



Weekly Chemistry and Economic Trends

ACC Economics & Statistics

30 July 2010

Macroeconomic Status

Our running tab of positive indicators rose slightly to 12 out of 20 this week. However, we continue to post a yellow 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 Confidence ↓ 3.9 points to 50.4 (1985=100)

New Home Sales ↑ 23.6% to 330,000 units; ↓ 16.7% Y/Y

2nd Quarter GDP ↑ 2.4% SAAR

Advance Durable Goods Orders ↓ 1.0%; ↑ 15.9% Y/Y

Chicago PMI ↑ 3.2 points to 62.3 (still expanding)

As more pieces of the economic puzzle fall into place, signs of storm clouds remain. Consumer confidence remains dismal in light of low consumer income growth, high unemployment, and a soft equity market. Although new homes sales rebounded from the record low in May they remain at historically low levels, down 16.7% Y/Y, and could be years off from reaching anywhere close to peak levels as the pace of sales is expected to move like molasses for some time to come. Orders for durable goods fell again. All eyes were on today's GDP report and growth slowed in the 2nd quarter. The Federal Reserve's *Beige Book* suggests a slowing pace of economic recovery across Districts in June and early-July. The good news this week was found in the fall in initial claims for unemployment insurance and heightened activity in the Midwest.

Overall industrial activity appears to be downshifting in light of the end of a year-long expansion of activity and adjustment that aligned output with demand. That is, restocking (or an inventory bounce), which is now dissipating. That the boom in manufacturing activity is slowing is normal in this stage of the cycle. In previous business cycles, early-cycle downshifts were normal but were followed by reaccelerating growth. Nonetheless, as we mentioned in our 2nd quarter

Business of Chemistry Status

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

Oil ↓ \$78.36 (Thursday)

Natural Gas ↑ \$4.80 (Thursday)

Railcar Loadings ↓ 763 from a week ago; ↑ 9.5% Y/Y (13-week moving average)

Polymers and Chemicals ↑ (Y/Y): styrene-based latexes, epoxy, LLDPE

Polymers and Chemicals ↓ (Y/Y): HDPE, polypropylene, LDPE

Situation & Outlook, the "recovery, however, remains fragile and there are many risks."

Turning to chemistry, the individual product reports clearly illustrate the recovery that has occurred in the past year. It appears, however, that the pace of recovery is slowing. The analysis of downstream underlying demand suggests that customers were restocking thermoplastic inventories in June. The Chicago PMI report was positive for plastic resins.

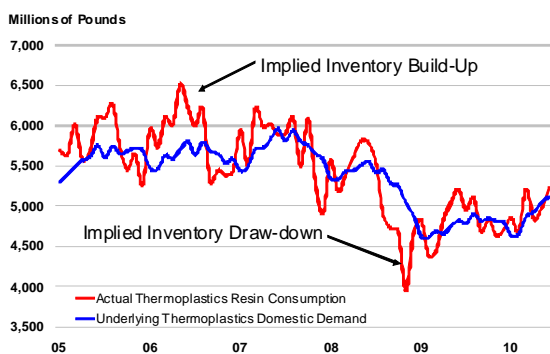
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DOWNSTREAM THERMOPLASTICS INVENTORY ANALYSIS

To assess the plastic resins inventory along the value system it is useful to track increases and declines in demand against a trend line that takes into account the dynamics of the aggregated economic activity downstream. Several approaches have been used to assess underlying demand but the approach used here is based on a method developed for the steel industry. Various data sources were used to develop technical coefficients similar to those used in input-output (I-O) analysis. These technical coefficients represent a ratio of physical inputs consumed relative to output and are developed for disaggregate markets and product applications. The method was used to provide an estimate of the level of demand for each plastic resin relative to each month's level of economic activity. This fitted level implies what resin demand would most likely be, given the economic environment of that month and on-going technical relationships. It measures consumption through the end-use product or applications. That is, to use a food packaging example, the equivalent-resin consumption downstream through convertor and to the food product manufacturer. The results of the analysis are robust.

Underlying Thermoplastics Demand vs. Actual Thermoplastics Resin Consumption



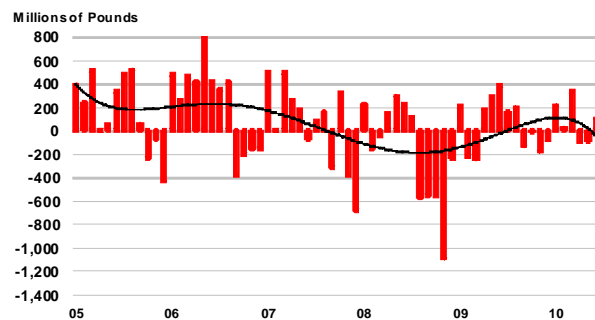
Source: USITC, Statistics Canada, American Chemistry Council

Note: Thermoplastics includes LDPE, LLDPE, HDPE, PP, PS, and PVC



The first chart illustrates the level of actual resin consumption (defined as domestics sales plus imports) for the six major thermoplastics (HDPE, LLDPE, LDPE, PP, PS, and PVC) combined versus underlying demand where demand reflects given technological relationships, the level and composition of North American economic activity, and more specifically end-use market conditions. Some segments of the economy are more 'polymer-intensive' than others. In general, when actual plastic resin consumption exceeds underlying demand, inventory accumulation is likely occurring. Conversely, when actual plastic resin consumption falls short of underlying demand, it's likely that downstream inventory is being drawn-down. The second chart shows the difference between actual resin consumption and underlying demand.

Underlying Demand less Actual Thermoplastics Resin Consumption



Note: Thermoplastics includes LDPE, LLDPE, HDPE, PP, PS, and PVC

Source: American Chemistry Council



The data for June indicate that customers were restocking their inventories during the month. But overall, the recent trend (using a 3MMA) suggests that customers may actually be drawing down their inventories. Downstream end-use customers' consumption averaged 5.01 billion pounds of thermoplastic resins for the past three months. Over the same period, underlying demand averaged 5.03 billion pounds (3MMA). As a result, customers along the downstream supply chain drew down inventories by about 24 million pounds. The latest version of our model incorporates recalibrations to account for the behavior of one more years' worth of resin data.

A similar set of charts are available separately for all polyethylene combined, polypropylene, polystyrene, and polyvinyl chloride as well as epoxy, and styrene-based latexes. These charts along with a spreadsheet are available for ACC members on MemberExchange. (See details under For More Information.)

POLYMER AND CHEMICAL PRODUCTS

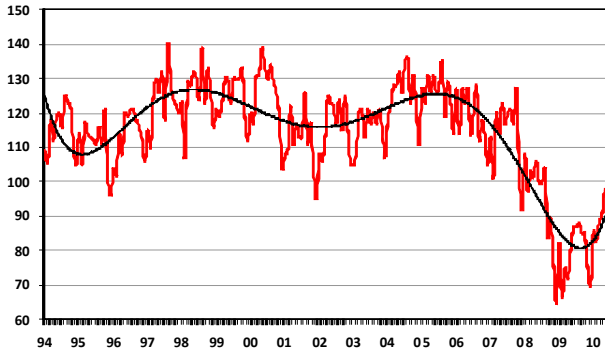
Data for the production or supply of polymers and chemicals are reported on a non-seasonally adjusted basis, so there are often month-to-month fluctuations. Using a three-month moving average (3MMA) or employing Y/Y comparisons is a good means to deal with this data.

The ACC reported that domestic production of **epoxy** resin has declined over the past two months ending at 52 million pounds in June. In June, production was up 12.9% Y/Y while sales and captive use was up 37.3% Y/Y. Epoxy resins are used as protective coatings, bonding adhesives in building and construction, electrical, and many other uses.

The ACC also reported that domestic production of **styrene-based (SB) latexes** fell to 94 million pounds in June. Production was up 8.0% Y/Y and up 16.5% YTD/YTD. Sales and

captive use was up slightly for the month and up 0.8% Y/Y and up 8.4% YTD/YTD. Styrene-based latexes are used in carpet backing and coatings.

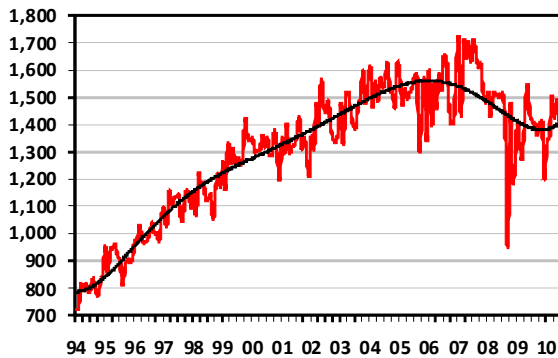
Styrene-Based Latex Production (million pounds)



Source: American Chemistry Council

The ACC also reported that domestic production of **polypropylene** (PP) resins fell to 1.42 billion pounds in June. Production was off 1.9% Y/Y. Sales and captive use was up 3.5% Y/Y. Capacity utilization fell to 86%. Major applications for polypropylene are found in packaging, automotive parts, fibers and appliances.

Polypropylene Production (million pounds)

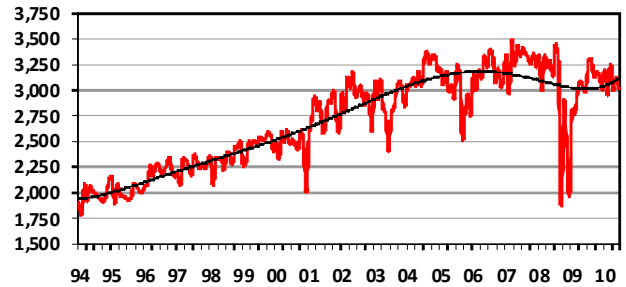


Source: American Chemistry Council

The ACC released its final June reports for polyethylene. Domestic production of **high density polyethylene (HDPE)** resin fell to 1.43 billion pounds in June. Production was down 0.9% Y/Y and sales and captive use was up 2.0% Y/Y. Production was up 2.0% YTD/YTD while sales and captive use was up 5.0% YTD/YTD. Production of **linear low density polyethylene (LLDPE) resin** fell to 1.04 billion pounds. Production was up 5.4% Y/Y and sales and captive use was

down 1.3% Y/Y. Production was up 8.8% YTD/YTD and sales and captive use was up 4.1% YTD/YTD. Production of **low density polyethylene (LDPE)** rose to 542 million pounds. Production was down 1.1% Y/Y and sales and captive use was up 0.7% Y/Y. Production was up 5.2% YTD/YTD and sales and captive use was up 4.1% YTD/YTD. Taking all three major polyethylene resins (HDPE, LLDPE, and LDPE) together, at 3.02 billion pounds in June, total polyethylene production was up 1.2% Y/Y while inventories were up 17.1% Y/Y. Major polyethylene applications are found in packaging, housewares, toys, wire and cable, and many other uses.

Polyethylene Production (million pounds)



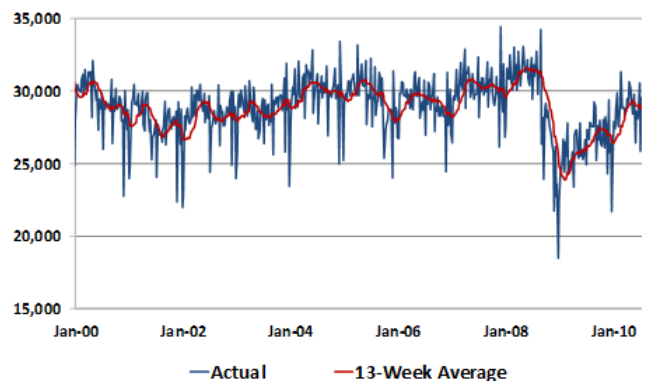
Note: Includes HDPE, LLDPE and LDPE (Data from 1994-2000 are US-only, but from 2001 include US+ Canada.)

Source: American Chemistry Council

CHEMICAL RAILCAR LOADINGS

According to the Association of American Railroads (AAR), for the week ending 24 July (week 29), railcar loadings of polymers and basic chemicals (blue line) fell by 763 to 28,752 railcars. Compared to the same week last year, loadings were up 7.7% Y/Y and were up 11.8% YTD. Loadings have been on the rise for six of the last 13 weeks.

Chemical Railcar Loadings



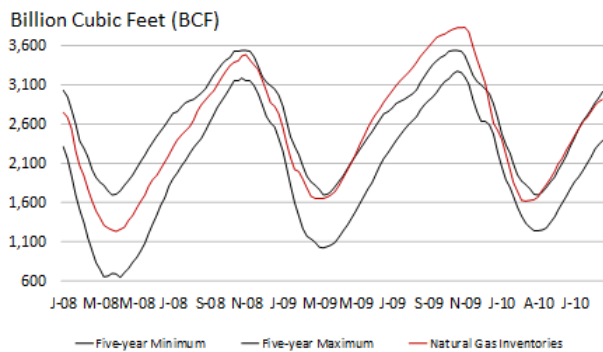
Source: Association of American Railroads

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 slowing activity and is now up 9.5% Y/Y, a deceleration from earlier in the year.

ENERGY

The Energy Information Administration (EIA) reported a 28 BCF build in **natural gas inventories** for the week ending 23 July. This build was below expectations and below the typical build for this week of 54 BCF. The extremely hot weather across much of the nation was the primary factor for the low build. Natural gas inventories now stand at 2,919 BCF and are 3.1% (94 BCF) below last year's levels for the week, and 8.9% (333 BCF) above the five-year average. Although natural gas inventories remain at the upper edge of the five-year maximum, the hot weather is taking a toll.

Natural Gas Inventories



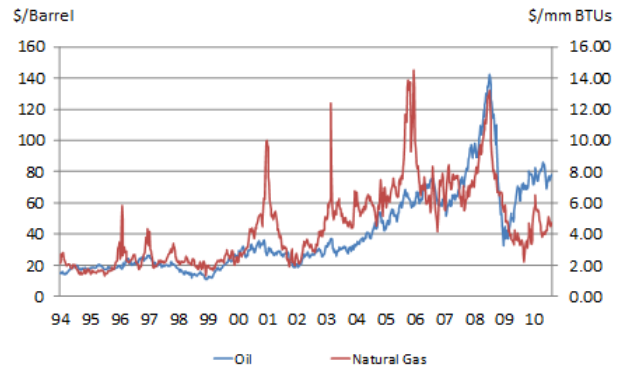
Source: Energy Information Administration

With a small build in stocks, **natural gas prices** (the benchmark Henry Hub), closed at \$4.80 per million BTUs on Thursday, up from \$4.69 last Thursday. A year ago, the price was \$3.34 per million BTUs. As a result, recent prices represent a 43.7% Y/Y rise. With rising crude inventories, **oil prices** fell to \$78.36 per barrel yesterday (Thursday). A year ago, oil was \$66.94 per barrel. As a result, recent prices represent a 17.1% Y/Y gain.

At 16.3:1, the ratio of oil prices to natural gas prices deteriorated from 16.9:1 a week ago. One year ago, the ratio was 20.0:1. 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.

Oil and Natural Gas Prices



Source: Energy Information Administration

According to Baker-Hughes, for the week ending 23 July the North American **natural gas rig count** rose by three to 982 rigs. One year ago the rig count was 675 rigs.

BEIGE BOOK

The Federal Reserve collects anecdotal reports from each of the 12 District banks about economic conditions in their region. This compendium of reports is assembled and disseminated in the *Beige Book*. The Federal Reserve Board reports that economic activity has continued to increase, on balance, since the previous survey, although the Cleveland and Kansas City Districts reported that the level of economic activity generally held steady. Among those Districts reporting improvements in economic activity, a number of them noted that the increases were modest, and two Districts, Atlanta and Chicago, said that the pace of economic activity had slowed recently.

Manufacturing activity continued to expand in most Districts, although several Districts reported that activity had slowed or leveled off during the reporting period. Districts also noted improved conditions in the services sector. Retail sales reports generally indicate a continued rise in spending, and several Districts noted that necessities continued to be strong sellers, while big-ticket items moved more slowly. Most Districts, however, that reported on light vehicle sales noted declines in recent weeks. Activity in residential real estate markets was sluggish in most Districts after the expiration of the April 30 deadline for the homebuyer tax credit. Commercial real estate markets, especially construction, remained weak. Banking conditions varied across the Districts, with some Districts noting soft or decreased overall loan demand;

credit standards remained tight in most reporting Districts. Recent rains had mixed effects on crop conditions, while activity in the natural resources sector increased. Overall labor market conditions improved modestly across the Districts, with several reports of temporary hiring. Consumer prices held steady in most reporting Districts. Input prices also held largely steady, with only a few reports of cost increases. Wage pressures continued to be contained on the whole.

Manufacturing activity in most Districts continued to move up since the last report, although the pace of activity slowed or activity leveled off in the New York, Cleveland, Kansas City, Chicago, Atlanta, and Richmond Districts. Automobile manufacturing was a bright spot for the Cleveland, Chicago, and St. Louis Districts. Automobile parts suppliers also experienced increased demand in both the Richmond and Chicago Districts. Fuel demand at oil refineries in the San Francisco District improved, while gasoline demand was steady in the Dallas District. Firms in the semiconductor manufacturing industry reported relatively strong sales or demand growth in both the Boston and San Francisco Districts. Firms in aircraft and parts manufacturing saw sales pick up in both the San Francisco and Dallas Districts. Manufacturing firms in the Boston, Philadelphia, Kansas City, and Dallas Districts were optimistic that demand would continue to improve in the following months. Cleveland's contacts, however, expect demand growth to taper off, while Philadelphia noted that the balance of positive over negative views had narrowed. Atlanta reported fewer firms planning expansions in production. Richmond, Chicago, and Dallas reported that firms in construction-related manufacturing experienced weak demand; construction supplies sales were flat in Kansas City, and Minneapolis reported that a firm in the sector was increasing production. Steel production declined in both the Chicago and Cleveland Districts. Some manufacturers in the Atlanta and San Francisco Districts reported high excess production capacity. Capacity utilization was below pre-recession levels in Cleveland and edged lower among steel producers in Chicago.

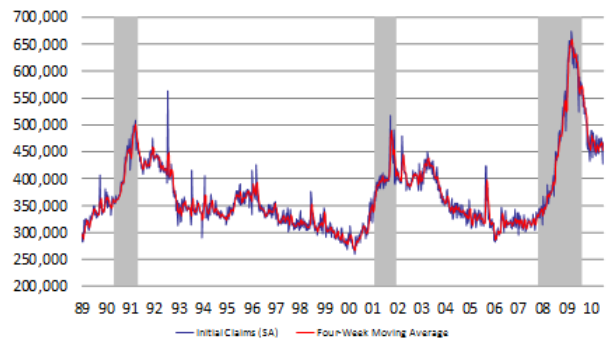
Turning to the chemical industry, producers of chemicals in the Philadelphia District reported increases in orders while producers in the Atlanta District reported increased shipments of chemicals. In the St. Louis District, firms in the plastics product and plastics resin manufacturing industries announced plans to expand operations and hire new employees. In the Dallas District, producers of PVC resins used in housing and commercial construction said orders fell since the last report, and expectations are for no near-term improvement. Other than PVC, there were no signs of weakness in chemicals. Demand was strong for petrochemicals used in manufacturing, pulp and paper and alumina. In addition, contacts said domestic demand for ethylene/polyethylene products remained solid, and that export demand has returned slowly as capacity was restored.

The *Beige Book* report is of importance to the business of chemistry as it provides insight into trends in key end-use customer industries as well as the industry itself. Searches of the text of the *Beige Book* can easily identify reports on end-use customer industries. (See www.federalreserve.gov for more details.)

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.*

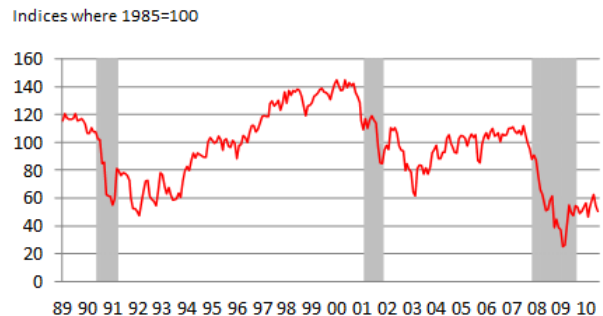
Initial Claims for Unemployment Insurance



Source: Department of Labor

The Department of Labor reported that in the week ending 24 July, **initial claims** for unemployment was 457,000, a decrease of 11,000 from the previous week's revised figure of 468,000. The four-week moving average was 452,500, a decrease of 4,500 from the previous week's revised average of 457,000.

Consumer Confidence

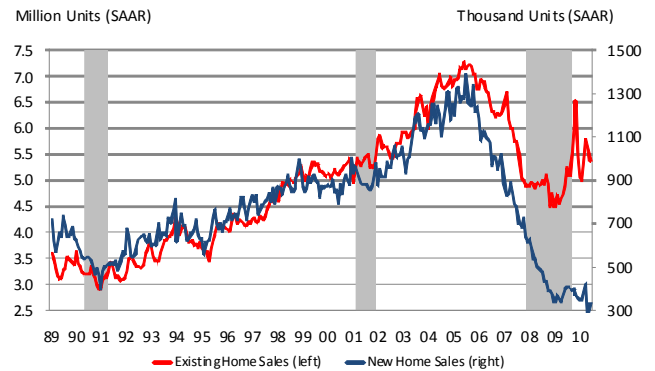


Source: Conference Board

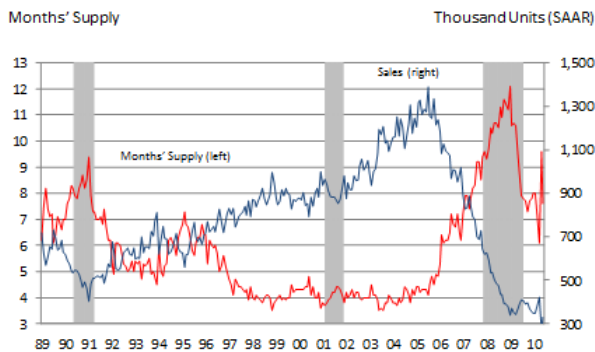
The Conference Board reported that its index of **consumer confidence**, which had declined sharply in June, retreated even further in July, falling 3.9 points to 50.4 (1985=100). Consumers continue to grow increasingly more pessimistic about the short-term outlook. Low income growth, a soft equity market, and concerns about business conditions, and the labor market continue to cast a dark cloud over consumers. This pessimism is not likely to improve until the job market recovers. Consumers' assessment of current conditions was more downbeat in July with the Present Situation Index decreasing 0.7 points to 26.1. Consumers' short-term outlook also deteriorated further in July, with the Expectations Index declining 6.1 points to 66.6. Although future plans to purchase a new automobile or major appliance improved somewhat from low levels, consumers' plans to buy a house slipped to a near-record low. The Consumer Confidence Survey is based on a representative sample of 5,000 U.S. households. *This report is important to the business of chemistry as an explanatory variable for both pharmaceuticals and consumer products (e.g., soaps, detergents, and toiletries). To the limited extent that it foreshadows consumer spending (and the chemistry associated with that) it is also an important indicator.*

New home sales, for example, generate sales of chemistry through purchases of paints & coatings, new furniture, carpet, resilient flooring, window treatments, appliances, and fixtures. In architectural coatings, about 20% of sales are tied to new home sales, with 80% tied to existing home sales.

Existing and New Home Sales



New Home Sales and Months' Supply



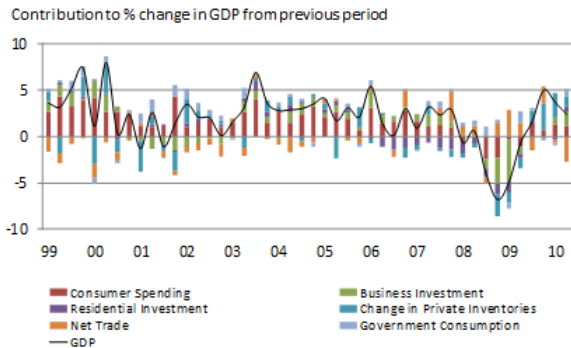
The Census Bureau reported that **new home sales** rebounded in June to a 330,000 unit pace. New home sales had tumbled to a historical low in May when a 267,000 unit pace was recorded. New homes sales for June did exceed expectations but, nonetheless remain historically low. In fact, it was the second lowest on record. Sales were up in each region, except for in the West where sales fell 6.6% in June and remain at a pace down 45.7% Y/Y. Sales rose 46.4% in the Northeast, 33.1% in the South and 20.5% in the Midwest. Homes for sale fell slightly to 210,000 units at the end of June, a level off 25.0% Y/Y. This compares with a 16.7% Y/Y decline in sales. The gain in June sales pulled the supply of homes for sale down from 9.6 months' supply in May to 7.6 months in June at the current sales pace. One year earlier, months' supply was 8.5 months. The median sales price of new houses sold in June 2010 was \$213,400, down slightly from May, and down 0.6% Y/Y. *The report is important to the business of chemistry.*

The Census Bureau reported that **durable goods orders** fell \$2.0 billion (or 1.0%) to \$190.5 billion in June. This was the second consecutive monthly decrease and followed a 0.8% May decrease. The decline was led by a 25.6% drop in orders for non-defense aircraft and parts. Excluding transportation, new orders decreased 0.6% and excluding defense, new orders decreased 0.7%. Computers and electronic products, down four of the last five months, had the largest decrease. Unfilled orders fell as well but inventories rose during the month. Non-defense new orders for capital goods excluding aircraft (a proxy for business investment) increased 0.6% in June. The gain follows a 4.6% rise in May and was the good news in this report. Overall orders were up 15.9% Y/Y and orders for non-defense new orders for capital goods excluding aircraft were up 15.2% Y/Y. Almost by definition, capital goods orders are lumpy. When a major airline places an order for new airplanes, it usually purchases a number of them. Most other businesses do the same when they upgrade computer and communications systems, or add industrial capacity. As a result, orders tend to be volatile and it was in these two areas that weakness occurred. Nonetheless, the report does raise some caution.

The Bureau of Economic Analysis (BEA) reported that 2nd quarter **GDP** -- the output of goods and services produced by labor and property located in the United States -- increased at an annual pace of 2.4% down from a 3.7% annual pace in the 1st quarter and a 5.0% pace in the 4th quarter. This was the fourth consecutive quarterly gain and was in line with expectations and left 2nd quarter GDP up 3.2% Y/Y, accelerating from the 1st quarter. The report confirmed economists' views that the recession that began in December 2007 ended last summer. Nonetheless, the 2nd quarter pace of growth was the

lowest in a year. Positive contributions were found in consumer spending with slackening contributions from goods partially offset by higher services spending. Business investment provided a strong contribution and residential investment also provided a positive contribution as did government spending. The change in private inventory investment increased but contributed less to growth. These were partly offset by a stable net export position, but one that subtracted 2.8 percentage points off from growth. Imports rose as is typical when spending recovers. Final sales to domestic purchasers is an alternative measure preferred by some economists and here the news was positive, with growth accelerating from a 3.5% pace in the 1st quarter to a 4.2% in the 2nd quarter. Real disposable personal income (DPI) rose at a 4.3% annual pace for the quarter and the savings rate improved 0.7 percentage points to 6.2%. The overall implicit price deflator increased at a 1.8% annual pace, up from a 1.0% annual pace in the 1st quarter. Nonetheless, inflation remains restrained. Readers should note that the national income and product accounts were revised back to 2007.

Contribution to % Change in Real GDP Growth (by Expenditure)

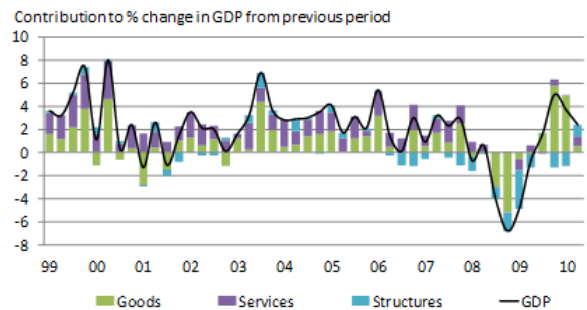


Source: Bureau of Economic Analysis

Although GDP by expenditure type is generally featured in the headline news, the BEA also provides data on GDP by type of products – goods, services, and structures. Previous analysis by this department shows that on average, the chemistry value associated with goods expenditures is four times (4X) that for spending on services. Basic and specialty chemicals are the dominant chemistry inputs into goods. Knowing the structure of GDP allows one means of assessing underlying demand for chemistry (i.e., molecules). Of importance to the business of chemistry is that the goods portion of GDP rose at a 2.0% annual pace in the 2nd quarter, (a marked deceleration from the 20.3% annual pace in the 1st quarter), while services rose at a 1.3% annual pace, an acceleration. Structures, which also feature relatively high chemistry content (adhesives, sealants, coatings, PVC, other polymers, etc.) rose at a 13.6% annual pace, largely offsetting the 1st quarter decline. Overall, the composition of economic growth has been working in the favor of the business of chemistry as implied underlying demand rose at a 3.8% annual pace during the 2nd

quarter. In contrast, the Federal Reserve Board data on industrial production showed a 5.9% annualized decline in overall business of chemistry output in the 2nd quarter. Comparable figures for basic chemicals and specialties were a decline of 4.5% and a gain of 2.6% respectively.

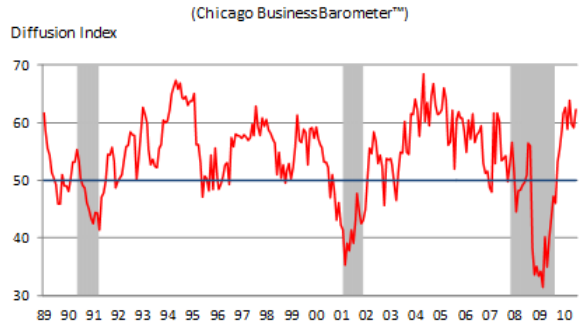
Contribution to % Change in Real GDP Growth (by Major Product Type)



Source: Bureau of Economic Analysis

Purchasing managers in the Midwest reported that the **Chicago PMI** (conducted by the ISM-Chicago and actually named the Business Barometer™) rose 3.2 points to 62.3 in July. A reading above 50 signals expansion and below 50 signals contraction. This rebound of activity marks the 10th month of growth. Looking at the details, five of the seven Business Activity indexes improved in July with all seven in positive territory. New orders and order backlogs featured increases, which is positive for future growth. Production and inventories also rose and employment continued June's growth. Lead times for MRO supplies reached their highest level in three decades. (See www.ism-chicago.org for details.) *This is an important regional index for the chemical industry as Chicago is a geographical focus for plastics processing and the report suggests that the manufacturing sector in this region may be improving. Plastic resins sales correlate well with this index and the report was very positive for the industry.*

Chicago Purchasing Managers Index



Note: An index of 50 or over indicates that manufacturing is expanding, while an index below 50 indicates that is declining.

Source: Institute for Supply Management - Chicago

NEXT WEEK

Economic reports released next week include employment, personal income and consumer spending, construction spending, light vehicle sales, ISM manufacturing and non-manufacturing, and factory orders.

UPCOMING EVENTS OF INTEREST

"Econometrics for the Business Analyst"

17-20 August 2010

National Association for Business Economics (NABE)

Federal Reserve Bank of Atlanta

Atlanta, Georgia

Contact: www.nabe.com

"Brazil/Latin America - Resource-Loaded and Ready for Prime Time" a panel discussion

Chemical Marketing & Economics Group

American Chemical Society, NY Section

9 September 2010

Club Quarters Midtown

40 W 45th Street

New York, New York

Contact: www.nyacs-cme.org

"The 3rd Chemical Purchasing Summit"

16-17 September 2010

ICIS Chemical Business

Hyatt Harborside

Boston, Massachusetts

Contact: www.icis.com

"2010 Plastics Processors Conference & Plastics Industry Workshop"

20-21 September 2010

Chemical Market Associates, Inc.

The Westin Michigan Avenue Chicago

Chicago, Illinois

Contact: www.cmaiglobal.com

2010 NABE Annual Meeting

"Mile-High Challenges to Economic Prosperity"

9-12 October 2010

National Association for Business Economics (NABE)

Grand Hyatt Denver

Denver, Colorado

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).

