

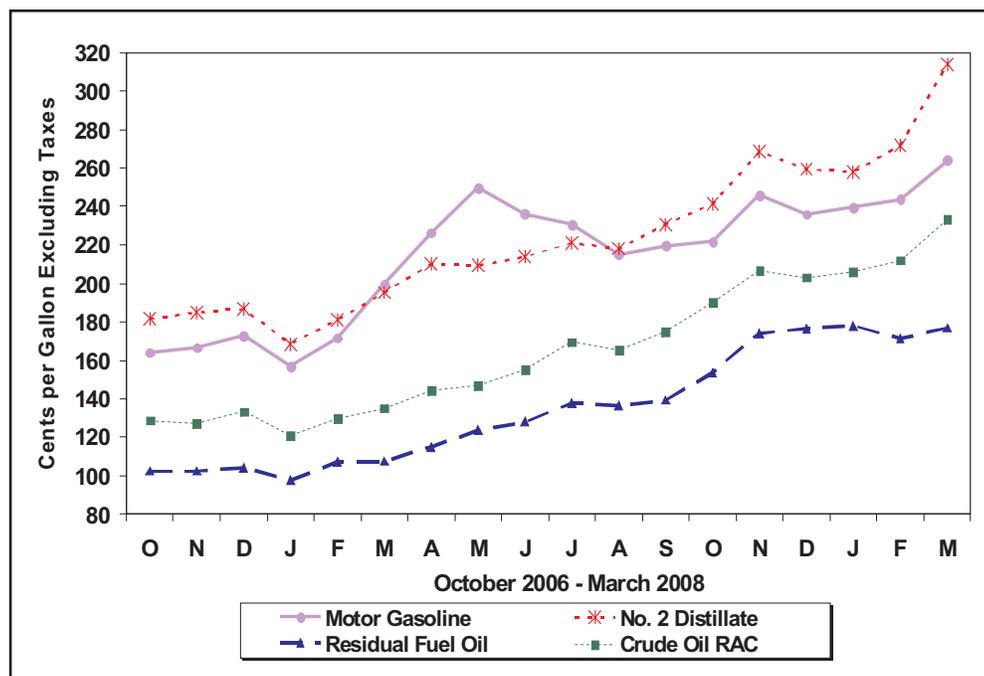
Highlights

Economic worries, supply concerns, and political issues continued to affect international crude oil prices, driving them to record-setting levels during March. At the start of the month another round of sanctions issued by the United Nations Security Council against Iran over its nuclear energy program underpinned prices. At the same time, heightened tensions between Venezuela, Ecuador, and Colombia over Colombia's bombing of rebel forces in Ecuador also supported rising oil prices. Additionally, the March 5 meeting of the Organization of Petroleum Exporting Countries (OPEC) where the group was expected to, and did, maintain its current production quotas, helped sustain higher price levels. Continuing worries about the vigor of the U.S. economy and the declining value of the dollar also pressured oil prices higher. Some market watchers contend more non-commercial investors are moving into the commodities markets as a way to hedge against the weakening value of the U.S. dollar. Recent economic news, including the release of data showing a drop in U.S. retail sales at mid-month, drove prices for key crude oil streams to record-setting highs. During the same period, the bailout of the investment banking and brokerage firm, Bear Stearns, caused more turbulence in financial markets and also affected price trends in commodities markets. While growing concern that an explicit recession in the United States could soften demand from the world's largest oil consumer dampened prices for a short while, an explosion on a major crude oil export pipeline system in Iraq at the end of the month sent prices upwards once again. While benchmark crude oil prices closed March near their opening

levels, the decline was seen as the result of technical factors rather than driven by fundamental market issues.

Crude oil and refined product prices rose appreciably amid a volatile atmosphere in the U.S. petroleum products marketplace during March. Market interest focused on crude oil and distillates, especially during the first half of the month, with prices for those products repeatedly setting record highs as the value of the dollar fell and inventories recorded declines. In early March, news that home foreclosures rose significantly during the final quarter of 2007 helped induce another decrease in the value of the dollar. As the month continued, rising crude oil inventories signaled a downturn in demand for the product to some observers. Notably, the refinery utilization rate fell from February's level and the rate seen at this time last year. While both

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: Cents per Gallon Excluding Taxes, Volumes: Million Gallons per Day)

Products	Sales to End Users						Sales for Resale					
	March 2008		February 2008		March 2007		March 2008		February 2008		March 2007	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
Motor Gasoline	278.3	55.2	256.9	55.1	213.8	57.4	264.0	311.1	243.6	309.0	199.6	316.5
Conventional	275.6	33.0	255.9	33.3	206.4	35.0	261.8	219.8	243.0	218.2	193.4	225.1
Regular	273.6	28.8	253.8	29.0	204.2	30.0	260.4	195.1	241.5	191.7	191.6	197.3
Midgrade	284.1	2.4	264.9	2.4	214.9	2.7	263.0	10.6	244.9	11.5	199.4	10.0
Premium	296.9	1.8	276.8	1.9	225.7	2.2	281.0	14.2	259.6	15.1	210.5	17.8
Reformulated	282.4	22.1	258.5	21.8	225.3	22.5	269.1	91.2	245.1	90.8	214.7	91.3
Regular	278.5	17.5	254.4	17.1	221.0	17.4	266.3	77.8	242.6	76.8	211.6	76.2
Midgrade	291.6	2.2	267.4	2.2	234.9	2.4	278.4	2.4	251.3	2.6	222.4	3.1
Premium	302.4	2.5	279.0	2.5	245.2	2.6	287.0	11.0	260.5	11.4	232.1	12.1
Aviation Gasoline	337.0	0.1	307.0	0.1	262.7	0.1	324.9	0.4	297.8	0.4	246.1	0.4
Kerosene-Type Jet Fuel	312.2	37.3	269.4	36.9	187.2	40.4	310.6	16.6	267.3	16.3	184.6	16.5
Propane (Consumer Grade)	179.9	3.4	NA	3.7	NA	3.5	146.0	33.6	143.1	48.4	104.9	39.3
Kerosene	358.2	0.1	334.6	0.1	232.5	0.1	328.0	0.7	284.2	1.8	194.3	1.4
No. 1 Distillate	319.8	0.1	288.7	0.2	208.2	0.2	331.6	0.7	291.3	1.7	218.4	0.7
No. 2 Distillate	325.4	20.9	281.0	22.7	205.5	25.4	313.7	148.2	271.7	153.4	195.3	148.5
No. 2 Fuel Oil	323.2	1.0	288.8	1.3	205.0	1.1	297.6	18.2	260.9	24.8	178.1	19.7
No. 2 Diesel Fuel	325.5	19.8	280.5	21.4	205.5	24.3	315.9	130.0	273.8	128.6	197.9	128.9
Ultra Low Sulfur	326.8	11.8	281.6	12.6	209.9	11.7	316.5	109.1	274.8	107.3	202.5	93.8
Low Sulfur	325.9	7.0	280.2	7.4	209.6	7.7	314.1	18.2	270.4	17.5	194.2	16.5
High Sulfur	308.4	1.0	272.5	1.4	188.4	4.8	307.0	2.7	262.0	3.8	178.1	18.5
No. 4 Fuel^a	W	W	W	W	W	W	230.0	0.2	198.4	0.2	138.3	0.3
Residual Fuel Oil	193.4	7.8	180.1	9.8	115.0	11.5	176.8	10.5	171.4	8.1	107.6	7.3
Sulfur Content not > 1 %	204.7	2.5	200.3	2.8	122.1	3.8	195.6	2.3	187.0	2.9	117.1	3.0
Sulfur Content > 1 %	188.1	5.4	171.9	6.9	111.4	7.7	171.5	8.2	162.5	5.1	100.8	4.2

NA = Not available.

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.

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."

maintenance and repair issues accounted for some of the decrease, discretionary runs cuts due to diminishing margins also contributed to the decline. The Energy Information Administration (EIA) calculates that crude oil costs accounted for 71.8 percent of the retail price of gasoline (including taxes) in March 2008. Last year at this time, crude oil costs made up 52.3 percent of the retail cost of gasoline. Another notable trend highlighting the robust values for crude oil is the price for West Texas Intermediate (WTI) crude oil (the U.S. benchmark for this product) meeting or exceeding wholesale gasoline prices several times during the month. As the month wore on, actions taken by the Federal Reserve to help steady the economy proved to have only short-lived effects in oil markets, and crude oil prices responded more forcefully to trends in the dollar's valuation. Distillate fuel prices were also volatile, with the price for No. 2 heating oil

reaching a record-breaking level at mid-month on continued stock declines and forecasts for cold temperatures in the Northeast, the nation's key heating oil consuming region. Distillate prices were not only affected by low U.S. inventories, but also by short supplies in European markets. Additionally, at the end of March, a force majeure on April product loadings declared by a South Korean refinery coupled with a larger-than-expected drop in distillate stocks led the No. 2 heating oil price to a new record high on March 27. A comparison of current and year-ago monthly average spot market prices highlights the changes taking place in petroleum product prices. The March 2008 spot price for WTI crude oil at Cushing, Oklahoma averaged \$105.5 per barrel, marking a \$10.06 (10.5 percent) increase from February's average price of \$95.39 per

Petroleum Products

Motor Gasoline

At New York Harbor, the daily spot price for regular gasoline continued in an unsettled mode during March. After opening at \$2.479 per gallon, the price followed the lead of crude oil and other petroleum product prices during the initial weeks of March. Nevertheless, the price fell sharply at mid-month, dropping below the price for WTI crude oil, due in large part to robust gasoline inventories. The price reached its low for the month on March 17 when it dropped to \$2.325 per gallon. The volatility continued throughout the remainder of the month, thanks to the overall vigor of prices in the complex. Following the month's high of \$2.704 per gallon on March 28, the price fell precipitously, closing March at \$2.400 per gallon.

- March monthly average prices for finished gasoline show substantial increases from February levels. The average price for retail sales of motor gasoline by refiners climbed 21.4 cents to \$2.783 per gallon, while the average wholesale price increased 20.4 cents to \$2.640 per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets also rose 21.4 cents to \$2.786 per gallon. The average wholesale price for gasoline climbed 19.9 cents to \$2.645 per gallon. The average dealer tank wagon (DTW) price jumped 21.8 cents to \$2.713 per gallon, while the average rack price increased 19.1 cents to \$2.639 per gallon. The average bulk sale price also rose 19.1 cents to \$2.541 per gallon. Reformulated gasoline prices were 6.4 cents higher than conventional gasoline prices at the retail level, and 5.5 cents more at wholesale.
- Data show only marginal changes in refiner sales of motor gasoline during March. Total sales increased 2.2 million gallons per day (0.6 percent) to an average of 366.3 million gallons per day. Retail sales remained essentially flat, rising only 100,000 gallons per day (0.2 percent), while wholesales increased 2.1 million gallons per day (0.7 percent). DTW sales made up 13.5 percent of wholesales, while rack and bulk sales accounted for 69.8 percent and 16.7 percent, respectively.

barrel. More notably, the average price one year ago was \$60.44 per barrel, a \$45.01 (74.5 percent) difference to the current average. At New York Harbor, the March No. 2 fuel oil monthly spot market price averaged \$3.066 per gallon, up a remarkable 42.2 cents (16.0 percent) from February's average of \$2.644 per gallon. The March 2007 average price was \$1.742 per gallon, \$1.324 (76.0 percent) lower than the March 2008 price. The March 2008 spot market price for regular gasoline at New York Harbor averaged \$2.504 per gallon, 12.3 cents (5.2 percent) higher than the February 2008 average of \$2.381 per gallon, and 56.6 cents (29.2 percent) higher than the March 2007 average price of \$1.938 per gallon.

Additional March 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 course during March. Opening at \$101.78 per barrel, the price dropped back to the month's low of \$99.72 on March 4 on expectations of increases in stocks of crude oil and gasoline. Nevertheless, the price rebounded on a number of economic and political concerns, rising firmly to a new record and the month's high of \$110.21 per barrel on March 13. The price experienced broad swings during the latter half of the month, first dampened by economic concerns and drop in demand for oil products, then boosted by heating oil prices and a pipeline explosion in Iraq. The price fell sharply during the final days of March, closing at \$101.54 per barrel, marginally below its opening level for the month.

- Monthly average crude oil prices rose significantly in all categories in March. The average domestic crude oil first purchase price jumped \$9.03 (10.1 percent) to \$89.41 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil climbed \$5.78 (6.6 percent) to \$93.35 per barrel. The average landed cost of foreign crude oil rose \$6.45 (7.2 percent), to \$96.26 per barrel.
- The average refiner acquisition cost for domestic crude oil increased \$7.43 (8.1 percent), to \$99.68 per barrel. The average cost of imported crude oil jumped \$9.62 (11.0 percent), to \$97.03 per barrel, while the composite refiner acquisition cost for crude oil increased \$8.87 (10.0 percent), to \$97.94 per barrel.

No. 2 Distillate

The New York Harbor daily spot price for No. 2 heating oil rose significantly in March, reaching long-term highs. After opening at \$2.806 per gallon, its lowest price for the month, the price swiftly jumped upwards following the release of inventory data showing another decline in distillate stocks. Following a brief lull, the price climbed again following forecasts for below-normal temperatures in the Northeast and rumors of a refinery outage in the same region. While moderating after reaching record highs at mid-month, the price rose to new highs at the end of the month following news of refinery problems at a facility in South Korea. The price reached the month's high of \$3.236 per gallon on March 27. Closing at \$3.078 per gallon, the price was 27.1 cents higher than its opening level for the month.

- Prices for No. 2 distillates soared in March. The national average residential sales price climbed 29.4 cents to \$3.472 per gallon. The average wholesale price jumped 41.6 cents to \$3.145 per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets surged 46.9 cents, while the average wholesale price rose 41.9 cents. Ultra low-sulfur diesel fuel prices were 1.1 cents higher than low-sulfur diesel fuel at retail, and 1.9 cents more at wholesale.
- Sales of No. 2 distillates by refiners fell in March. Total sales declined 7.1 million gallons per day (4.0 percent), to 169.0 million gallons per day. Sales of No. 2 fuel oil fell 6.9 million gallons per day (26.4 percent), while sales of No. 2 diesel fuel declined 200,000 gallons per day (0.1 percent). Ultra low-sulfur diesel fuel accounted for 80.7 percent of all refiner diesel fuel sales, while total diesel fuel sales made up 88.6 percent of all refiner No. 2 distillate sales.

Residual Fuel Oil

- Residual fuel oil prices increased during March. Refiner prices for low-sulfur residual fuel oil rose 4.4 cents to \$2.047 per gallon at retail, and 8.6 cents to

\$1.956 per gallon at wholesale. Refiner prices for high-sulfur residual fuel oil climbed 16.2 cents to \$1.881 per gallon at retail, and 9.0 cents to \$1.715 per gallon at wholesale. Including data reported by a sample of residual fuel oil marketers, average prices for low-sulfur residual fuel oil rose 6.5 cents to \$2.058 per gallon at retail, and 13.1 cents to \$1.929 per gallon at wholesale. Prices for high-sulfur residual fuel oil increased 14.8 cents to \$1.866 per gallon at retail, and 7.9 cents to \$1.711 per gallon at wholesale.

- Refiner sales of residual fuel oil rose slightly in March. Total sales increased 400,000 gallons (2.2 percent) to 18.3 million gallons per day. Low-sulfur residual fuel oil sales fell 900,000 gallons (15.8 percent), while high-sulfur residual fuel oil sales increased 1.6 million gallons (13.3 percent).

Other Products

- Prices for the remaining surveyed products rose in March, significantly in many instances. The refiner price for propane increased 2.9 cents per gallon at wholesale. Including data from a sample of propane marketers, the average residential price rose 3.5 cents per gallon, while the average retail price inched up 0.8 cent per gallon. The average wholesale price for propane climbed 3.0 cents per gallon. Prices for kerosene-type jet fuel, aviation gasoline, kerosene, and No. 1 distillate registered large increases at both levels, while the wholesale price for No. 4 distillate also rose significantly in March.
- Sales of the products included in this section show mixed trends during March. Propane, kerosene, and No. 1 distillate sales fell at both retail and wholesale, while kerosene-type jet fuel did just the opposite. Aviation gasoline sales declined at the retail level, but rose at wholesale. Sales of No. 4 distillate fell again at the wholesale level during March.