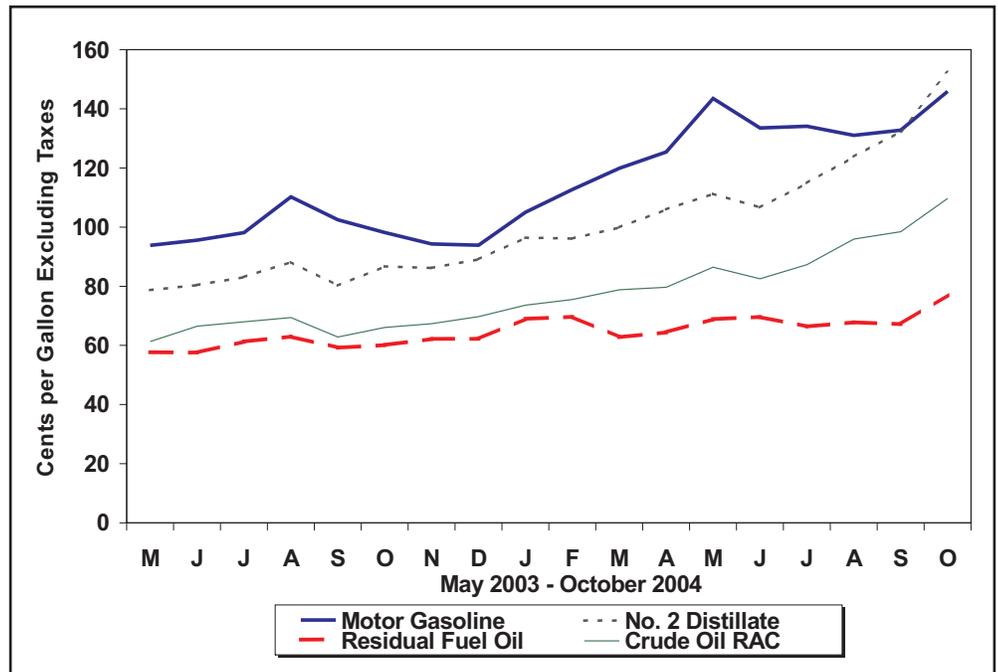


Highlights

Prices for many world crude oil streams surged to record levels during October. While political issues affecting the oil industry added pressure on prices, such as the threat by Nigerian rebels to attack oil and gas production facilities, fundamental market factors acted as the primary influence on crude oil values. Ongoing robust demand from Asian markets (particularly China), production and supply rates, and refined product inventory levels both directed and underpinned the upward trend of crude oil prices throughout October. The rise in prices was particularly evident in Atlantic Basin markets, where production and stocks of middle distillates heavily affected crude oil price activity. In the U.S., worries about the supply of heating fuel for the coming winter season, along with diminished crude oil output from offshore fields in the Gulf of Mexico, lifted benchmark prices well above \$50 per barrel. In European markets, efforts to produce very low-sulfur diesel fuel before new environmental regulations went into effect, influenced demand for sweet crude oil streams, driving their prices appreciably higher than prices for sour crude oil streams. However, during the closing days of October, oil prices dropped sharply. The pronounced decreases were primarily due to a U.S. Energy Information Administration (EIA) weekly supply report showing an increase in crude inventories and more improvement in Gulf of Mexico oil production. Additionally, an interest rate hike announced by the Chinese government on October 28 had some influence on prices. Market watchers interpreted the rate increase, intended to cool the country's booming economy and curb inflation, as having a possible effect on oil demand in the future.

Crude oil and refined product prices in U.S. markets were quite volatile in October. The month began with crude oil prices easily topping records in both spot and futures markets. The spot market price for benchmark West Texas Intermediate (WTI) at Cushing, Oklahoma broke the \$50-per-barrel mark on the first day of October, then continued to rise to new levels almost daily during the first half of the month. Escalating prices, especially for distillates, were supported by inventory reports showing declines in supply levels through most of the month. Both seasonal scheduled refinery maintenance and the lingering effects of storm-related cut-backs at offshore oil production facilities and ports in the Gulf Coast region were significant factors leading to lower stock levels. In turn, those data affected price trends throughout regional markets. In addition to continuing robust demand for the product from the transportation and manufacturing sectors, brisk demand for diesel fuel for agricultural use also influenced

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					
	October 2004		September 2004		October 2003		October 2004		September 2004		October 2003	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
Motor Gasoline	158.6	59.0	145.2	58.5	115.0	64.6	145.9	319.2	132.8	319.6	98.2	319.0
Conventional	153.1	33.8	141.1	34.0	108.8	35.9	141.6	210.1	129.5	215.2	93.4	214.0
Regular	150.8	27.8	138.7	27.6	106.1	28.1	140.3	181.7	128.0	183.8	91.9	180.6
Midgrade	159.4	3.4	147.7	3.6	115.5	4.3	146.9	10.6	133.8	11.1	99.0	11.5
Premium	168.7	2.6	156.7	2.9	122.8	3.5	152.4	17.8	140.5	20.3	103.5	21.9
Oxygenated	157.5	2.8	147.3	1.7	118.7	3.5	147.8	11.6	135.8	9.2	104.8	10.5
Regular	155.2	2.3	145.2	1.4	115.8	2.7	146.4	9.5	134.6	7.5	103.4	8.3
Midgrade	163.5	0.3	154.0	0.2	124.4	0.5	148.6	1.2	136.0	1.1	105.4	1.3
Premium	174.5	0.2	164.3	0.1	135.4	0.3	161.0	1.0	148.9	0.7	115.7	1.0
Reformulated	167.2	22.4	151.0	22.7	123.4	25.2	154.7	97.5	140.0	95.2	108.4	94.4
Regular	163.4	16.8	146.9	16.8	119.2	18.3	152.3	78.8	137.4	75.4	105.5	73.2
Midgrade	174.0	2.5	158.2	2.6	130.0	3.1	161.2	4.9	145.2	5.2	115.9	5.8
Premium	182.1	3.1	166.7	3.3	138.2	3.8	166.6	13.8	151.6	14.7	119.7	15.4
Aviation Gasoline	W	W	189.2	0.1	150.8	0.1	172.2	0.5	165.8	0.6	131.3	0.5
Kerosene-Type Jet Fuel	155.0	44.6	133.3	46.3	84.5	43.7	154.9	13.9	132.5	13.8	83.7	12.0
Propane (Consumer Grade)	98.3	2.2	85.9	2.6	55.8	3.0	88.6	40.3	80.4	37.3	59.7	38.7
Kerosene	169.5	0.1	W	W	117.2	0.1	163.2	2.0	140.1	1.5	91.6	2.3
No. 1 Distillate	167.4	0.1	147.3	0.1	101.8	0.2	166.3	1.0	145.7	0.6	101.8	1.2
No. 2 Distillate	155.3	20.0	134.7	20.0	91.4	18.9	152.4	139.9	132.4	140.5	86.6	138.4
No. 2 Fuel Oil	153.4	2.1	129.9	2.1	88.2	2.5	147.8	17.3	126.8	15.4	84.2	19.3
No. 2 Diesel Fuel	155.6	17.9	135.3	17.9	91.9	16.4	153.1	122.6	133.1	125.1	87.0	119.1
Low Sulfur	158.7	12.1	137.8	12.3	93.6	11.3	153.9	107.6	133.9	108.5	87.5	101.6
High Sulfur	149.1	5.8	130.0	5.7	88.1	5.0	147.8	15.0	127.6	16.6	83.7	17.4
No. 4 Fuel^a	W	W	110.1	0.1	74.9	0.3	127.9	0.0	111.5	0.0	75.2	0.1
Residual Fuel Oil	82.8	9.0	77.2	9.2	65.2	9.7	77.1	5.0	67.2	5.0	60.1	4.9
Sulfur Content not > 1 %	88.3	2.2	88.3	3.4	70.7	3.0	85.7	2.4	74.6	2.2	65.2	2.0
Sulfur Content > 1 %	81.0	6.8	70.7	5.8	62.8	6.7	68.9	2.6	61.3	2.8	56.6	2.9

W = Withheld to avoid disclosure of individual company data.

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

Notes: Motor gasoline averages and totals prior to October 1993 include leaded gasoline.

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*.

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

October distillate prices. Comparing some year-on-year distillates supply and consumption data for the month of October sheds light on their effect on other prices in the petroleum product complex. Demand for distillates increased 3.7 percent from last year's rate, while production and imports remained flat. Further, monthly stocks data reinforce the downward trend seen in weekly data: total distillates stocks fell 10.3 percent from the October 2003 level, while low sulfur and high sulfur distillates declined 7.4 percent and 14.0 percent, respectively. A look at spot market prices at New York Harbor reflects the impact of these conditions on prices. The monthly average price in October 2003 for No. 2 fuel oil was 89.1 cents per gallon, while in October 2004, the average price was \$1.485 per gallon, an increase of nearly 60 cents. The change in the price for low sulfur diesel fuel is even more significant.

The average price in October 2003 was 83.9 cents per gallon, and in October 2004 the price was \$1.533 per gallon, a difference of 69.4 cents, and an 82.7 percent increase. However, all major product prices underwent sharp declines during the last week of the month as more refineries came back online from scheduled maintenance procedures.

Refiners were expected to take advantage of the favorable crack spreads for distillates and concentrate on producing those fuels and beginning to alleviate concern about supply levels going into the 2004-05 winter season.

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

Crude Oil

Spurred by concern about production and supplies, the daily spot price for West Texas Intermediate (WTI) crude oil at Cushing, Oklahoma reached record-setting highs in October. Opening at \$49.56 per barrel, its lowest point for the month, the price continued on a firmly rising path as concern about hobbled oil production in the Gulf of Mexico gripped the market. As the month progressed, apprehension about the adequacy of distillate fuels inventories for the coming winter supported the price. Following its record-setting high of \$56.37 per barrel on October 26, the price declined considerably during the final days of the month, closing at \$51.78 per barrel, \$2.22 higher than its opening level.

- Monthly average crude oil prices soared in October. The average domestic crude oil first purchase price shows the largest increase, rising \$5.63 (13.9 percent) to \$46.26 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil increased \$3.66 (9.4 percent), to \$42.52 per barrel. The average landed cost of foreign crude oil rose \$3.52 (8.6 percent), to \$44.62 per barrel.
- The average refiner acquisition cost for domestic crude oil climbed \$4.47 (10.5 percent), to \$47.24 per barrel. The average cost of imported crude oil to U.S. refiners jumped \$4.94 (12.2 percent), to \$45.45 per barrel, while the composite refiner acquisition cost for crude oil increased \$4.72 (11.4 percent), to \$46.06 per barrel.

Petroleum Products

Motor Gasoline

While not reaching the soaring heights of other products' prices, the daily spot price at New York Harbor for regular gasoline recorded a new long-term high in October. Opening at \$1.340, the price followed the general market trend, rising steadily during the first two weeks of the month. At mid-month, the gasoline price diverged from other prices in the complex, as the market focused on crude oil and distillates supplies. While the price exhibited more modest changes, it reached its highest point for the year thus far on October 22, when it rose to \$1.431 per gallon. Falling sharply during the last week of the month, the price reached its low of

\$1.290 per gallon on October 28, then closed the month at \$1.331 per gallon, marginally lower than where it began the month.

- National average gasoline prices soared upwards in October. The average price for retail sales of motor gasoline by refiners rose 13.4 cents to \$1.586 per gallon, while the average wholesale price increased 13.1 cents to \$1.459 per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets jumped 13.4 cents to \$1.576 per gallon. The average wholesale price for gasoline increased 12.5 cents to \$1.456 per gallon. The average dealer tank wagon (DTW) price surged 16.0 cents to \$1.535 per gallon, while the average rack price climbed 12.8 cents to \$1.449 per gallon. The average bulk sale price rose 11.6 cents to \$1.350 per gallon. Reformulated gasoline prices exceeded conventional gasoline prices by 13.4 cents at retail, and 12.3 cents at wholesale. Oxygenated gasoline prices were 3.9 cents higher than conventional gasoline prices at retail, and 6.1 cents more at wholesale.
- Sales of motor gasoline by refiners show only modest changes in October. Total sales remained essentially flat, rising only 100,000 gallons per day (0.0 percent) to an average of 378.2 million gallons per day. Retail sales increased 500,000 gallons per day (0.9 percent), while wholesales declined 400,000 gallons per day (0.1 percent). Rack sales accounted for 68.3 percent of wholesales, while DTW and bulk sales made up 17.2 percent and 14.5 percent, respectively. Reformulated gasoline made up 31.7 percent of total motor gasoline sales, while oxygenated gasoline accounted for 3.8 percent of sales.

No. 2 Distillate

- At New York Harbor, the daily spot for No. 2 fuel oil surged in October. After opening at \$1.393 per gallon, the price dropped back to the month's low of \$1.381 per gallon on October 4, then rose at a steady pace during the following two weeks. It jumped at mid-month as concerns increased about adequate supplies of heating fuels during the coming winter season. Shortly after reaching its high of \$1.589 per gallon on October 22, the price began a sizable decline, falling to \$1.456 per gallon by the close of the month. The closing level was 5.3 cents lower than its opening point.

- Monthly average prices for No. 2 distillates show profound changes from September levels. The national average residential sales price leaped 20.3 cents to \$1.801 per gallon. The average wholesale price climbed 19.7 cents to \$1.527 per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets soared 21.9 cents, while the average No. 2 diesel fuel wholesale price jumped 19.9 cents. The margin between low- and high-sulfur diesel fuel prices was 4.8 cents at retail and 3.9 cents at wholesale.
- Overall, refiner sales of No. 2 distillates dropped slightly in October. Total sales fell 700,000 gallons per day (0.4 percent), to 159.9 million gallons per day. Sales of No. 2 fuel oil increased 1.8 million gallons per day (10.2 percent), while sales of No. 2 diesel fuel decreased 2.5 million gallons per day (1.7 percent). Low-sulfur diesel fuel made up 85.2 percent of all refiner diesel fuel sales, and 74.9 percent of all refiner No. 2 distillate sales.

Residual Fuel Oil

- October national average residual fuel oil prices show a wide range of changes from September levels. Refiner prices for low-sulfur residual fuel oil remained flat at 88.3 cents per gallon at retail, but climbed 11.1 cents to 85.7 cents per gallon at wholesale. The average refiner retail price for high-sulfur residual fuel oil increased 10.3 cents to 81.0 cents per gallon, while the wholesale price rose 7.6 cents, to 68.9 cents per gallon. Including data reported by a sample of residual fuel oil marketers, average prices for low-sulfur residual fuel oil increased 1.2 cents to

83.1 cents per gallon at retail, and 8.8 cents to 81.2 cents per gallon at wholesale. The retail price for high-sulfur residual fuel oil jumped 10.2 cents to 80.3 cents per gallon, while the wholesale price increased 10.5 cents to 75.2 cents per gallon.

- As a whole, refiner sales of residual fuel oil declined in October. Total sales fell 200,000 gallons per day (1.4 percent). Low-sulfur residual fuel oil sales declined 1.0 million gallons per day (17.9 percent), while high-sulfur residual fuel oil sales increased 800,000 gallons per day (9.3 percent).

Other Products

- October monthly average prices for the remaining surveyed products show significant increases from September levels in most sales categories. Refiner prices for propane increased 12.4 cents per gallon at retail, and 8.2 cents per gallon at wholesale. Including data from a sample of propane marketers, the average residential propane price rose 6.4 cents per gallon, and the average wholesale propane price increased 9.9 cents per gallon. Kerosene-type jet fuel and No. 1 distillate prices soared at both the retail and wholesale levels. Wholesale prices for aviation gasoline, kerosene, and No. 4 distillate prices also show substantial increases.
- Refiner sales of the products included in this section were mixed in October. Sales of propane and kerosene-type jet fuel fell at retail but rose at wholesale, while sales of No. 1 distillate increased at both levels. Sales of kerosene and No. 4 distillate increased at wholesale, while aviation gasoline sales decreased in that category.