Weekly Chemistry and Economic Trends

ACC Economics & Statistics

12 February 2010

Macroeconomic Status

Our running tab of positive indicators rose by one to 17 out of 20 this week. As a result, we continue to post a green banner. Please refer to the end of this report for an explanation of the color codes. See the *Indicators in Detail* section at the end of this report for more details on the change in the following indicators.

Consumer Credit ↓ \$1.8 billion to \$2.46 trillion
Wholesale Trade ↑ 0.8%; ↑ 5.7% Y/Y
Trade Deficit ↑ \$3.8 billion to \$40.2 billion
Retail Sales ↑ 0.5%; ↑ 4.7% Y/Y
Business Inventories ↓ 0.2%; ↓ 9.7% Y/Y

Business of Chemistry Status

For the business of chemistry, the indicators still bring to mind a green banner for basic and specialty chemicals.

Oil ↑ \$75.28 (Thursday)
Natural Gas ↑ \$5.51 (Thursday)
Railcar Loadings ↓ 2,200 from a week ago; ↑ 13.0% Y/Y (13-week moving average)
Market Capitalization ↑ 1.3% this week; ↓ 4.3% YTD
Polymers and Chemicals ↑ **(Y/Y):** epoxy
Polymers and Chemicals ↓ **(Y/Y):** soda ash

Despite the historic snow in the Washington, DC area that delayed several government reports, the economic news was generally positive. Consumers continue to pay down debt, however spending at the retail level is showing signs of strength. The trade deficit widened as demand for imports is increasing to feed a growing economy. Wholesale trade continues to improve, and inventories remain quite lean, suggesting a restocking effort going forward. Along the supply chain, trade grew signaling an expansion of activity. At the same time, inventories were drawn down even further, suggesting that restocking will soon re-engage and add to growth.

Overseas, a “Greek tragedy” enfolded, resulting in jitters to bond, currency and other financial markets and dominated the news for the week. However, economic data released indicate recovery and expansion elsewhere. Rising US exports reflect improved economic prospects overseas.

Turning to chemistry, the individual product reports suggest recovery, although much ground needs to be made up before the past peak is reached. Slippage in railcar loadings probably reflect the winter storms, but the overall trend is one of recovery. Inventories among chemical wholesalers are at their lowest level relative to sales, which bodes well for future production. For 2009 as a whole, exports totaled \$153.4 billion, down 12.2% from \$174.4 billion in 2008. Imports for the year were \$151.1 billion, down 14.4% from \$176.5 billion in 2008. As a result, a \$2.13 billion deficit in 2008 moved to a \$2.28 billion surplus in 2009, a \$4.42 billion swing and the first trade surplus since 2001. These headline trade balances are dominated by the large deficit in pharmaceutical trade. For chemistry excluding pharmaceuticals, the trade surplus in 2009 was \$20.3 billion.

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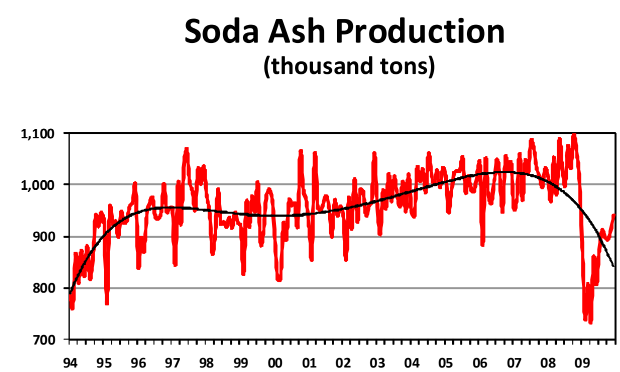
POLYMER AND CHEMICAL PRODUCTS

Data for the production or supply of polymers and chemicals are reported on a non-seasonally adjusted basis, so there are often month-to-month fluctuations. Using a three-month moving average or employing Y/Y comparisons is a good means to deal with this data.

The American Chemistry Council (ACC) reported that domestic production of **epoxy** resin slipped to 42 million pounds in December. Production was up 94.2% Y/Y while sales and captive use was up 45.3% Y/Y. For 2009 as a whole, production declined 8.3% to 535 million pounds. Epoxy resins are used as protective coatings, bonding adhesives in building and construction, electrical, and many other uses.

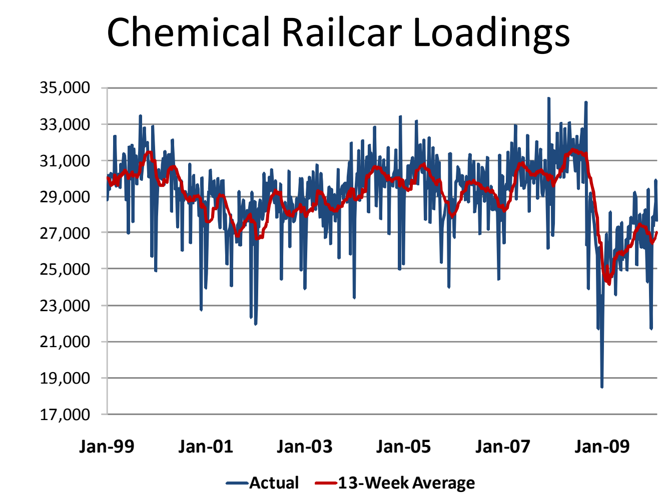


Source: US Geological Survey

The US Geological Survey reported that production of **soda ash** rose from 910,000 tons in November to 941,000 tons in December. Production was off 6.9% Y/Y. Inventories rose from 231,000 tons (7.6 days' supply) at the end of November to 239,000 tons (7.9 days' supply) at the end of December. Inventories were off 16.2% Y/Y from a year earlier when 8.8 days' supply was on hand. For 2009 as a whole, production fell 17.3% to 10.26 million *tons. Soda ash is primarily used in glassmaking, manufacturing other inorganic chemicals (sodium, bicarbonate, sodium silicates, etc.), detergents, flue gas desulfurization, water treatment, and in pulp and paper manufacturing.*

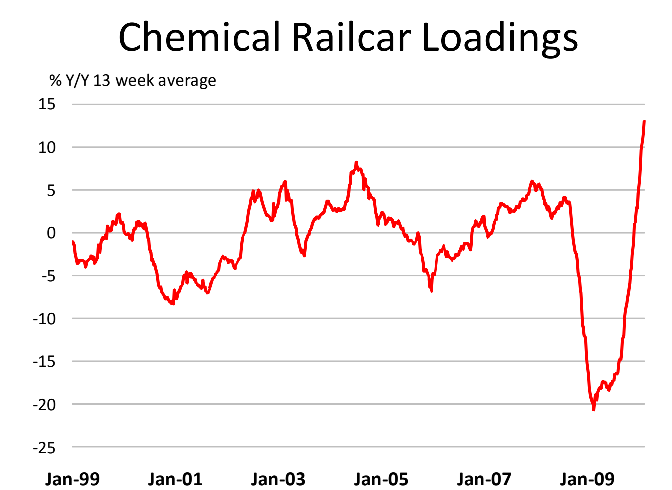
CHEMICAL RAILCAR LOADINGS

According to the Association of American Railroads (AAR), for the week ending 5 February (week 5), railcar loadings of polymers and basic chemicals (blue line) fell by 2,200 to 27,693 railcars. This decline was likely weather-related. Compared to the same week last year, loadings were up 13.5% Y/Y and were up 13.3% YTD. Loadings have been on the rise for seven of the last 13 weeks.



Source: Association of American Railroads

The railcar loadings data are the best 'real time' indicator of industry activity. This is especially the case for polymers and other basic chemicals. But the data are fairly erratic. This is one reason why we employ a 13-week moving average to smooth out many of the seasonal irregularities. The 13-week moving average of railcar loadings (red line) indicates continued improving activity and is now up 13.0% Y/Y.

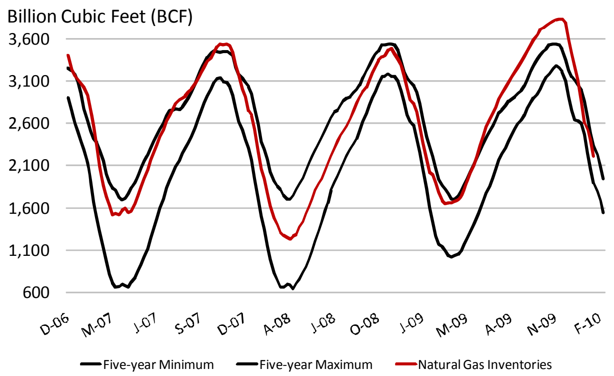


Source: Association of American Railroads

ENERGY

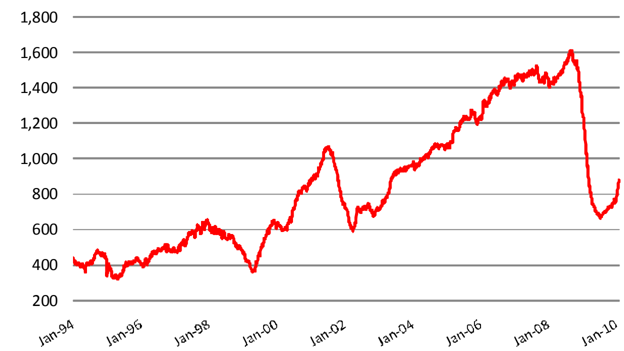
The Energy Information Administration (EIA) reported a 191 BCF draw in **natural gas inventories** for the week ending 5 February. A typical draw for this week is 149 BCF. Natural gas inventories now stand at 2,215 BCF and are 8.4% (172 BCF) above last year's levels for the week, and 5.4% (114 BCF) above the five-year average. As a result, natural gas inventories remain within the five-year historic range.

Natural Gas Inventories



Source: Energy Information Administration

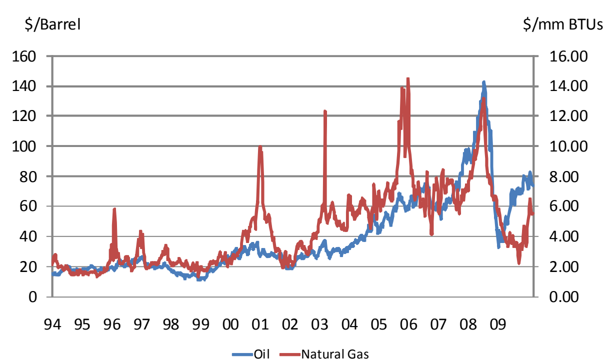
Natural Gas Rig Count



Source: Baker-Hughes

Natural gas prices (the benchmark Henry Hub), closed at \$5.51 per million BTUs on Thursday, up from \$5.44 last Thursday. A year ago, the price was \$4.69 per million BTUs, thus, recent prices represent a 17.4% Y/Y increase. **Oil prices** rose to \$75.28 per barrel yesterday (Thursday). A year ago, oil was \$43.98 per barrel, thus, recent prices represent a 121.5% Y/Y increase.

Oil and Natural Gas Prices



Source: Energy Information Administration

At 13.7:1, the ratio of oil prices to natural gas prices <u>improved</u> from 13.5:1 a week ago. One year ago, the ratio was 7.2:1. As a rough rule of thumb, when the ratio is above a band between 6 and 7, the competitiveness of Gulf Coast-based petrochemicals and derivatives vis-à-vis other major producing regions is enhanced. In the US, 70% of ethylene, for example, is derived from natural gas liquids while in Western Europe, 70% is derived from naphtha, gas oil and other light distillate oil-based products. Historically, other factors (co-product prices, exchange rates, capacity utilization, etc.) have played a role as well.

According to Baker-Hughes, for the week ending 5 February, the North American **natural gas rig count** rose by 17 to 878 rigs. One year ago the rig count was 1,104 rigs.

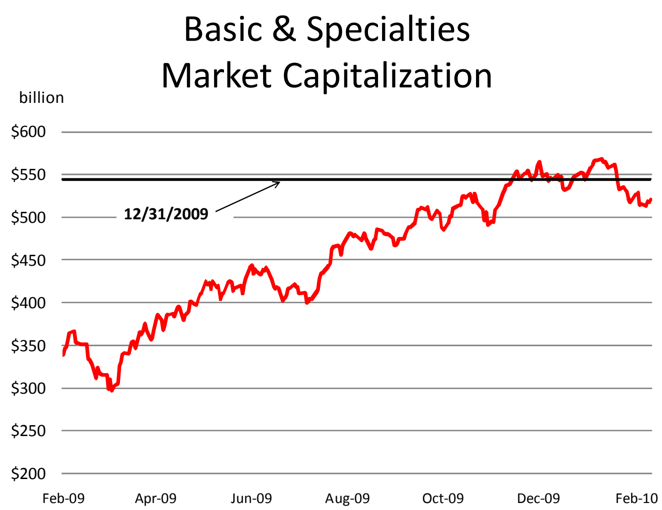
SHORT TERM ENERGY OUTLOOK

EIA released its monthly Short Term Energy Outlook this week presenting its projections through 2011. The world oil market should gradually tighten in 2010 and 2011, as the global economic recovery continues and world oil demand begins to grow again. Continuation of the production targets set by the Organization of the Petroleum Exporting Countries (OPEC), as well as lower overall growth in non-OPEC supply over the 2010-2011 forecast period, would also contribute to a firming of crude oil prices this summer. However, the combination of high commercial inventories among members of the Organization for Economic Cooperation and Development (OECD) and ample OPEC surplus production capacity should help dampen the likelihood of any large upward swings in prices.

EIA expects total natural gas consumption to increase 0.4% to 62.5 billion cubic feet per day (BCF/d) in 2010 and another 0.4% in 2011. Very cold weather during the first half of January, particularly in the Southeast, contributed to an 8.4% jump in the monthly estimate for electric-power-sector natural gas consumption from the previous forecast. The latest estimate for electric-power-sector consumption in January would be a new record for the month. Although natural gas consumption in the electric power sector has been strong so far this year, an increase in coal-fired generation capacity and higher natural gas prices through the remainder of the year should reduce the share of natural-gas-fired generation in the baseload power mix in 2010. This is despite lower-than-normal snowpack in the Northwest, which we expect to reduce hydroelectric generation in that region in 2010 to about 8% below last year's level and boost natural gas consumption. The projected 1.3% decline in electric-power-sector natural gas use is offset by growth in the residential, commercial, and industrial sectors in the 2010 forecast. The outlook for growth in total natural gas consumption in 2011 comes from increases in the industrial sector as a result of improved economic conditions. For more information, go to www.eia.doe.gov.

CHEMICALS MARKET CAPITALIZATION

The S&P 500 index rose 1.5% during the week ending Thursday, 11 February. The ACC market capitalization of US basic chemical and specialty chemical companies also rose, by 1.3% from what it was last week to close at $520.9 billion on Thursday.

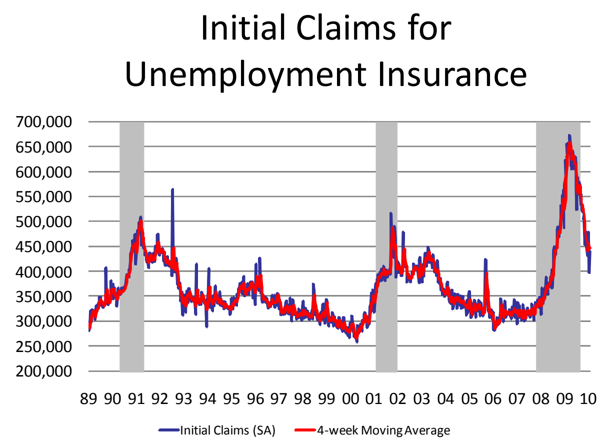


Equity prices are often a good indicator of future activity and represent one component of the leading economic indicators. The ACC market cap is down 4.3% from the beginning of the year. By comparison, the S&P 500 index is down by 3.3% since the beginning of the year.

INDICATORS IN DETAIL

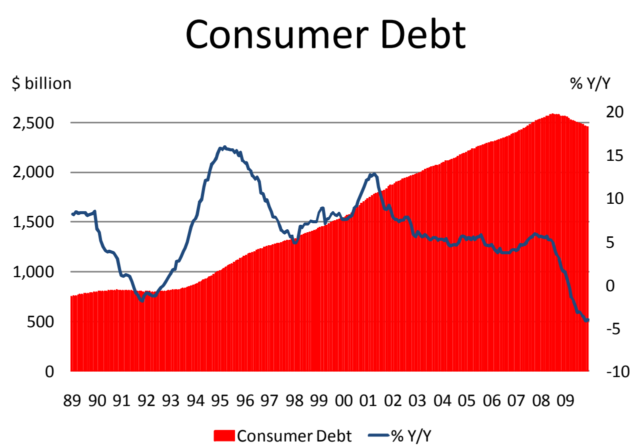
Note that economic statistics tend to be somewhat erratic in nature. As seen with the disruptions from the 2005 hurricanes, seasonality plays a role and one must be careful in placing too much emphasis on a single month's figures. Analysts often use a three-month moving average or employ Y/Y comparisons to deal with the volatility. *Also note that chemistry-related items and commentary are reported in italics.*

The Department of Labor reported that **new initial claims for unemployment insurance** fell by 43,000 to 440,000 during the week ending 6 February. The 4-week moving average was 468,500, a decrease of 1,000 from the previous week's revised average of 469,500.



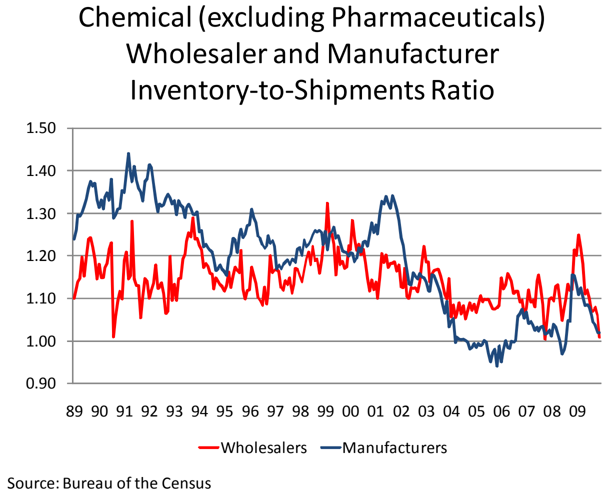
Source: Department of Labor

The Federal Reserve reported that **consumer credit** fell for the 11th straight month by $1.8 trillion to $2.46 trillion. This is a smaller decline than in October or November. Revolving credit (i.e., credit card debt fell $8.5 billion and non-revolving credit (i.e., car loans, etc.) rose by $6.8 billion. Consumers continue to deleverage in the wake of the financial crisis in a process that will take years. As consumers pay down debt, consumer spending will remain relatively weak.



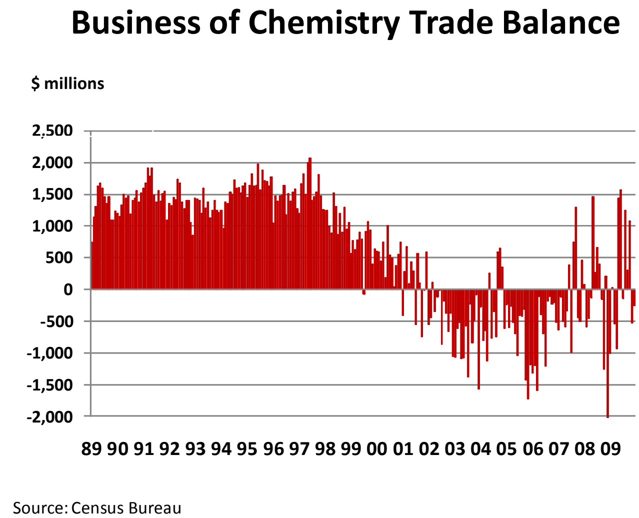
Sources: Federal Reserve

The Census Bureau reported that **wholesale trade** rose 0.8% to $341.2 billion. Strength was found in sales of machinery, equipment, and supplies; metals and minerals; farm product raw materials; and drugs and druggists' sundries. The December gain, however, was a sharp deceleration from the upwardly revised 3.6% increase in November. Total inventories of merchant wholesalers, except manufacturers' sales branches and offices, fell 0.8% to $383.6 billion at the end of December. End-of-month inventories of metals and minerals; motor vehicle and motor vehicle parts and supplies; farm product raw materials; and petroleum and petroleum products were all down in December. The December inventories-to-sales ratio for wholesalers was 1.12, down from 1.14 in November and a December 2008 ratio of 1.32. Wholesale trade was up 5.7% Y/Y while inventories were off 10.2% Y/Y. The inventory liquidation is winding down and inventories at the wholesale level are relatively lean. As sales grow, so will production as the supply chain is replenished.



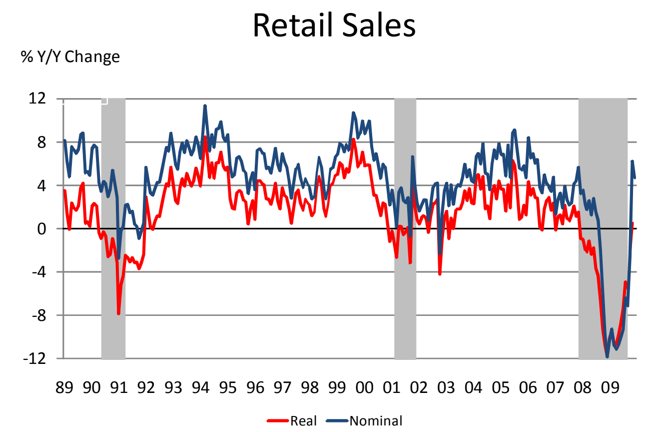
Wholesale trade in chemicals rose 4.7% to $7.64 billion in December. This follows a 3.7% gain in November. Inventories, however, fell 0.6% to $7.70 billion at the end of December. This follows a 1.8% gain in November and helped push the inventory-to-sale ratio down from 1.06 in November to 1.01 in December, a record low. One year earlier, the ratio was 1.24. Sales were up 1.3% Y/Y while inventories were 17.6% Y/Y. The low level of inventories relative to sales bodes well for future chemical industry growth.

The Census Bureau reported that total December exports of $142.7 billion and imports of $182.9 billion resulted in a **trade deficit** of $40.2 billion, which is up from a revised $36.4 billion in November. December exports were $4.6 billion (3.3%) more than November exports of $138.1 billion. December imports were $8.4 billion (4.8%) more than November imports of $174.5 billion and reflect a strengthening US economy as well as higher oil imports and oil prices. The widening of the trade deficit was unexpected and will result in a downward revision of 4th quarter GDP growth. The December increase in exports of goods reflects increases in capital goods ($1.8 billion); industrial supplies and materials ($1.6 billion); automotive vehicles, parts, and engines ($0.9 billion); other goods ($0.3 billion); and consumer goods ($0.3 billion). Foods, feeds, and beverages were virtually unchanged. The December increase in imports of goods reflects increases in industrial supplies and materials ($4.4 billion); automotive vehicles, parts, and engines ($1.6 billion); capital goods ($1.6 billion); foods, feeds, and beverages ($0.3 billion); and other goods ($0.2 billion). Consumer goods were virtually unchanged. For 2009 as a whole, exports of goods and services were $1.553 trillion and imports were $1.934 trillion leaving a deficit of $380.7 billion, which was down significantly form a $695.9 billion deficit in 2008 and a $701.4 billion deficit in 2007. The December trade deficit in goods with China actually fell, but for the year as a whole, the trade deficit was $226.8 billion. Nonetheless, this is down from a record $268.0 billion in 2008.



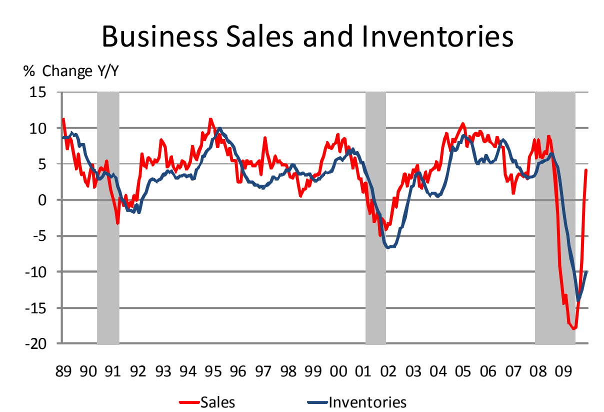
For chemicals, exports (not seasonally adjusted) rose from $13.1 billion in November to $13.3 billion in December. Gains were centered in plastics, organic chemicals, consumer chemicals, and miscellaneous chemicals. Imports fell from $13.6 billion to $13.5 billion in December. The trade deficit in chemistry slipped from $526 million to $251 million. Much of the change was in a lower deficit in pharmaceuticals and the surplus elsewhere actually expanded from $2.0 billion to $3.1 billion. For 2009 as a whole, exports totaled $153.4 billion, down 12.2% from $174.4 billion in 2008. This marks the first decline since 1998. Imports for the year were $151.1 billion, down 14.4% from $176.5 billion in 2008. As a result, a $2.13 billion deficit in 2008 moved to a $2.28 billion surplus in 2009, a $4.42 billion swing and the first trade surplus in chemicals since 2001. These headline trade balances are dominated by the large deficit in pharmaceutical trade. For chemistry excluding pharmaceuticals, the trade surplus in 2009 was $20.3 billion. Most of this was in plastics and miscellaneous chemicals trade and to a lesser extent consumer chemistry and colorants.

The Census Bureau reported that **retail sales** rose 0.5% during January, following an upwardly revised 0.1% decline in December. Compared to a year ago, retail sales were up 4.7%. Sales at general merchandise stores rose 1.5%. Sales also rose at electronics and appliance stores; food and beverage stores; sporting goods, hobby, book & music stores; gasoline stations; clothing and accessory stores and nonstore retailers. Housing-related retail sales (furniture stores and building material/garden supply centers) were down as this sector continues to struggle. Sales of motor vehicles and parts were flat. The report suggests that the consumer sector is gaining strength and starting this year on a positive note. *This report is important to the business of chemistry in that historically there is a correlation between "real" retail sales (i.e., adjusted for price change) and the consumption of polyethylene resins used in packaging. Also, food service is a major market for industrial and institutional cleaning chemicals.*



Source: Census Bureau

The Census Bureau reported that **business inventories** fell 0.2% to $1,310.7 billion at the end of December. Inventories fell across all three sectors. The combined value of distributive trade sales and manufacturers' shipments, however, rose 0.9% to $1,040.4 billion. Strong gains occurred in the manufacturing and wholesale sectors, but December retail sales were weak. Overall sales gains and inventory destocking resulted in the inventory-to-sales ratio declining from 1.27 in November to 1.26 in December. One year earlier, the ratio was 1.46. Business sales were up 4.7% Y/Y while inventories were down 9.7% Y/Y. Destocking has largely run its course with low levels of inventories now on hand. As a result, restocking will likely re-engage and add to economic growth in the months ahead. *This indicator is of importance to the chemicals industry as it explains much of variation in demand and production during the cycle.*



Note: Business includes retail, wholesale and manufacturing.

Source: Census Bureau

NEXT WEEK

Economic reports released next week include Empire State Survey, homebuilders confidence, housing starts, building permits, import prices, industrial production, capacity utilization, producer prices, Philadelphia Fed survey, and consumer prices.

UPCOMING EVENTS OF INTEREST

2010 Chemicals Outlook: The Return of M&A?
Tim Wilding, Managing Director of Investment Banking and co-Head of the Industrial Group - Oppenheimer & Co
4 March 2010
Chemical Marketing & Economics Group, New York Section
Club Quarters - Midtown NYC
40W 45th Street
New York, NY
Contact: www.nyacs-cme.org

The New Normal? Policy Choices after the Great Recession
NABE's 26th Annual Washington Economic Policy Conference
7-9 March 2010
National Association for Business Economics
Key Bridge Marriott Hotel
Washington, DC
Contact: www.nabe.com

CMAI 2010 World Petrochemical Conference
23-25 March 2010
Chemical Market Associates, Inc.
Hilton Americas Hotel
Houston, Texas
Contact: www.cmaiglobal.com

35th Annual World Petrochemical Conference
24-25 March 2010
DeWitt & Company, Inc.
Hotel ZaZa
Houston, Texas
Contact: www.dewittworld.com

7th Annual NABE Professional Development Seminar
12-14 April 2010
National Association for Business Economics
Sheraton Crystal City
Arlington, Virginia
Contact: www.nabe.com

FOR MORE INFORMATION

For ACC members, our section of the members-only extranet, MemberExchange, contains a plethora of data, economic analyses, presentations, outlooks, weekly economic updates, and much more. You can access frequently updated data files (which provide the most recent and historical data for the business of chemistry - including trade data) as well as the economic data that enable you to track worldwide industry trends, follow developments as they unfold and gain insight into the long-term outlook. These include the indicators covered in this weekly report. To request access to the site, go to: https://memberexchange.americanchemistry.com, and select "Economics and Statistics," and complete the registration process.

In addition to this weekly newsletter, ACC offers monthly, semi-annual and annual economic data publications that enable users to track worldwide industry trends, follow developments as they unfold and gain insight into the long-term outlook. These products contain comprehensive statistics and analyses that cover worldwide production, trade, shipments, inventories, price indices, energy, employment, investment, R&D, EH&S, financial performance measures, macroeconomic data, plus MUCH more. To order, call 301-617-7824 or visit ACC online at http://americanchemistry.com/thestore and select Software.

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Note on the color codes: The banner colors represent observations about the current conditions in the overall economy and the business of chemistry. For the overall economy we keep a running tab of 20 indicators. The banner color for the macroeconomic section is determined as follows:

Green – 13 or more positives
Yellow – between 8 and 12 positives
Red – 7 or fewer positives

For the chemical industry, there are fewer indicators available. As a result we rely upon judgment whether production in the industry (defined as chemicals excluding pharmaceuticals) has increased or decreased three consecutive months).