

Highlights

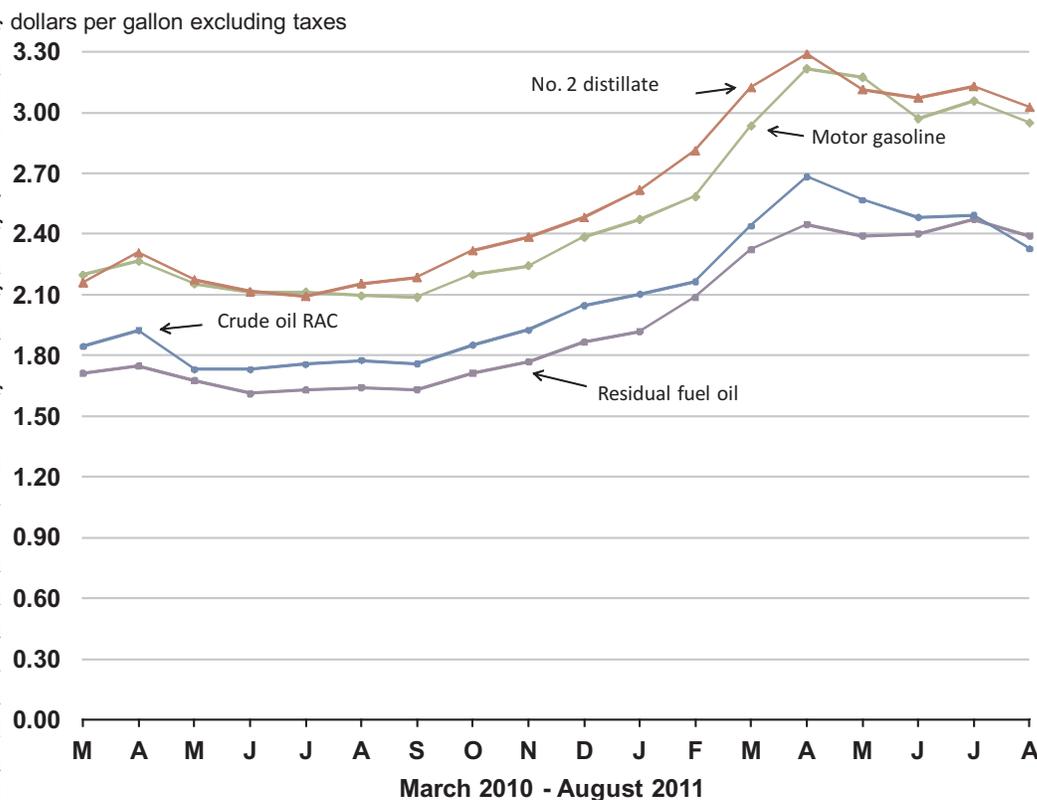
After a comparatively settled turn in July, world crude oil prices returned to a more volatile path during August. Turbulence stemming from fiscal and economic matters in Organization for Economic Cooperation and Development (OECD) countries caused prices to plummet at the start of August, while production issues helped underpinned a resurgence later in the month. More specifically, the dispute over the federal government debt ceiling that resulted in Standard & Poor's downgrading the United States' long-term sovereign credit rating from AAA to AA+ created turmoil in financial markets that quickly bled over to commodities markets. The renewed sovereign debt problems in Europe, particularly in Greece, also added a note of uncertainty about the pace of economic recovery and its effect on oil demand.

In contrast to the effect of these economic issues on prices, scheduled outages and unplanned disruptions to production operations in the North Sea supported their rise during the latter half of August. Still absent Libyan crude oil also had an effect of lower output from North Sea fields. Many refineries are keyed to use certain types of crude oil and the loss of the light sweet crude oil exported from Libya has had an impact on market demand and prices for other similar streams such as the ones from the North Sea. Notably, a leak due to a malfunctioning relief valve at the Gannet Alpha platform led to the most significant oil spill in the North Sea in a decade. The incident started on August 11 and continued through August 23. During the final days of the month, pipeline spills caused by

vandalism leading to delays of exports from Nigeria and the threat of Hurricane Irene to the heavily populated East Coast of the United States helped underpin international crude oil prices.

Several factors including economic and fiscal issues, supply and demand trends, and refinery operations contributed to crude oil and refined products price volatility in U.S. markets during August. As noted above, the debt ceiling debate in Congress had a significant effect on prices in financial and commodities markets, and pressured oil products prices sharply lower at beginning of the month. Following that sharp drop, prices began to rally after

Figure HL1. Crude Oil and Petroleum Product Wholesale Prices



Sources: Energy Information Administration. Crude oil refiner acquisition cost: Form EIA-14, "Refiners' Monthly Cost Report"; petroleum product prices: Form EIA-782A, "Refiners' /Gas Plant Operators' Monthly Petroleum Product Sales Report."

Table HL1. U.S. Refiner Prices and Volumes of Petroleum Products

(Prices: Dollars per Gallon Excluding Taxes, Volumes: Million Gallons per Day)

Products	Sales to End Users						Sales for Resale					
	August 2011		July 2011		August 2010		August 2011		July 2011		August 2010	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
Motor Gasoline	3.134	42.4	3.172	42.4	2.250	45.1	2.949	306.4	3.058	297.7	2.095	328.2
Conventional	3.104	27.7	3.140	27.8	2.197	29.8	2.938	209.7	3.042	202.5	2.071	228.4
Regular	3.086	24.8	3.123	24.9	2.175	26.4	2.919	186.1	3.023	178.3	2.054	201.8
Midgrade	3.200	1.4	3.226	1.4	2.308	1.7	2.981	7.7	3.085	7.8	2.094	9.3
Premium	3.326	1.4	3.352	1.4	2.424	1.7	3.139	15.9	3.220	16.3	2.255	17.3
Reformulated	3.190	14.7	3.232	14.6	2.355	15.2	2.973	96.6	3.092	95.2	2.152	99.8
Regular	3.147	11.7	3.191	11.6	2.308	11.9	2.947	82.8	3.067	81.6	2.123	84.6
Midgrade	3.297	1.2	3.332	1.2	2.464	1.3	3.030	1.7	3.147	1.7	2.216	2.0
Premium	3.396	1.8	3.428	1.8	2.564	2.0	3.141	12.2	3.254	12.0	2.329	13.2
Aviation Gasoline	3.913	0.2	4.027	0.1	2.967	0.2	3.899	0.5	4.011	0.4	2.842	0.5
Kerosene-Type Jet Fuel	3.057	35.0	3.118	33.8	2.158	36.1	3.040	23.9	3.090	24.0	2.138	23.8
Propane (Consumer Grade)	1.650	4.7	1.620	4.7	1.211	3.8	1.522	24.3	1.513	20.5	1.084	22.3
Kerosene	3.851	0.0	3.812	0.0	2.772	0.0	3.089	1.0	3.158	1.2	2.125	1.0
No. 1 Distillate	3.562	0.0	3.437	0.0	2.705	0.0	3.266	0.3	3.156	0.5	2.412	0.2
No. 2 Distillate	3.144	13.6	3.215	12.8	2.262	13.7	3.026	149.8	3.129	137.6	2.155	156.0
No. 2 Fuel Oil	3.227	0.2	3.294	0.2	2.379	0.2	2.927	9.5	3.024	6.8	2.041	7.2
No. 2 Diesel Fuel	3.143	13.5	3.214	12.6	2.260	13.4	3.032	140.3	3.135	130.7	2.161	148.8
Ultra Low Sulfur	3.164	10.6	3.232	9.9	2.277	11.0	3.034	133.7	3.136	125.3	2.166	137.2
Low Sulfur	3.067	2.6	3.143	2.3	2.175	2.2	3.012	5.6	3.105	4.7	2.114	8.3
High Sulfur	3.061	0.3	3.166	0.4	2.247	0.2	2.957	1.0	3.052	0.7	2.054	3.3
No. 4 Fuel^a	W	W	W	W	W	W	W	W	W	W	W	W
Residual Fuel Oil	2.512	5.1	2.508	5.9	1.676	6.8	2.392	10.1	2.474	13.3	1.642	11.4
Sulfur Content not > 1 %	2.896	1.5	2.877	1.7	1.895	2.2	2.394	3.1	2.547	5.0	1.705	2.4
Sulfur Content > 1 %	2.342	3.5	2.362	4.3	1.571	4.6	2.392	7.0	2.430	8.2	1.625	9.1

W = Withheld to avoid disclosure of individual company data.

^a Includes No. 4 fuel oil and No. 4 diesel fuel.

Note: Beginning January 2007, oxygenated gasoline is included in conventional gasoline.

Note: In January 2007, ultra low-sulfur diesel fuel was added.

Note: All on-highway diesel must be ultra low-sulfur as of December 1, 2010.

Notes: Values shown for the current month are preliminary. Values shown for previous months are revised. Data are final upon publication in the *Petroleum Marketing Annual*. Total volumes may not equal the sum of the components due to rounding.

Source: Energy Information Administration Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

the release of weekly inventory data showing sizeable declines in crude oil and refined product stocks. Reports of refinery operations problems also helped underpin prices in Midwestern markets. The Environmental Protection Agency (EPA) granted a temporary waiver allowing suppliers to provide winter formulation gasoline in Memphis, Tennessee area through August 31 to prevent supply disruptions to the area stemming from the shutdown of Valero's 180,000 b/d Memphis refinery. At the end of the month, the threat of Hurricane Irene to East Coast led to precautionary steps at number of refining and pipeline facilities that included ramping

down operations until the storm passed. Despite those measures, the storm's path across the highly populated region did not affect prices.

Notably, No. 2 distillate prices continued to exceed gasoline price in markets across the country during August. More specifically, EIA weekly data covering retail sales of regular gasoline and on-highway diesel fuel show prices (including taxes) for these products averaged \$3.639 per gallon and \$3.860 per gallon at the U.S. level during August, respectively. At the spot market level, the point in the supply chain

where petroleum products are traded on a cash basis with the expectation of immediate, physical delivery of the product, the same situation was evident. The New York Harbor spot market price for regular gasoline averaged \$2.835 per gallon in August compared with the spot price for No. 2 ultra low-sulfur diesel which averaged \$3.010 per gallon during the same period. A look at other benchmark spot market prices shows an overall decline in prices month-on-month. The New York Harbor monthly average price for regular gasoline fell 18.6 cents (6.2 percent) from July's average price of \$3.021 per gallon, but was 89.2 cents (45.9 percent) higher than the August 2010 price of \$1.943 per gallon. The price for No. 2 fuel oil averaged \$2.946 per gallon in August 2011, 12.2 cents (4.0 percent) lower than July's average of \$3.068 per gallon, but 93.1 cents (46.2 percent) above the average of \$2.015 per gallon seen during August 2010. The average August 2011 spot price for West Texas Intermediate (WTI) crude oil at Cushing, Oklahoma was \$86.33 per barrel, compared with \$97.30 per barrel, reflecting a decrease of \$10.97 (11.3 percent). The price one year ago was \$76.60 per barrel, marking a \$9.73 (12.7 percent) difference with the current price.

Additional August market and sales activity for crude oil and the principal petroleum products are summarized in the following sections.

Crude Oil

The daily spot price for WTI crude oil at Cushing, Oklahoma moved along a volatile path during August. After opening at \$95.68 per barrel, its highest level for the month, the price entered a period of sharp decline, stemming from turbulent conditions in financial markets stemming from the debt ceiling dispute in Congress and serious fiscal problems in eurozone countries. Following the month's low of \$79.32 per barrel on August 9, the price began to regain some ground, thanks in large part to significant declines in crude oil and finished products inventories reported in weekly stocks data. Although the price took a decided downturn on unfavorable economic news at mid-month, it rose again during the latter half of August on a combination of the threat of Hurricane Irene, economic trends, and geopolitical events. Closing the month at \$88.91 per barrel, the price was \$6.77 lower than its opening level for August.

- Monthly average crude oil prices fell appreciably in all categories of sales during August. The average domestic crude oil first purchase price decreased \$8.82 (9.0 percent), to \$89.00 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil decreased \$8.24 (7.8 percent), to \$97.80 per barrel. The average landed cost of foreign crude oil dropped \$8.69 (8.2 percent), to \$97.59 per barrel.
- The average refiner acquisition cost for domestic crude oil fell \$6.77 (6.6 percent), to \$95.90 per barrel. The average cost of imported crude oil declined \$6.93 (6.5 percent), to \$99.01 per barrel. The composite refiner acquisition cost for crude oil decreased 6.98 (6.7 percent), to \$97.70 per barrel.

Petroleum Products

Motor Gasoline

The New York Harbor daily spot price for regular gasoline moved along an unsettled path during August. After opening at \$3.020 per gallon, the price moved to the month's high of \$3.050 per gallon on August 1, then fell into a steep decline in response to economic issues in the U.S. and abroad. The price reached its low of \$2.680 per gallon on August 9. The price rebounded on reported decreases in gasoline stocks along with news of refinery outages. It continued to climb through the end of the month, underpinned in large part by those same fundamental issues along with market technical factors and a modest amount of support from Hurricane Irene. Closing the month at \$2.846 per gallon, the price was 17.4 cents below its opening level for August.

- Monthly average prices for sales of finished gasoline by refiners declined during August. The average price for retail sales of motor gasoline dropped 3.8 cents to \$3.134 per gallon, while the average wholesale price fell 10.9 cents to \$2.949 per gallon.

- Refiner motor gasoline sales rose in August. Total sales increased 8.7 million gallons per day (2.6 percent) to an average of 348.8 million gallons per day. Retail sales remained flat, while wholesales rose 8.7 million gallons per day (2.9 percent). DTW sales accounted for 9.9 percent of wholesales, while rack and bulk sales made up 79.3 percent and 10.9 percent, respectively.

No. 2 Distillate

Like other products in the complex, the daily spot price for No. 2 heating oil at New York Harbor experienced significant changes during August. After opening at \$3.086 per gallon and marking the month's high of \$3.090 per gallon on August 1, the price embarked on a considerable decline, driven downwards by economic and fiscal concerns. It reached the month's low of \$2.806 per gallon on August 9. Reported decreases in distillate and other petroleum product inventories along with interruptions in refinery operations put the price on a rising path through the remainder of the month. Closing at \$3.068 per gallon, the price was 1.8 cents per gallon below its opening level for August.

- Refiner monthly average prices for No. 2 distillates declined in August. The average sales price for No. 2 diesel fuel to end users fell 7.1 cents to \$3.143 per gallon, while the average wholesale price decreased 10.3 cents to \$3.032 per gallon. The average price for No. 2 fuel oil sales to end users dropped 6.7 cents to \$3.227 per gallon, while the average wholesale price fell 9.7 cents to \$2.927 per gallon.
- Sales of No. 2 distillates by refiners increased during August. Total sales rose 13.1 million gallons per day (8.7 percent), to 163.4 million gallons per day. No. 2 fuel oil sales climbed 2.6 million gallons per day (37.5 percent), while sales of No. 2 diesel fuel rose 10.5 million per day (7.3 percent).

Residual Fuel Oil

- The refiner monthly average prices for residual fuel oil generally fell during August. Prices for low-sulfur residual fuel oil rose 1.9 cents to \$2.896 per gallon at retail, but fell 15.3 cents to \$2.394 per gallon at wholesale. Prices for high-sulfur residual fuel oil declined 2.0 cents to \$2.342 per gallon at retail, and 3.8 cents to \$2.392 per gallon at wholesale.
- Sales of residual fuel oil by refiners decreased in August. Total sales declined 4.0 million gallons (20.8 percent) to 15.2 million gallons per day. Low-sulfur residual fuel oil sales fell 2.1 million gallons per day (31.3 percent), while high-sulfur residual fuel oil sales decreased 2.0 million gallons per day (16.0 percent).

Other Products

- August refiner prices for the remaining surveyed products show mixed trends. Prices for propane and No. 1 distillate increased at both retail and wholesale, while kerosene-type jet fuel and aviation gasoline fell at both levels. Kerosene prices rose at retail, but fell at wholesale.
- Refiner sales of these products varied during August. Sales of propane were flat at retail, but rose at wholesale. Kerosene-type jet fuel and kerosene sales increased at the retail level, while falling at wholesale. Sales of aviation gasoline rose at both levels, while No. 1 distillate sales did just the opposite.

Summary Statistics