1.9
France	2.4	2.3	0.3	-2.3	1.2	1.5	1.7	2.2	2.1
Germany	3.4	2.6	1.0	-4.9	1.5	1.8	1.9	1.8	1.6
Italy	2.1	1.5	-1.0	-4.9	0.7	1.3	1.3	1.6	1.4
Spain	4.0	3.6	0.9	-3.6	-0.5	0.7	1.1	1.6	1.8
U.K.	2.9	2.6	0.5	-4.8	0.9	1.7	2.3	2.6	2.5
Central Europe	6.6	5.8	2.9	-4.5	2.0	3.3	4.4	4.5	4.2
Russia	7.7	8.1	5.6	-7.9	2.6	3.7	3.3	3.6	3.3
Asia/Pacific	5.5	6.1	3.1	0.9	5.3	4.6	5.1	5.2	5.0
Japan	2.0	2.3	-1.2	-5.1	1.8	1.1	1.8	2.0	1.3
ex Japan	7.9	8.7	5.8	4.4	7.1	6.4	6.6	6.7	6.4
Australia	2.7	4.8	2.3	1.0	2.9	2.6	3.0	3.5	3.2
China	11.6	13.0	9.6	8.7	10.1	8.5	8.3	8.6	8.2
India	9.7	9.1	6.1	6.8	8.0	7.9	7.8	7.5	7.1
Indonesia	5.5	6.3	6.1	4.5	5.6	5.5	5.9	5.4	5.3
Korea (South)	5.2	5.1	2.2	0.1	3.8	3.5	4.4	3.9	3.6
Malaysia	5.8	6.3	4.6	-1.7	5.6	4.6	5.3	5.1	4.8
Philippines	5.3	7.1	3.8	0.9	4.2	4.5	4.7	4.6	4.6
Singapore	8.4	7.8	1.2	-2.1	5.0	4.8	4.9	4.2	4.0
Taiwan	5.4	6.0	0.7	-2.7	4.9	5.5	5.8	5.0	4.0
Thailand	5.2	4.9	2.6	-2.8	5.6	4.3	4.7	4.4	4.7
Vietnam	8.2	8.5	6.2	5.3	6.5	6.1	7.1	6.9	6.9
South America	5.6	6.3	4.8	-0.8	3.3	4.5	4.6	4.4	4.1
Argentina	8.5	8.7	6.8	-0.3	1.8	3.4	4.0	4.0	3.9
Brazil	4.0	6.1	5.1	-0.4	4.7	5.4	5.3	4.7	4.2
Colombia	6.9	7.5	2.4	-0.1	2.1	3.2	3.8	3.8	3.7
Venezuela	9.8	8.2	4.8	-2.8	-1.2	3.5	3.4	3.6	3.4
World	4.1	3.9	1.8	-2.1	3.2	3.3	3.5	3.5	3.4

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Global Consumer Price Inflation

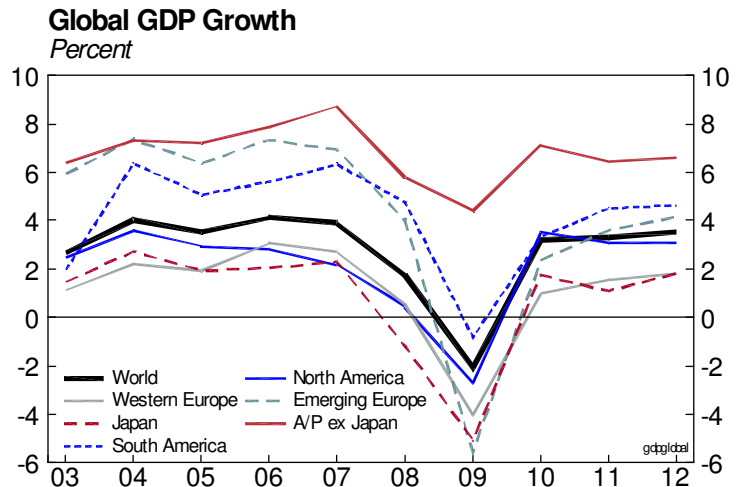
	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	Forecast				2013
					<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	-2018
North America									
United States	3.2	2.9	3.8	-0.3	2.5	2.5	2.5	2.5	2.5
Canada	2.0	2.1	2.4	0.3	1.6	2.0	2.0	2.1	2.0
Mexico	3.6	4.0	5.1	5.3	4.5	4.4	4.1	4.2	4.9
Western Europe	2.0	2.1	3.2	0.5	1.6	1.7	1.8	1.9	1.9
France	1.7	1.5	2.8	0.1	1.8	1.8	1.9	2.0	2.1
Germany	1.6	2.3	2.6	0.3	1.2	1.4	1.4	1.5	1.5
Italy	2.1	1.8	3.3	0.8	1.5	1.9	1.9	1.5	1.6
Spain	3.5	2.8	4.1	-0.3	1.1	1.9	2.2	2.1	1.9
U.K.	2.3	2.3	3.6	2.2	2.8	1.6	1.9	2.1	2.0
Central Europe	5.5	5.6	7.8	4.2	4.4	3.9	3.9	3.3	3.0
Russia	10.9	12.7	14.1	11.7	6.5	6.2	5.6	5.1	3.7
Asia/Pacific									
Japan	0.3	0.1	1.4	-1.4	-0.8	-0.3	0.0	0.7	1.7
ex Japan	3.5	4.4	6.7	2.1	3.6	3.6	3.4	3.4	3.6
Australia	3.5	2.3	4.4	1.8	2.5	2.6	2.7	2.6	2.7
China	1.5	4.8	5.9	-0.7	2.3	3.0	3.0	3.4	3.6
India	5.8	6.4	8.4	10.9	8.5	5.8	5.1	4.4	4.5
Indonesia	13.1	6.3	10.1	4.6	6.1	5.9	4.8	5.0	4.8
Korea (South)	2.2	2.5	4.7	2.8	3.1	2.6	2.6	2.4	2.6
Malaysia	3.6	2.0	5.4	0.6	2.2	3.0	2.9	3.0	3.0
Philippines	6.2	2.8	9.3	3.3	4.8	5.0	5.2	4.8	4.9
Singapore	1.0	2.1	6.5	0.2	1.1	1.3	1.6	1.5	1.7
Taiwan	0.6	1.8	3.5	-0.9	1.7	2.5	2.5	2.4	2.3
Thailand	4.6	2.2	5.5	-0.8	3.9	3.3	3.1	3.0	3.4
Vietnam	7.4	8.3	23.1	7.0	8.0	8.0	7.6	6.5	6.0
South America									
Argentina	10.9	8.8	8.6	6.2	6.7	7.7	8.3	7.7	7.3
Brazil	4.2	3.6	5.7	4.9	4.2	4.3	4.1	3.6	3.4
Colombia	4.3	5.5	7.0	4.2	2.8	4.1	5.0	5.2	5.0
Venezuela	13.7	18.7	31.5	28.6	34.8	28.6	19.7	13.5	8.3

Global Industrial Production

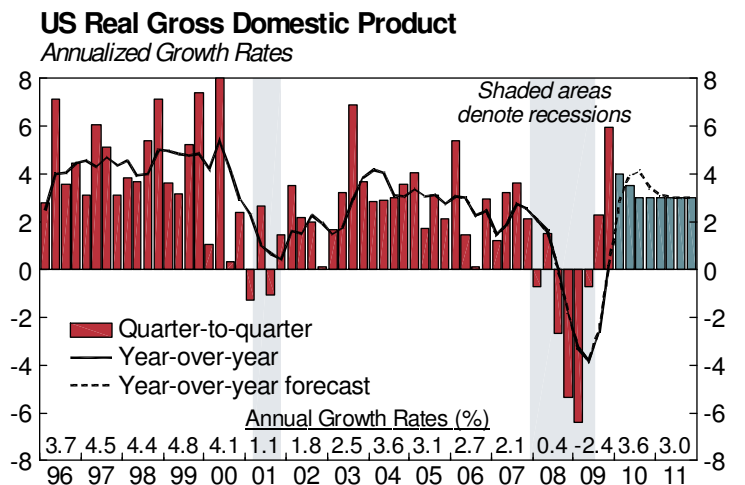
	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	Forecast				2013
					<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	-2018
North America									
United States	2.3	1.5	-2.2	-9.7	6.1	4.2	2.7	2.7	2.8
Canada	-0.3	0.1	-4.2	-10.7	4.7	7.3	6.1	4.4	3.4
Mexico	5.7	2.0	-0.6	-7.3	6.2	6.5	3.8	3.6	4.0
Western Europe	3.1	2.6	-2.1	-13.1	2.6	3.4	2.6	2.2	1.5
France	1.3	1.2	-2.6	-11.6	3.4	3.6	3.0	1.8	1.1
Germany	5.8	5.9	0.0	-16.1	4.7	5.8	3.6	3.2	1.6
Italy	3.6	2.2	-3.3	-17.6	1.6	2.9	1.7	1.4	0.7
Spain	3.9	2.0	-7.3	-15.8	2.5	2.0	2.0	1.5	1.8
U.K.	0.0	0.3	-3.1	-10.2	1.2	2.5	2.9	2.9	1.9
Central Europe	9.2	7.8	0.7	-9.9	4.2	4.5	5.2	5.0	4.5
Russia	3.9	6.3	2.1	-10.8	2.6	4.4	3.5	3.4	3.2
Asia/Pacific									
Japan	4.2	2.9	-3.4	-22.3	14.0	8.0	7.0	4.5	0.9
ex Japan	9.9	10.6	6.8	4.7	11.1	9.0	9.2	8.7	8.2
Australia	1.8	3.0	2.9	-3.3	3.1	2.1	2.5	2.7	2.4
China	16.2	17.9	12.5	11.6	14.8	12.2	11.7	11.8	10.7
India	10.3	10.3	3.9	6.5	10.1	9.5	9.4	6.3	5.7
Indonesia	-1.6	5.6	3.0	0.9	3.0	3.6	3.5	4.4	5.2
Korea (South)	8.9	7.0	3.0	-1.2	10.7	5.3	6.3	6.1	5.3
Malaysia	5.0	1.2	0.7	-7.7	6.9	3.4	3.9	3.1	3.6
Philippines	2.5	-3.8	5.0	-12.8	6.8	7.6	7.9	5.7	5.4
Singapore	11.9	5.9	-4.2	-4.1	10.5	7.3	7.6	3.9	3.6
Taiwan	6.2	5.7	-1.8	-8.7	14.7	13.0	14.5	9.9	5.3
Thailand	7.3	8.2	5.3	-5.2	10.4	4.1	5.4	4.2	4.8
Vietnam	14.6	11.9	12.0	8.0	10.9	12.8	12.5	8.0	8.5
South America									
Argentina	8.4	7.5	4.8	0.6	5.0	6.8	6.7	6.2	5.3
Brazil	2.8	6.0	3.1	-7.4	6.6	6.0	6.0	4.3	4.0
Colombia	10.9	10.9	-3.1	-6.2	1.9	4.5	4.7	4.3	3.4
Venezuela	10.1	6.9	1.4	-10.9	-0.8	4.8	4.4	3.5	3.6
World	4.2	3.9	-0.2	-9.0	6.4	5.5	4.8	4.3	3.9

Macroeconomic Overview

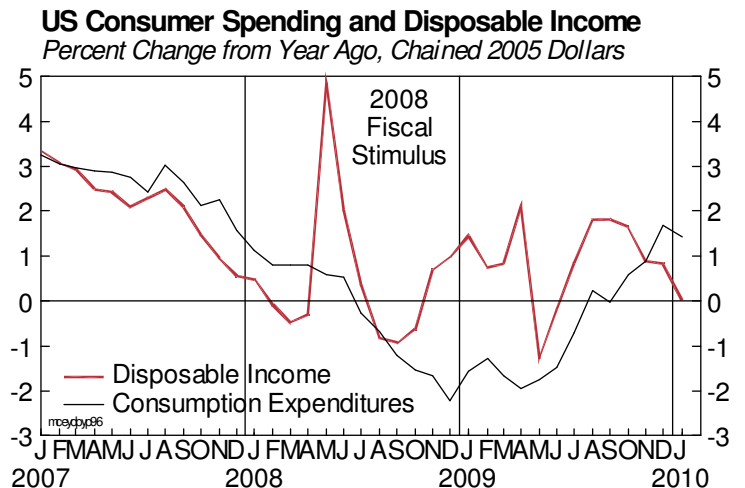
- GDP declined in most of the world in 2009. Only a few countries – most notably China, India, and Indonesia – recorded significant growth in GDP.
- Global GDP is expected to rise 3.2% in 2010, after declining 2.1% in 2009, the first annual decline since World War 2.



- U.S. real GDP rose at a 5.9% annual rate in the fourth quarter, the fastest growth rate since 2003. Nearly two-thirds of the growth was due to a slowdown in the rate of inventory liquidation.
- GDP growth is expected to continue, but at a slower rate.
- Annual GDP is expected to grow by 3.6% in 2010 after declining 2.4% in 2009.



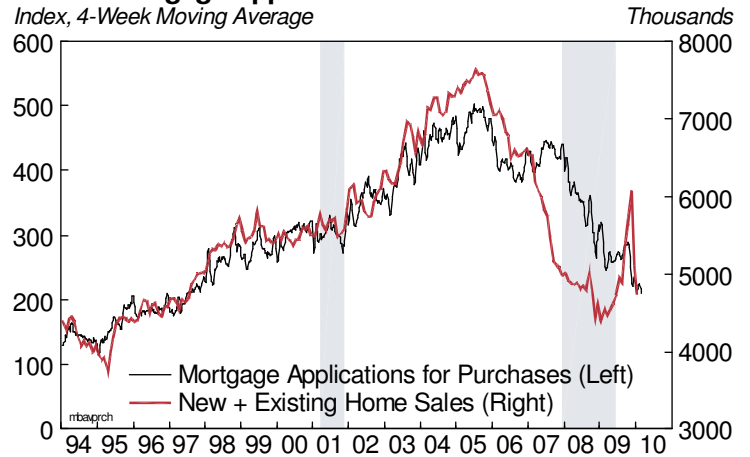
- U.S. real personal consumption expenditures rose at a 1.7% annual rate in the fourth quarter of 2009, after rising at a 2.8% rate in the third quarter. Expenditure rose 0.3% from December to January, getting the year off to a good start.
- Disposable income fell in January because of a jump in the government's estimate of federal income tax payments, which reflected "federal budget projections of higher final settlements and lower refunds for 2010." Wage and salary income rose a healthy 0.4%.



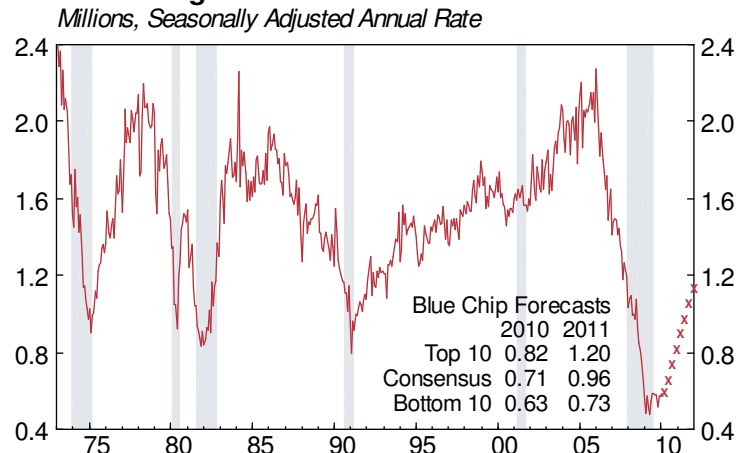
U.S. Construction Activity

- Existing home sales rebounded by 41.3% from November 2008 to November 2009, but plummeted in December 2009 and January 2010. Sales surged in September, October, and November as buyers tried to beat the scheduled expiration of the first-time home owners' tax credit. The credit has since been extended, but sales have fallen back to August 2009 levels.
- New home sales, which surged in early 2009, fell to an all-time low in January.
- Total housing starts bottomed in April 2009, down more than 80% from their January 2006 peak.
- Starts rebounded in May and June 2009, but have remained essentially flat since as homebuilders work off unsold homes and homebuyers target foreclosures.
- Recovery is expected to resume, but starts are expected to remain below one million units in 2010.
- Investment in residential structures rose at a 5% annual rate in the fourth quarter of 2009, after surging at an 18.9% annual rate in the third quarter.
- Investment in nonresidential structures declined at a 13.9% annual rate in the fourth quarter, the fourth consecutive double-digit decline. Credit constraints and the lagged impact of residential construction on associated commercial construction suggest that investment in nonresidential structures will decline further through the first half of 2010.

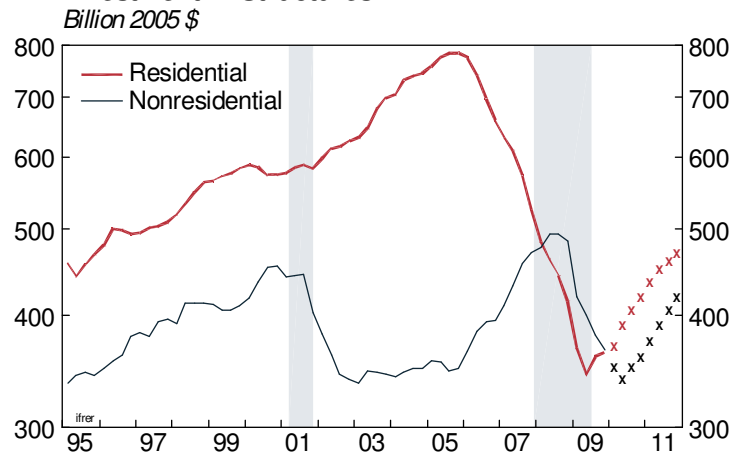
US Mortgage Applications and Home Sales



US Housing Starts



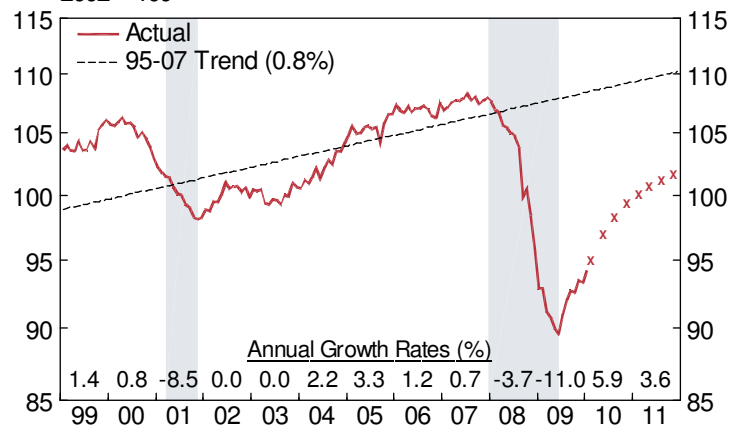
Investment in Structures



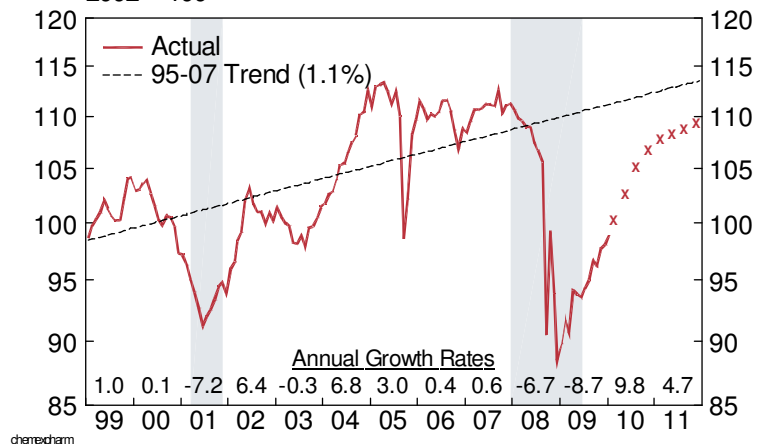
U.S. Production and Key Markets

- Industrial production in U.S. manufacturing (excluding computers, communication equipment, and semiconductors) rose 5.1% (9% annual rate) from June 2009 to January 2010 after falling 17.3% from July 2007 to June 2009.
- The Institute of Supply Management's New Orders Index hit a new cyclical high of 65.9 in January, suggesting that production will continue to rise.
- The expected recovery is weaker than the historical norm, especially after mid-2010, but stronger than most other forecasts.
- Industrial production in the chemical industry (ex pharmaceuticals) has risen 11.8% from its December 2008 low (through January), after falling 21.4% from September 2007 to December 2008.
- Production is expected to grow going forward as inventory liquidation ends and exports to Asia increase.
- Paper production rose 8.5% from April 2009 to January 2010.
- Paper production is expected to continue its cyclical rebound over the next few years, but the long-term trend in paper production is down because of a structural reduction in paper demand as email replaces office documents and the internet replaces newspapers, magazines, catalogs, etc. (An increase in imports cannot explain the weakness in U.S paper production, which parallels similar weakness in printing and publishing.)

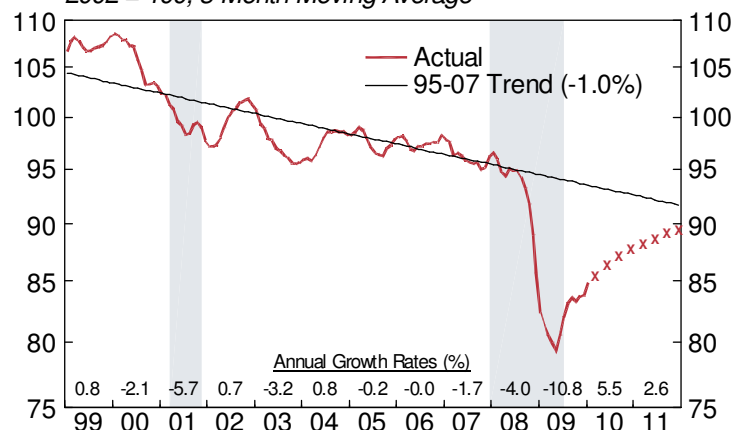
US Manufacturing Production ex High-Tech Sectors
2002 = 100



US Industrial Production, Chemicals ex Pharma
2002 = 100

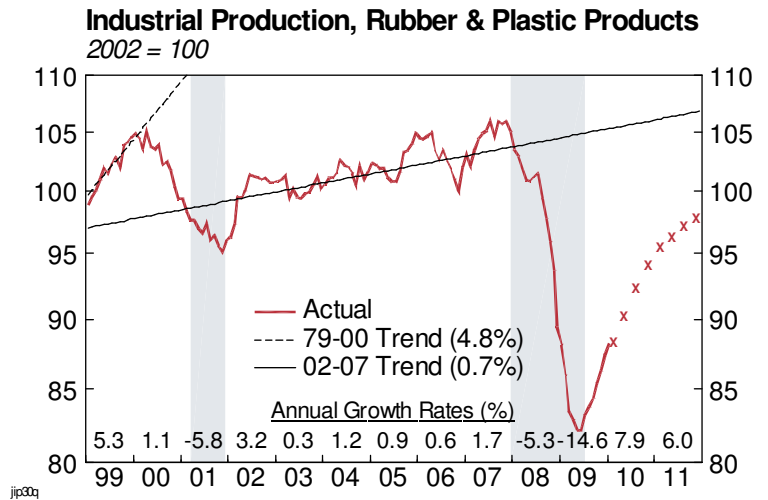


U.S. Industrial Production, Paper
2002 = 100, 3-Month Moving Average

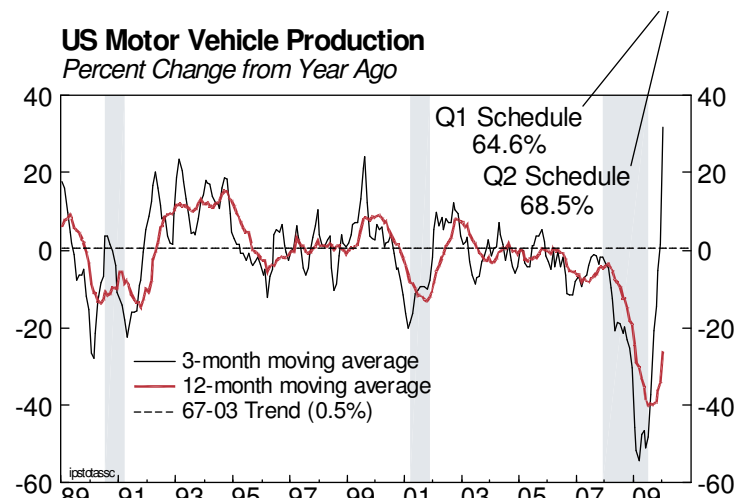
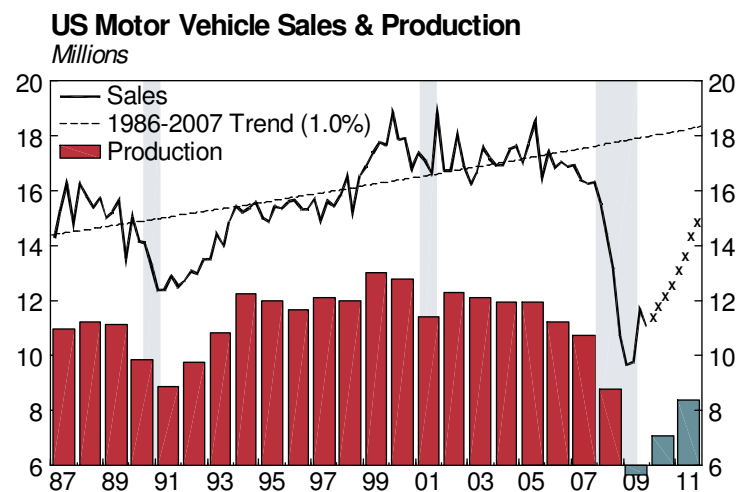


U.S. Production and Key Markets

- Industrial production of rubber and plastic products has risen 7.4% from its June 2009 trough, after falling 22.4% from its November 2007 peak. Recovery is expected to continue.
- Production of rubber and plastic products, which include tires, belts, hoses, and automotive parts made from high-performance polymers, is very dependent on motor vehicle sales and production.



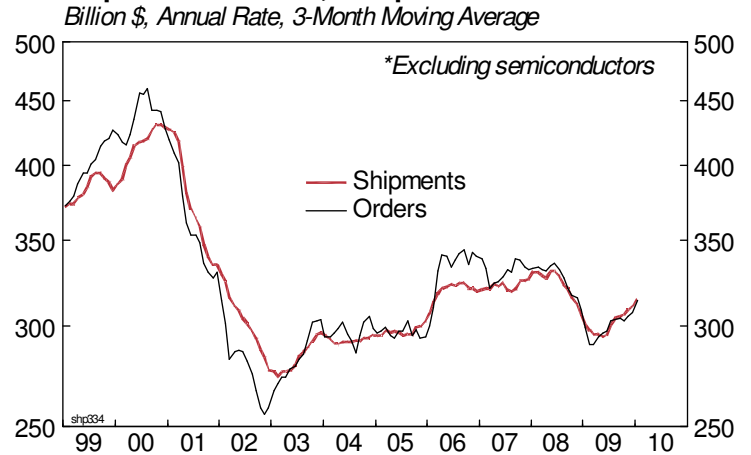
- Update March 2. U.S. motor vehicles sales rose to an 11.1 million annual rate in November, the highest in over a year except for July and August, when sales were boosted by the “cash-for-clunkers” program.
- Sales are expected to trend up through 2010 and – because sales have been running well below normal “scrappage” – could exceed the current forecast.
- Despite the recovery, annual sales, which averaged 17.3 million units over the 1999-2006 period before slipping to 16.5 million units in 2007 and 13.4 million units in 2008, are expected to total only 10.5 million in 2009 and 11.75 million in 2010.
- Motor vehicle production began to recover in the third quarter of 2009 after the two worst quarters since 1958. Despite the second-half rebound, annual U.S. motor vehicle production fell in 2009 to its lowest level since 1961.
- Year-over-year growth rates in U.S. vehicle production will be staggeringly high in the first half of 2010 because of easy prior-year comparisons. Production was up 104% year-over-year in January.



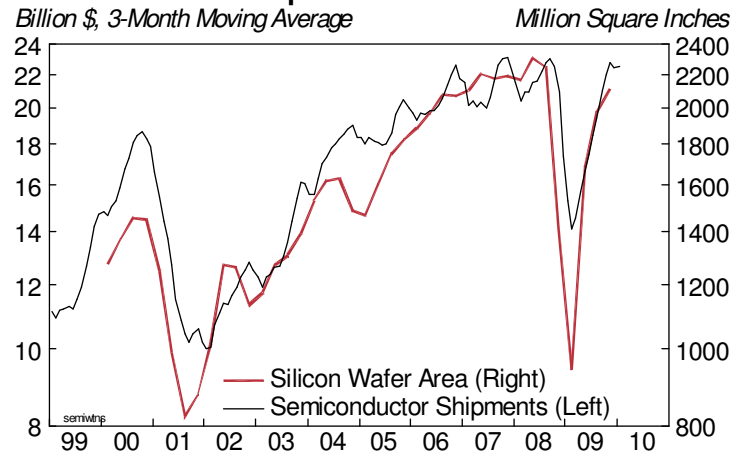
U.S. Production and Key Markets

- U.S. shipments of computers and electronic products (total) hit bottom in June 2009 and were up 14% year-over-year in January.
- Excluding semiconductors, orders hit bottom in January 2009 and have risen since. They are running slightly above shipments. This suggests that shipments will continue to rise at a moderate rate.
- Shipments of silicon materials (wafer area) are a good indicator of global demand for products going into the electronics industry. Wafer area has rebounded strongly since bottoming in the first quarter of 2009 and was up 47.7% year-over-year in the fourth quarter, though still slightly below their pre-recession peaks.
- The data are only reported quarterly back to 2000, but silicon wafer area (in square inches) has been strongly correlated with semiconductor shipments (in dollars), which are reported monthly back to 1976.
- Worldwide semiconductor shipments rose 54% from the first quarter of 2009 to the fourth quarter and are very close to their pre-recession peak.
- Shipments of equipment used to make semiconductors were up 62% year-over-year in the three months ending in January, but are still well below the peak reached in 2007. The book-to-bill (orders-to-shipments) ratio for semiconductor equipment stood at 1.20 (highest since 2003) for the three months ending in January. A book-to-bill ratio above one suggests rising shipments going forward.

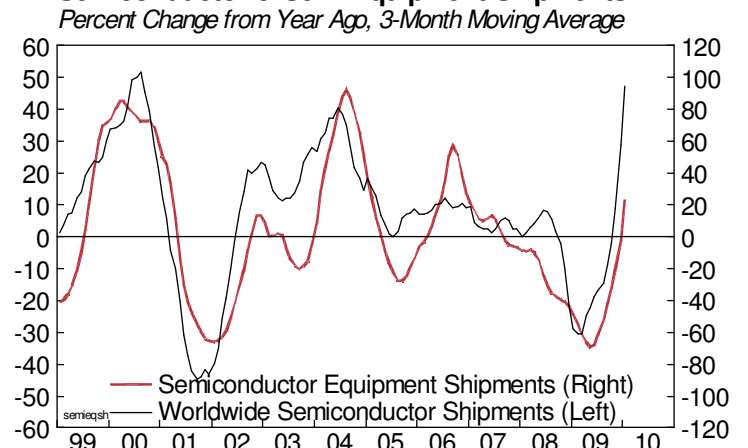
Shipments & Orders, Computers & Electronic Products



Semiconductor Shipments & Silicon Wafer Area

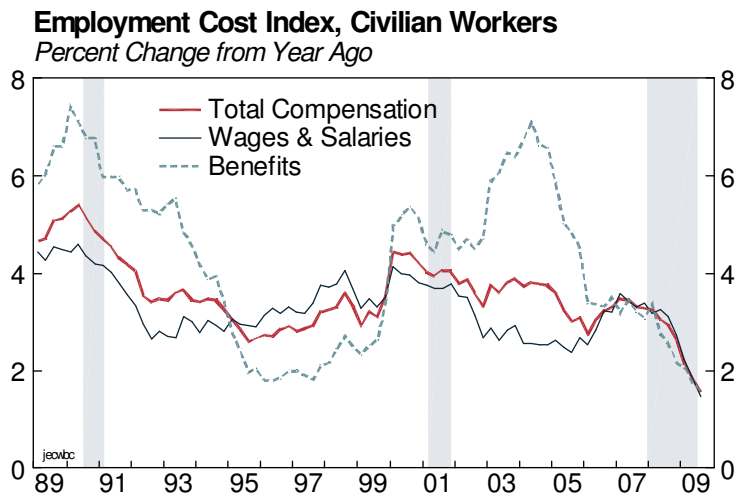
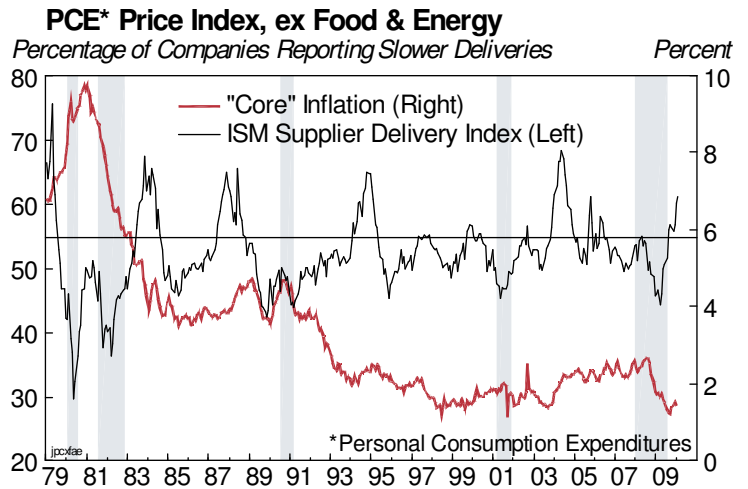
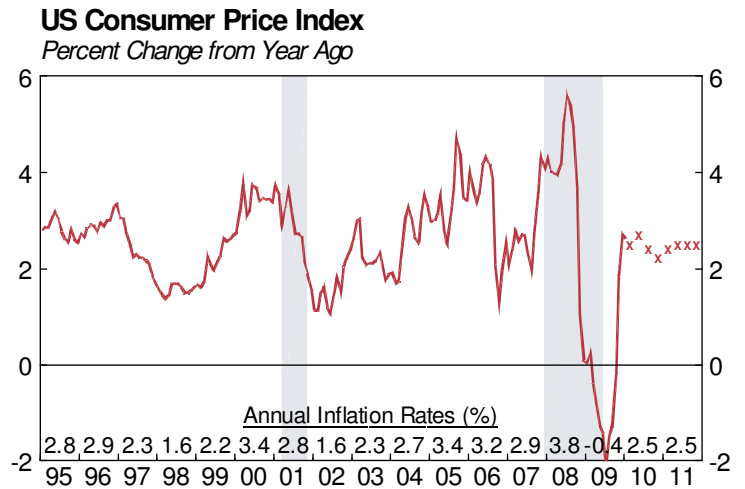


Semiconductor & Semi Equipment Shipments



U.S. Prices and Costs

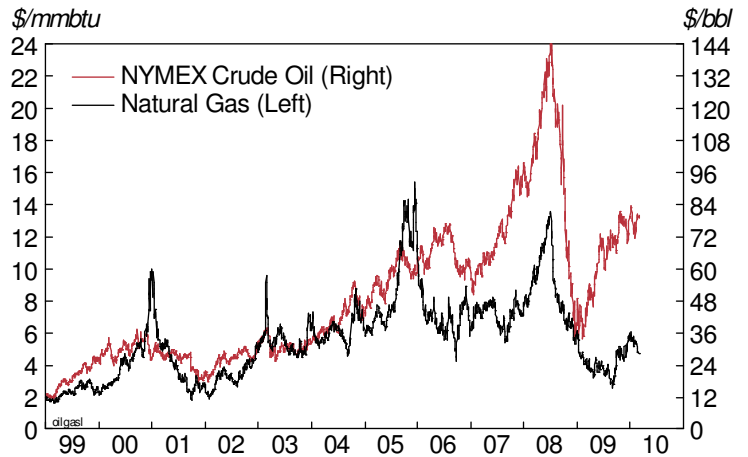
- Inflation, as measured by the year-over-year change in the consumer price index, has risen back into “normal” territory after the oil-driven fluctuations of the last several years. The CPI was up 2.6% year-over-year in January.
- Headline inflation is expected to stabilize in the 2-3% range, but it will continue to be impacted by movements in commodity (e.g., food and energy) prices that are not necessarily driven by economic fundamentals.
- “Core” inflation, as measured by the year-over-year change in the Personal Consumption Expenditures price index, excluding food and energy, fell from 2.7% in July 2008 to 1.2% in September 2009, and stood at 1.4% in January.
- The Institute of Supply Management’s Supplier Delivery Index, a leading indicator of inflation, suggests that there are supply constraints (bottlenecks) in the economy and that further near-term declines in core inflation are unlikely.
- The Employment Cost Index for total compensation was up just 1.5% year-over-year in the fourth quarter; this is the smallest increase since the series began in 1982. High unemployment is likely to put continued downward pressure on labor costs, especially on wages and salaries.
- Given that labor accounts for about 70% of costs and income, a significant increase in inflation is unlikely unless labor costs reverse their current deceleration.



U.S. Prices and Costs

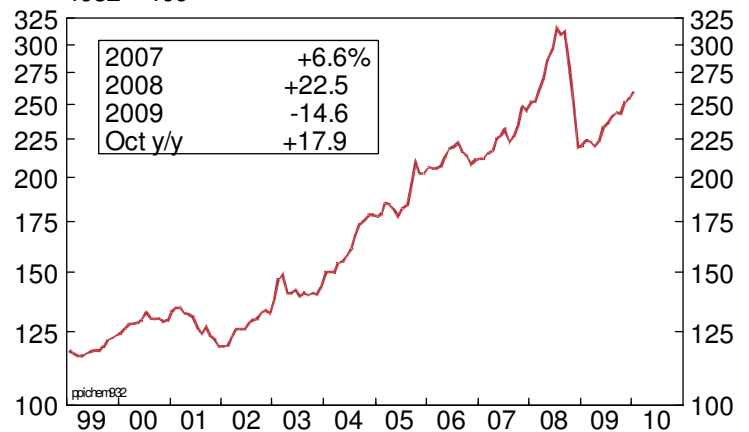
- The price of crude oil (West Texas Intermediate) fell from \$147/barrel in July 2008 to \$33/barrel in January 2009, but has remained in the \$69-84 range since October 2009.
- Natural gas prices fell below \$3 per million btu in 2009 before staging a (largely seasonal) rebound. Recent finds (e.g., Marcellus Shale formation) and new technologies have significantly increased the supply of natural gas in the United States, putting persistent downward pressure on prices.
- After collapsing over the last 5 months of 2008, the Producer Price Index for industrial chemicals has risen steadily since early 2009, tracking rising crude oil prices and some recovery in petrochemical margins.
- There is slight upward pressure on prices assuming that oil and gas prices plateau near current levels.
- Lack of inventory throughout the supply chain, coupled with recovery demand, is creating supply shortages and additional upward pressure on prices.
- The Federal Reserve's target Federal Funds rate remains in a range of 0-0.25%, a record low.
- The Fed faces a difficult challenge in 2010 and beyond. If it raises rates too quickly, the economy could fall back into recession. If it raises rates too slowly, inflation will accelerate, making a future severe recession inevitable.
- Barring surprises, the Fed is likely to keep its funds rate target close to zero until fall.

US Crude Oil and Natural Gas Futures Prices



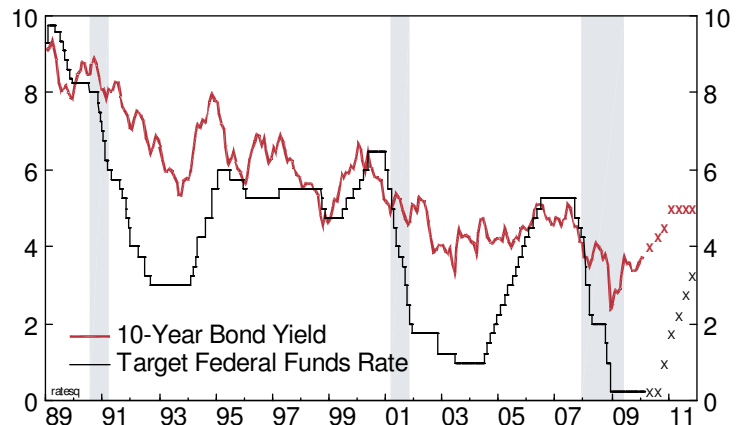
US Producer Price Index, Industrial Chemicals

1982 = 100



US Interest Rates

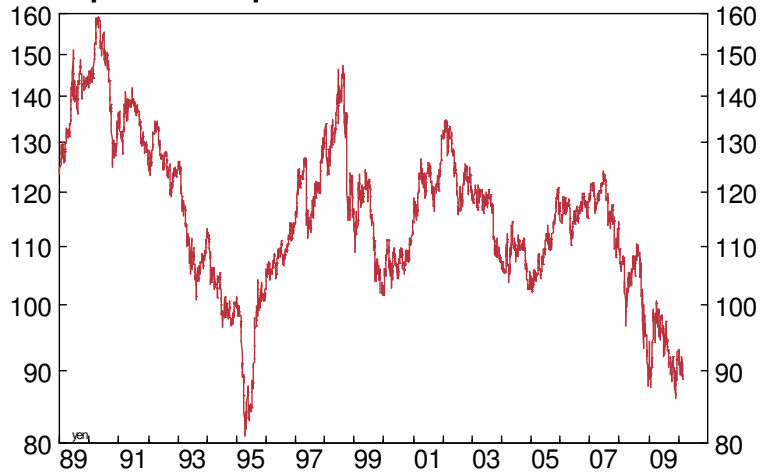
Percent



Trade and Currency Overview

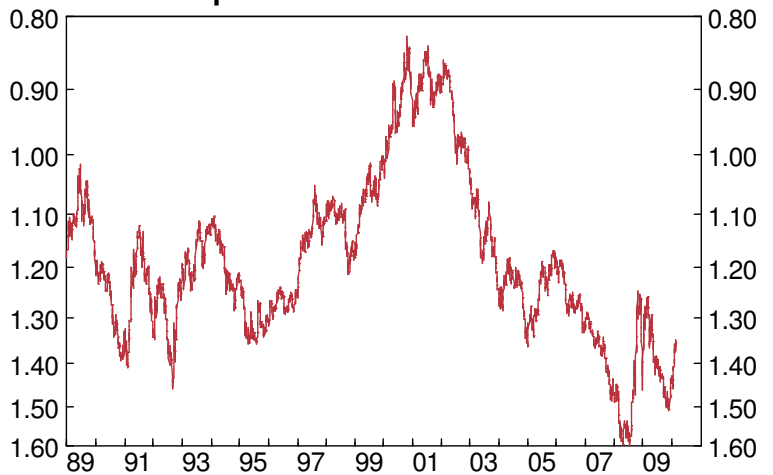
- The U.S. dollar remains near a 15-year lows versus the Japanese yen.
- The strong yen has reduced the profitability and competitiveness of Japanese exporters, but should boost export growth and profitability for U.S. companies.

Japanese Yen per US Dollar



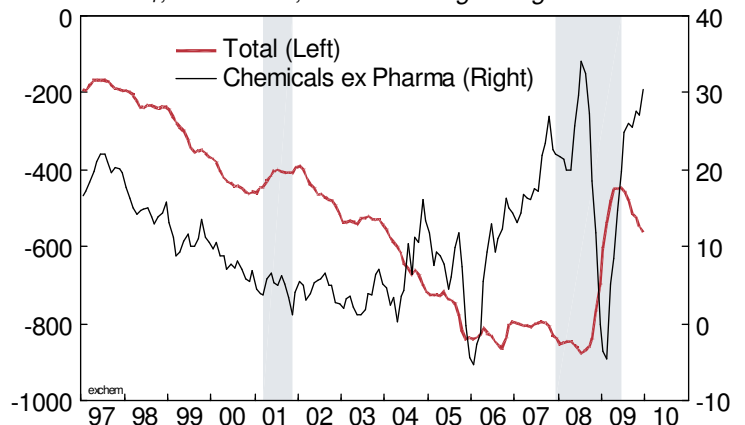
- The Euro strengthened versus the U.S. dollar through most of 2009, but has weakened sharply since December.
- Fiscal problems, particularly in Greece, have put downward pressure on the Euro. The common monetary policy needed to save the Greek economy (and perhaps others) is too stimulative for Germany and France and will likely require further Euro depreciation.
- The Euro is still over-valued relative to the level that equates the purchasing power of the dollar and Euro. (Most estimates put “purchasing power parity” at around \$1.20/Euro.)
- The U.S. trade deficit shrank during the worst of the recession, but has widened recently as imports have rebounded with the economic recovery.
- The chemical industry trade balance (excluding pharmaceuticals, which run a large deficit) has returned to a near-record surplus as Asian demand for U.S. chemicals has recovered from the global recession.

US Dollars per Euro



US Merchandise Trade Balance

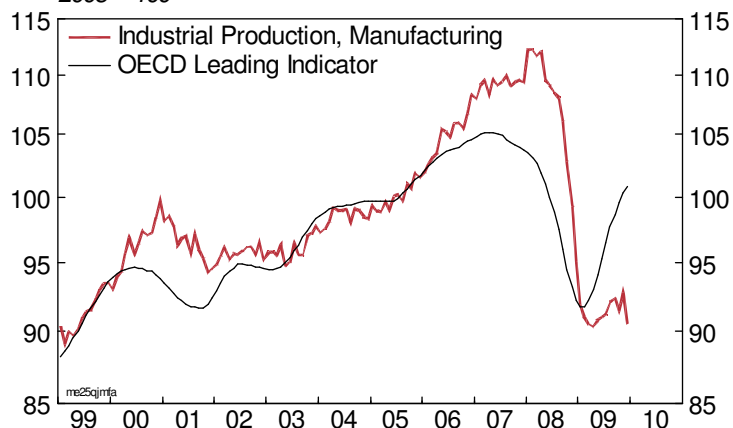
Billion \$, Annual Rate, 3-Month Moving Average



Non-U.S. Industrial Production

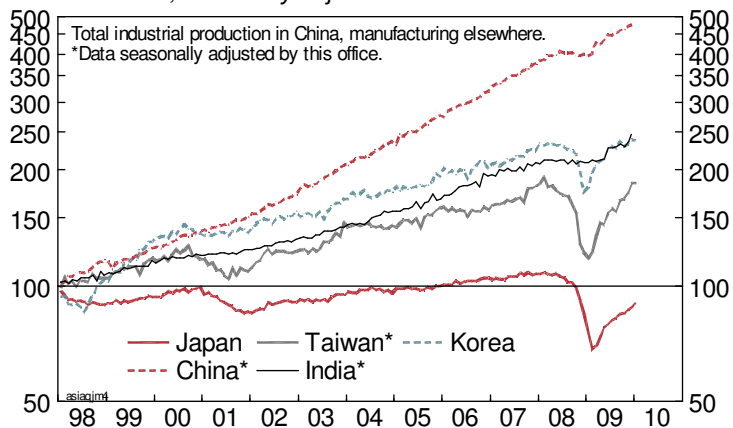
- Industrial production in European Union manufacturing rose 2.6% from April to November, but fell almost back to its April low in December. For the fourth quarter as a whole, production was down 0.4% quarter-to-quarter and down 7.5% year-over-year.
- The Organization for Economic Cooperation and Development's leading index for Europe has risen for ten straight months, through December.

Industrial Production: European Union
2005 = 100



- Industrial production has risen to new record highs in China, India, and South Korea, and is one good month away from a new record high in Taiwan.
- Year-over-year growth rates are well into double-digits throughout the region.
- The recovery from the global recession has been less strong in Japan, where production is still well below its pre-recession peak.

Industrial Production: Asia
1997 = 100, Seasonally Adjusted



- Industrial production in Brazilian manufacturing, on a seasonally adjusted basis, rose every month in 2009. It was up 17.9% year-over-year in December, but still below its pre-recession peak.
- Recovery has been less robust in Argentina, but production was up 6.6% year-over-year in November 2009.
- Recovery began later in Mexico, but industrial production in Mexican manufacturing rose above year-earlier levels in December for the first time in nearly two years.

Industrial Production, Latin America
1997 = 100, 3-Month Moving Averages

