



# 2<sup>nd</sup> Quarter 2010 Situation & Outlook

American Chemistry Council  
June 2010

At mid-year, it is apparent that the US economy has reached a transition phase, shifting from an economy driven by inventory changes (end of destocking and start of restocking) and stimulus spending, to one that is self-sustaining. That is, a virtuous cycle led by growth in business investment, consumer spending, and exports. Expansion of private sector payrolls (and incomes) will be essential for successful transition. US manufacturing continues on a strong upward trend, led by exports, restocking, and a surge in business investment. Although lagging manufacturing, the rest of the economy is now enjoying moderate growth. The recovery, however, remains fragile and there are many risks. Leading economic indicators currently suggest that the pace of economic growth will ease in the second half of the year. Expectations are for the US economy to grow 3.3% this year and then rise at a more moderate 3.1% in 2011 and 2.8% in 2012.

Overseas, uncertainty continues to cast a shadow in Europe as solvency and other fears fueled by the debt crisis are high. There are concerns about the contagion spreading and a recessionary relapse. The European recovery has suffered and it is the emerging markets that will be the major drivers of global economic expansion. Industrial production in most developing countries posted double-digit gains as global demand rebounded in wake of lean inventories. The European crisis will have a nominal effect on US economic activity, centered primarily in export demand. Concerns remain about how post-crisis macroeconomic policies will deal with fiscal balancing and inflationary pressures.

Major end-use markets for chemistry are experiencing strong recovery. Light vehicle sales are expected to be 11.7 million in 2010, up from 10.4 million in 2009. With improving credit and consumer incomes, sales will improve even further in 2011 and 2012. Spending on residential construction appears to have stabilized, though at historically low levels. Housing starts are expected to approach 700,000, up from 558,000 in 2009. All other major end-use sectors are rebounding in 2010 and will expand further in 2011 and beyond.

As with much of the manufacturing sector, the US chemical industry is experiencing a surprisingly good recovery in demand. An improving economy and inventory building along with some cost advantages fostered rising US chemistry exports in 2009 and into this year. As with our previous report in February, the year-earlier comparisons are quite strong in most segments, especially in basic chemicals. In May, American chemistry output was up by 4.7% Y/Y and capacity utilization rates rose to 73.7%, up 3.6 percentage points from 70.1% a year ago. Excluding pharmaceuticals, chemicals output was up 6.6% Y/Y in May 2010. Along the supply chain, inventories-

to-sales ratios for chemicals have improved and are at near record lows. It appears that the massive destocking of 2008 and 2009 has ended and restocking is now occurring. Industry operations have largely returned to normal.

We now expect chemistry output to rise 6.0% in 2010 before moderating to 4.0% growth in 2011, and 3.6% in 2012. Domestic demand will continue to improve along with the US economy, but exports to Europe will be under pressure in wake of a stronger dollar and a weak European economy. Exports to China and other Asian markets as well as Latin America and neighboring nations will support external demand. Excluding pharmaceuticals, output is expected to rise 6.8% in 2010. Basic chemicals and some specialty segments are expected to experience the strongest gains. Chemical production will rise solidly in all regions in 2010 with the strongest gains in the Gulf Coast and Ohio Valley regions. These gains will moderate in 2011 and 2012. In 2011, growth will moderate in all basic chemical segments but generally strengthen among most specialty chemical segments. Strong growth in exports and slower growth in imports may result in the first trade surplus in chemicals since 2001. Overall growth after 2012 will be at a premium to that of the US economy. Improving operating rates, cash flow, and expectations, and a need to maintain competitiveness will result in a slight improvement in chemical industry investment this year, with capital spending accelerating in 2011 and 2012.

The global chemical industry is recovering, led by resilience in the emerging Asian economies. Global chemical output fell 3.6% in 2009 and is expected to grow 7.2% in 2010 and reach pre-crisis highs before moderating to a 5.0% gain in 2011. With past peaks breached in some nations, growth in emerging markets will outpace that in developed countries. Growth after 2011 will moderate slightly but rise at a premium (1.2X) to global economic growth and will be broad-based among regions. This will engender a new wave of industry investment.

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**TABLE 1**  
**MACROECONOMIC OUTLOOK**

<i>% Change Y/Y unless noted otherwise</i>	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Global Macroeconomic Indicators</b>										
GDP (Market Exchange Rate basis)	3.4	3.9	3.9	1.8	-2.0	3.3	3.1	3.4	3.5	3.5
GDP (PPP basis)	4.5	5.1	5.2	3.0	-0.6	4.1	3.9	4.5	4.4	4.4
World Trade	7.9	8.8	6.8	2.3	-12.5	8.7	6.5	7.1	7.1	7.0
Industrial Production	4.6	5.6	5.7	1.6	-6.4	6.2	4.6	4.7	4.2	3.9
Consumer Prices	3.8	3.7	4.0	6.0	2.4	3.1	3.2	3.7	3.4	2.9
<b>US Macroeconomic Indicators</b>										
GDP	3.1	2.7	2.1	0.4	-2.4	3.3	3.1	2.8	2.6	2.6
Consumer Spending	3.4	2.9	2.7	-0.2	-0.6	2.5	2.7	2.7	2.3	2.4
Business Investment	6.7	7.9	6.2	1.6	-18.4	3.2	9.3	9.2	6.3	4.5
Industrial Production	3.3	2.3	1.5	-2.2	-9.7	5.5	4.9	3.3	3.2	2.7
Light Vehicle Sales (mm)	17.0	16.5	16.1	13.2	10.4	11.7	13.1	14.6	15.0	15.3
Housing Starts (mm)	2.07	1.81	1.36	0.90	0.56	0.70	1.03	1.55	1.58	1.54
Consumer Prices	3.4	3.2	2.9	3.8	-0.3	1.8	1.7	2.2	2.3	2.3
10-Year Treasury Notes (%)	4.29	4.79	4.63	3.67	3.26	3.60	4.16	4.88	5.14	5.42
Unemployment Rate (%)	5.1	4.6	4.6	5.8	9.3	9.6	9.1	7.7	6.8	6.4
\$/euro	1.24	1.26	1.37	1.47	1.39	1.24	1.20	1.24	1.29	1.29
<b>US End-Use Market Output</b>										
Construction	4.5	2.3	-2.0	-6.3	-17.8	-5.6	10.1	13.9	7.9	4.9
Food, Beverages & Tobacco	3.6	0.5	2.7	-0.3	-1.8	3.3	1.7	1.7	1.1	1.2
Textile Mill Products	1.8	-7.6	-7.1	-9.2	-16.2	2.4	-2.1	-2.2	-2.5	-3.0
Apparel	-3.7	-2.1	1.6	-5.1	-13.9	2.6	-4.9	-5.0	-4.9	-5.3
Structural Panels	5.2	-0.6	-10.5	-14.7	-22.2	2.9	7.9	7.4	5.8	1.8
Paper	-0.1	0.1	-1.7	-4.0	-10.8	3.3	3.7	2.5	1.4	0.3
Printing	2.4	0.6	0.9	-6.6	-14.4	-2.5	0.9	1.3	1.1	0.5
Petroleum Refining	3.4	0.3	-0.2	0.0	-0.7	0.3	2.4	1.6	1.3	1.0
Rubber & Plastic Products	0.9	0.6	1.7	-5.3	-14.6	9.5	5.2	2.2	1.5	1.2
Iron & Steel	-6.9	8.4	-2.9	-9.2	-41.5	40.1	9.5	7.1	5.0	4.5
Fabricated Metal Products	4.6	5.4	2.8	-1.8	-18.3	1.3	4.9	6.7	4.2	2.4
Computers	11.2	13.4	7.9	9.2	-9.9	11.5	13.1	13.7	9.4	7.2
Semiconductors & Electronic Components	21.1	16.5	14.8	10.5	-19.5	22.1	11.5	13.7	9.9	8.3
Appliances	-1.6	-1.5	-3.0	-15.5	-5.6	12.2	6.9	3.0	2.1	1.5
Motor Vehicles & Parts	0.2	-3.6	-2.8	-14.5	-28.0	15.5	14.9	13.4	7.3	4.8
Furniture	3.6	-0.4	-3.0	-10.6	-20.5	-1.5	8.6	8.8	5.7	3.4

Sources: Bureau of the Census, Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve Board, and ACC analysis.

**TABLE 2**  
**US CHEMISTRY OUTLOOK**

<i>% Change Y/Y unless noted otherwise</i>	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Business of Chemistry Output</b>										
Total by Segment:	3.5	3.1	1.2	-4.7	-4.5	6.0	4.0	3.6	3.2	2.8
Pharmaceuticals	4.0	6.4	2.1	-1.9	0.4	4.7	4.5	4.8	4.8	4.3
Chemicals, excluding Pharmaceuticals	3.1	1.0	0.7	-6.7	-8.4	6.8	3.7	2.9	2.2	1.9
Consumer Products	7.5	5.0	-3.6	2.0	-5.1	4.1	2.6	2.9	2.4	2.0
Agricultural Chemicals	4.1	6.5	-6.4	-9.0	-8.6	7.0	0.8	2.3	2.1	1.9
Specialties	-1.5	-3.5	1.9	-4.6	-15.3	2.4	4.1	4.2	3.0	2.0
Coatings	-2.4	-6.0	-1.5	-8.0	-18.8	0.8	2.9	3.6	2.4	1.2
Other Specialties	-1.1	-2.3	3.4	-3.2	-13.9	3.2	4.7	4.5	3.2	2.4
Basic Chemicals	2.6	0.5	2.8	-8.7	-5.4	8.8	3.8	2.5	1.7	1.5
Inorganic Chemicals	3.7	-3.5	3.0	1.6	-6.4	8.8	2.5	2.2	1.0	0.8
Bulk Petrochemicals & Organics	0.6	3.2	3.7	-11.7	-5.4	10.7	4.5	2.6	1.8	1.7
Plastic Resins	9.2	-0.9	1.0	-12.2	-0.1	5.3	4.3	3.1	2.5	2.2
Synthetic Rubber	-1.0	-4.9	6.0	9.2	-14.5	4.8	3.5	2.8	1.9	2.0
Man-Made Fibers	-10.0	-1.3	-4.1	-16.6	-14.6	5.6	0.4	-0.5	-1.2	-1.5
Total by Region:	3.5	3.1	1.2	-4.7	-4.5	6.0	4.0	3.6	3.2	2.8
Gulf Coast	2.4	0.4	2.5	-6.0	-7.1	7.7	3.6	2.6	1.9	1.7
Midwest	2.9	2.0	1.1	-3.5	-4.1	5.5	3.9	3.8	3.4	3.0
Ohio Valley	2.8	0.3	0.5	-4.1	-7.5	6.1	3.3	2.9	2.2	1.8
Mid-Atlantic	3.4	3.3	0.9	-2.7	-2.7	5.2	4.1	4.1	3.8	3.4
Southeast	3.5	2.5	0.5	-3.4	-4.6	5.7	3.7	3.6	3.2	2.9
Northeast	3.3	3.2	0.2	-2.1	-3.3	4.9	4.1	4.2	3.9	3.4
West Coast	3.2	3.5	0.6	-2.7	-2.3	4.9	4.1	4.3	4.1	3.6
<b>Other Chemistry Indicators</b>										
Capacity	1.9	1.4	1.0	1.4	-0.5	-0.8	0.0	0.8	1.8	2.8
Capacity Utilization (%)	77.5%	78.8%	79.0%	74.3%	71.3%	76.2%	79.3%	81.5%	82.6%	82.6%
Capital Spending (\$ billions)	\$22.91	\$23.27	\$23.19	\$24.47	\$20.00	\$20.25	\$23.25	\$26.50	\$29.10	\$30.65
% Change	3.4	1.6	-0.3	5.5	-18.3	1.3	14.8	14.0	9.8	5.3

Sources: Bureau of the Census, Federal Reserve Board and ACC analysis.

**TABLE 3**  
**GLOBAL CHEMISTRY OUTLOOK**

<i>% Change Y/Y unless noted otherwise</i>	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Business of Chemistry Output</b>										
United States	3.5	3.1	1.2	-4.7	-4.5	6.0	4.0	3.6	3.2	2.8
Canada	-1.4	0.8	1.4	-3.5	-11.2	8.0	4.5	3.5	3.4	3.2
Mexico	1.7	1.5	2.2	-0.2	-0.8	3.3	4.8	4.2	4.0	3.5
<b>North America</b>	<b>3.2</b>	<b>2.9</b>	<b>1.3</b>	<b>-4.5</b>	<b>-4.7</b>	<b>6.0</b>	<b>4.1</b>	<b>3.7</b>	<b>3.2</b>	<b>2.9</b>
Brazil	5.5	-0.4	1.0	1.4	-8.8	8.2	6.5	6.5	5.7	5.1
Other	7.4	6.8	4.9	2.4	-3.8	4.2	5.5	5.3	4.7	3.8
<b>Latin America</b>	<b>6.6</b>	<b>3.8</b>	<b>3.4</b>	<b>2.0</b>	<b>-5.7</b>	<b>6.0</b>	<b>5.9</b>	<b>5.8</b>	<b>5.1</b>	<b>4.4</b>
France	3.2	6.9	5.7	-0.6	-5.5	7.6	3.4	2.7	2.5	2.5
Germany	5.5	4.2	5.5	-1.5	-10.9	8.3	2.8	2.7	2.4	2.1
Italy	-0.4	4.8	-0.3	-3.2	-7.2	3.8	1.9	2.2	2.0	1.8
United Kingdom	2.6	3.1	-1.2	-0.4	-4.7	2.1	3.0	2.7	2.6	2.4
Belgium	-2.9	3.8	-1.4	5.2	-8.3	4.4	2.4	2.8	2.9	2.7
Ireland	-4.9	5.5	4.9	3.1	15.4	4.3	3.8	4.0	3.6	3.2
Netherlands	0.5	4.9	2.1	-4.3	-6.7	5.5	2.9	2.6	2.5	2.3
Spain	1.0	4.2	3.5	-1.4	-0.9	2.6	2.5	2.5	2.3	2.2
Sweden	0.1	9.1	-12.0	-5.7	-7.3	2.2	3.5	3.3	3.0	3.0
Switzerland	7.2	9.9	14.9	1.7	-5.5	2.8	3.2	3.3	3.0	3.1
Other	5.0	2.3	4.0	-0.4	-7.9	2.0	2.5	3.0	2.7	2.6
<b>Western Europe</b>	<b>2.4</b>	<b>5.0</b>	<b>3.3</b>	<b>-0.7</b>	<b>-5.9</b>	<b>5.0</b>	<b>2.9</b>	<b>2.8</b>	<b>2.6</b>	<b>2.4</b>
Russia	2.7	3.1	9.0	-1.8	-8.0	5.6	4.9	5.0	5.2	4.6
Other	4.6	9.1	6.1	-1.8	-15.6	4.4	5.3	5.9	5.5	5.0
<b>Emerging Europe</b>	<b>3.6</b>	<b>5.9</b>	<b>7.6</b>	<b>-1.8</b>	<b>-11.6</b>	<b>5.1</b>	<b>5.1</b>	<b>5.4</b>	<b>5.3</b>	<b>4.8</b>
<b>Africa &amp; Middle East</b>	<b>6.9</b>	<b>8.2</b>	<b>4.2</b>	<b>10.2</b>	<b>-0.1</b>	<b>6.1</b>	<b>6.6</b>	<b>6.8</b>	<b>6.4</b>	<b>6.0</b>
Japan	-0.3	1.8	1.9	-2.1	-9.8	5.7	3.5	3.2	2.7	2.2
Asia-Pacific (ex Japan)	10.7	11.9	13.9	4.9	4.0	12.3	8.5	8.6	8.1	7.7
China	19.0	21.1	20.2	7.7	6.4	16.5	11.9	11.6	11.0	10.5
India	10.7	7.4	10.4	5.2	10.3	8.4	8.3	8.6	8.3	8.2
Australia	-1.2	-8.4	-1.7	0.6	-2.0	2.7	2.2	2.1	2.0	1.7
Korea	1.2	2.8	6.7	1.6	3.0	9.2	5.1	6.3	5.6	4.8
Singapore	3.9	1.9	2.9	-0.6	-13.1	12.9	5.9	5.4	5.3	5.3
Taiwan	-2.0	2.2	7.4	-1.6	-8.3	11.7	6.3	6.6	6.0	5.5
Other	8.6	2.3	4.9	-1.6	-2.5	9.0	7.4	7.5	6.9	6.3
<b>Asia/Pacific</b>	<b>6.4</b>	<b>8.2</b>	<b>9.8</b>	<b>2.6</b>	<b>-0.3</b>	<b>9.5</b>	<b>6.4</b>	<b>6.3</b>	<b>5.8</b>	<b>5.3</b>
<b>Total Global Output</b>	<b>4.2</b>	<b>5.5</b>	<b>4.9</b>	<b>0.0</b>	<b>-3.6</b>	<b>7.2</b>	<b>5.0</b>	<b>4.9</b>	<b>4.6</b>	<b>4.2</b>
Developed	2.3	3.5	2.2	-2.5	-6.0	5.5	3.5	3.2	2.8	2.6
Developing	8.7	8.8	9.3	3.7	-0.7	9.7	7.6	7.7	7.2	6.7
Capital Spending (\$ billions)	\$156.2	\$171.9	\$204.6	\$235.6	\$223.8	\$242.4	\$272.8	\$307.8	\$342.8	\$372.0
% Change	12.6	10.0	19.0	15.2	-5.0	8.3	12.6	12.8	11.4	8.5

Source: ACC

Note: Analysis is based on the ACC Global Index of Business of Chemistry which is comparable to the Federal Reserve Board production indices and features a similar base year where 2002=100.

**APPENDIX TABLE 1**  
**GLOBAL ECONOMIC GROWTH OUTLOOK**

<i>% Change Y/Y unless noted otherwise</i>	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
United States	3.1	2.7	2.1	0.4	-2.4	3.3	3.1	2.8	2.6	2.6
Canada	3.0	2.9	2.5	0.4	-2.6	3.4	2.9	3.2	3.0	2.8
Mexico	3.2	4.9	3.3	1.5	-6.5	4.4	3.7	4.3	4.1	3.9
Brazil	3.2	4.0	6.1	5.1	-0.2	5.8	4.6	4.8	4.6	4.5
United Kingdom	2.2	2.9	2.6	0.5	-4.9	1.1	2.1	2.5	2.7	2.6
Eurozone	1.7	3.0	2.8	0.6	-4.1	1.0	1.4	1.8	1.9	1.9
France	1.9	2.4	2.3	0.3	-2.2	1.4	1.6	1.9	2.1	2.2
Germany	0.7	3.2	2.5	1.2	-5.0	1.5	1.7	1.9	1.8	1.9
Italy	0.7	2.0	1.5	-1.3	-5.0	0.7	1.0	1.3	1.4	1.4
Belgium	2.0	2.8	2.8	0.8	-3.0	1.2	1.6	1.9	2.1	2.1
Ireland	6.2	5.4	6.0	-3.0	-7.1	-1.1	2.3	2.8	2.9	3.1
Netherlands	2.0	3.4	3.6	2.0	-4.0	1.2	1.5	1.9	2.0	2.0
Spain	3.6	4.0	3.6	0.9	-3.6	-0.5	0.6	1.2	1.7	2.1
Sweden	3.3	4.2	2.6	-0.2	-4.4	1.9	2.6	2.7	2.5	2.5
Switzerland	2.6	3.6	3.6	1.8	-1.5	1.8	1.9	1.7	1.9	1.9
Russia	6.4	7.7	8.1	5.6	-7.9	5.2	4.4	4.3	4.5	4.3
Japan	1.9	2.0	2.4	-1.2	-5.2	3.0	1.6	1.8	1.8	1.6
China	10.4	11.6	13.0	9.6	8.7	10.3	9.1	8.7	8.8	8.7
India	9.2	9.8	9.4	7.3	5.7	8.1	8.2	8.2	8.1	7.9
Australia	3.2	2.6	4.7	2.4	1.3	3.1	3.3	3.3	3.3	3.3
Korea	4.0	5.2	5.1	2.3	0.2	5.5	4.5	4.3	4.0	3.9
Singapore	7.6	8.7	8.2	1.4	-2.0	8.5	5.2	4.9	4.6	4.7
Taiwan	4.7	5.4	6.0	0.7	-1.9	7.0	5.1	5.0	4.6	4.4

Source: ACC

**APPENDIX TABLE 2**  
**GLOBAL INDUSTRIAL PRODUCTION OUTLOOK**

<i>% Change Y/Y unless noted otherwise</i>	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
United States	3.3	2.3	1.5	-2.2	-9.7	5.5	4.9	3.3	3.2	2.7
Canada	1.7	-0.3	0.1	-4.2	-10.0	5.6	5.1	5.0	4.4	3.7
Mexico	3.2	5.7	2.4	-0.9	-6.4	4.8	3.9	4.1	3.6	3.4
Brazil	3.4	2.9	5.9	2.9	-7.1	9.0	5.8	5.6	4.9	4.7
United Kingdom	-1.1	0.7	0.1	-2.8	-10.5	2.3	2.6	2.5	2.3	1.7
Eurozone	0.9	3.8	3.3	-1.6	-14.8	3.7	2.3	2.9	2.4	2.0
France	0.2	1.4	1.4	-2.5	-11.9	4.0	2.6	2.9	2.3	1.9
Germany	3.5	5.7	6.0	0.0	-16.8	5.6	4.2	3.6	2.6	2.7
Italy	-0.8	3.6	2.2	-3.4	-17.2	3.8	2.2	2.2	2.0	1.4
Belgium	-0.1	5.2	2.6	-0.6	-13.8	1.8	2.0	2.4	2.4	2.0
Ireland	4.0	2.8	5.0	-1.8	-2.6	3.1	4.1	3.8	3.7	3.7
Netherlands	0.4	1.6	2.2	1.5	-7.9	3.5	2.2	2.5	2.3	2.0
Spain	0.8	3.9	2.0	-7.3	-15.2	1.9	2.0	2.6	2.6	2.4
Sweden	2.0	5.2	4.3	-4.3	-17.4	2.1	3.9	3.4	2.8	2.6
Switzerland	2.7	7.8	9.5	1.2	-7.8	3.7	2.6	2.9	3.1	3.0
Russia	4.0	3.9	6.3	2.1	-10.7	4.9	4.7	4.7	4.5	4.2
Japan	1.5	4.2	2.9	-3.4	-21.8	16.9	7.1	4.2	3.4	1.8
China	16.4	16.6	13.5	12.9	11.1	14.3	13.4	11.5	11.5	11.3
India	7.9	10.5	9.9	4.4	6.3	10.8	8.7	9.0	7.5	7.2
Australia	1.8	0.4	3.3	2.4	-2.6	3.5	3.0	2.9	2.7	2.4
Korea	5.9	8.9	7.0	3.0	0.0	12.4	6.8	6.6	6.0	5.6
Singapore	9.5	11.9	5.9	-4.2	-5.1	13.5	7.2	5.8	4.9	4.8
Taiwan	4.6	5.0	7.6	-1.7	-6.4	16.6	8.7	9.2	7.0	6.1

Source: ACC

**APPENDIX TABLE 3**  
**GLOBAL INFLATION OUTLOOK**

<i>% Change Y/Y unless noted otherwise</i>	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
United States	3.4	3.2	2.9	3.8	-0.3	1.8	1.7	2.2	2.3	2.3
Canada	2.2	2.0	2.1	2.4	0.3	1.8	2.0	2.1	2.1	2.2
Mexico	4.0	3.6	4.0	5.1	5.3	4.9	4.1	3.7	3.6	3.6
Brazil	6.9	4.2	3.6	5.7	4.9	5.0	4.5	4.2	4.1	4.1
United Kingdom	2.0	2.3	2.3	3.6	2.2	2.8	1.8	2.1	2.2	2.3
Eurozone	2.2	2.2	2.1	3.3	0.3	1.4	1.4	1.6	1.7	1.7
France	1.9	1.9	1.6	3.2	0.1	1.6	1.5	1.8	1.9	1.9
Germany	1.9	1.8	2.3	2.8	0.1	1.0	1.3	1.4	1.5	1.7
Italy	2.2	2.2	2.0	3.5	0.8	1.5	1.5	1.9	1.8	1.8
Belgium	2.5	2.3	1.8	4.5	-0.2	1.5	1.6	1.8	2.0	1.9
Ireland	2.2	2.7	2.9	3.1	-1.7	-0.6	1.0	1.6	1.9	2.1
Netherlands	1.5	1.7	1.6	2.2	1.0	1.2	1.4	1.7	1.8	1.9
Spain	3.4	3.6	2.8	4.1	-0.3	1.4	1.2	1.6	1.8	1.9
Sweden	0.8	1.5	1.7	3.3	2.2	1.4	1.9	2.0	2.0	2.0
Switzerland	1.2	1.1	0.7	2.4	-0.4	0.9	0.9	1.2	1.4	1.4
Russia	12.7	9.7	9.0	14.1	11.7	7.3	7.0	6.5	5.7	5.4
Japan	-0.3	0.3	0.0	1.4	-1.4	-0.8	-0.1	0.2	0.8	0.9
China	1.8	1.5	4.8	5.9	-0.7	3.2	3.1	3.1	3.1	3.1
India	4.2	6.2	6.4	8.3	10.9	11.4	5.7	5.0	4.7	4.6
Australia	2.7	3.5	2.3	4.4	1.8	2.9	2.9	2.7	2.6	2.6
Korea	2.8	2.2	2.5	4.7	2.8	3.0	3.2	2.9	2.8	2.8
Singapore	0.5	1.0	2.1	6.5	0.2	2.5	2.3	1.9	1.8	1.8
Taiwan	2.3	0.6	1.8	3.5	-0.9	1.6	2.1	1.9	2.0	2.0

### Methodology

This report presents an up-to-date assessment of current conditions and likely 2010-2014 prospects for the global business of chemistry, with particular emphasis on the US. The analysis reflects the ACC Global Index of Business of Chemistry Activity and other economic data and publicly available information through mid-June. The ACC Global Production Index measures the production volume of the business of chemistry for 33 key nations, sub-regions, and regions, all aggregated to the world total. The index is comparable to the Federal Reserve Board (FRB) production indices and features a similar base year where 2002=100. This index is developed from government industrial production indices for chemicals from over 65 nations accounting for about 97% of the total global business of chemistry. The ACC Global Index measures production activity generally consistent with the overall industry nomenclature of NAICS 325, the EU NACE 24, and the UN's ISIC 351 and 352 industries. That is, the index measures production of pharmaceuticals, soaps & detergents, personal care products, fertilizers, and other downstream products in addition to measuring inorganic chemicals, organic chemicals, plastic resins, synthetic fibers, synthetic rubber, adhesives and sealants, coatings, and other specialty chemicals. ACC's Chemical Production Regional Index (CPRI) measures production activity of the Business of Chemistry among the various regions of the US.

In looking ahead, a model of global output for the business of chemistry is employed. Also taken into account are the forecasts made by economists at the various national chemical associations in Europe (the expertise of whom ACC gratefully acknowledges) and from economic forecasting consultants and other institutions. Also gratefully acknowledged is the macroeconomic and chemical industry expertise of IHS Global Insight and Oxford Economics, leading providers of economic advice and consultancy services. The macroeconomic forecasts of the Economist Intelligence Unit (EIU) also were important to our thinking as was the US Industrial Outlook of the Manufacturers Alliance/MAPI. These were supplemented by forecasts provided by the Asian Development Bank, IMF, OECD, the WTO, and various banks. The forecasts that are presented in this analysis are our own.

Historical data (since 1994) and annual projections (to 2014 and beyond) for the tables in the report are available in a spreadsheet.

Note: Every effort has been made in the preparation of this publication to provide the best available information. However, neither the American Chemistry Council, nor any of its employees, agents or other assigns makes any warranty, expressed or implied, or assumes any liability or responsibility for any use, or the results of such use, of any information or data disclosed in this material.