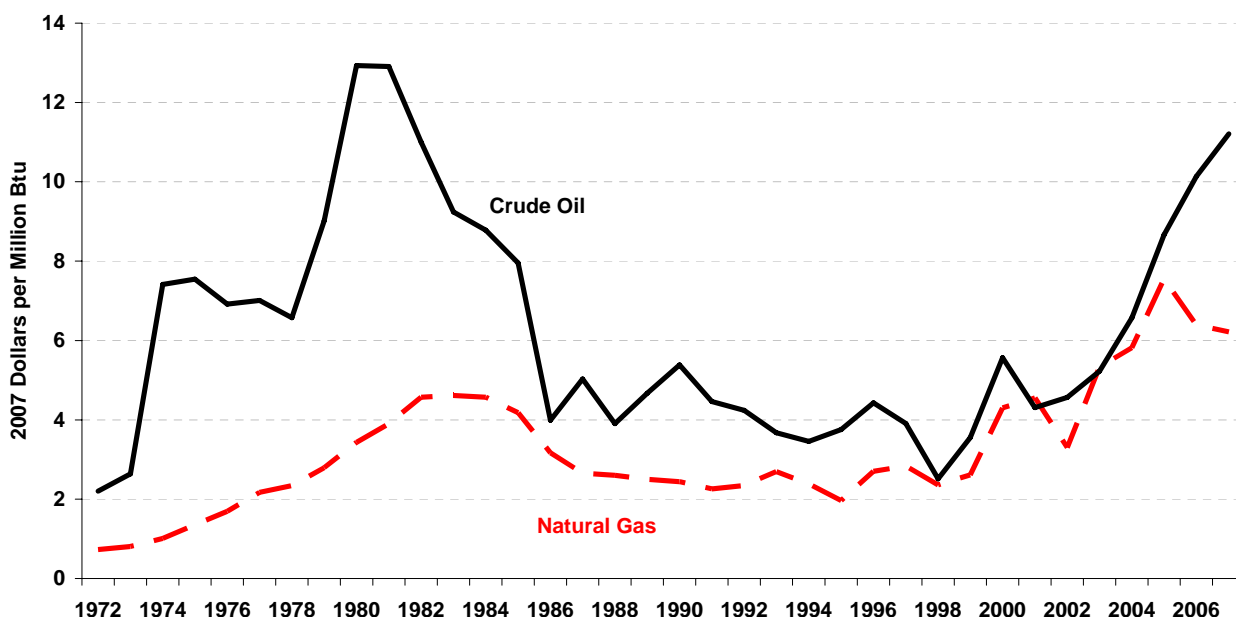


Overview of 2007 Petroleum and Natural Gas Markets

The Financial Reporting System (FRS) companies' financial results for 2007 were driven by the same factors as in 2006: substantially higher prices for crude oil and petroleum products, tempered by a decline in the price of natural gas. Crude oil prices (imported refiner acquisition cost) increased 11 percent from 2006 (in constant 2007 dollars),⁹¹ to \$67.04 per barrel, the highest level since 1981.⁹² Natural gas wellhead prices decreased 3 percent to \$6.39 per thousand cubic feet (mcf) in 2007.⁹³ Together, these changes increased the difference between crude oil and natural gas prices on a million British thermal unit (Btu) basis to nearly \$5, the largest gap since 1982. A gap of under \$2 had been the norm from 1992 through 2005 (**Figure 33**).

Figure 33. Imported Refiner Acquisition Cost of Crude Oil and Natural Gas Wellhead Prices, 1972-2007



Source: Crude Oil Price: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035 (2008/09) (Washington, DC, September 2008), Table 9.1; Natural Gas Price: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035 (2008/09) (Washington, DC, September 2008), Table 9.11; Heat Content Factors: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035 (2008/09) (Washington, DC, September 2008), Tables A2 and A4.

Gross refining margins in 2007 increased slightly for gasoline and jet fuel, but dropped slightly for distillate, as petroleum product prices generally rose slightly more than the increase in crude oil prices. Gasoline, jet fuel, and distillate prices each increased between 7 and 8 percent in 2007, to the highest levels the Energy Information Administration (EIA) has ever reported (**Figure 34**). Gasoline, distillate, and jet fuel prices remained tightly bunched, between \$2.17 and \$2.19 per gallon in 2007.

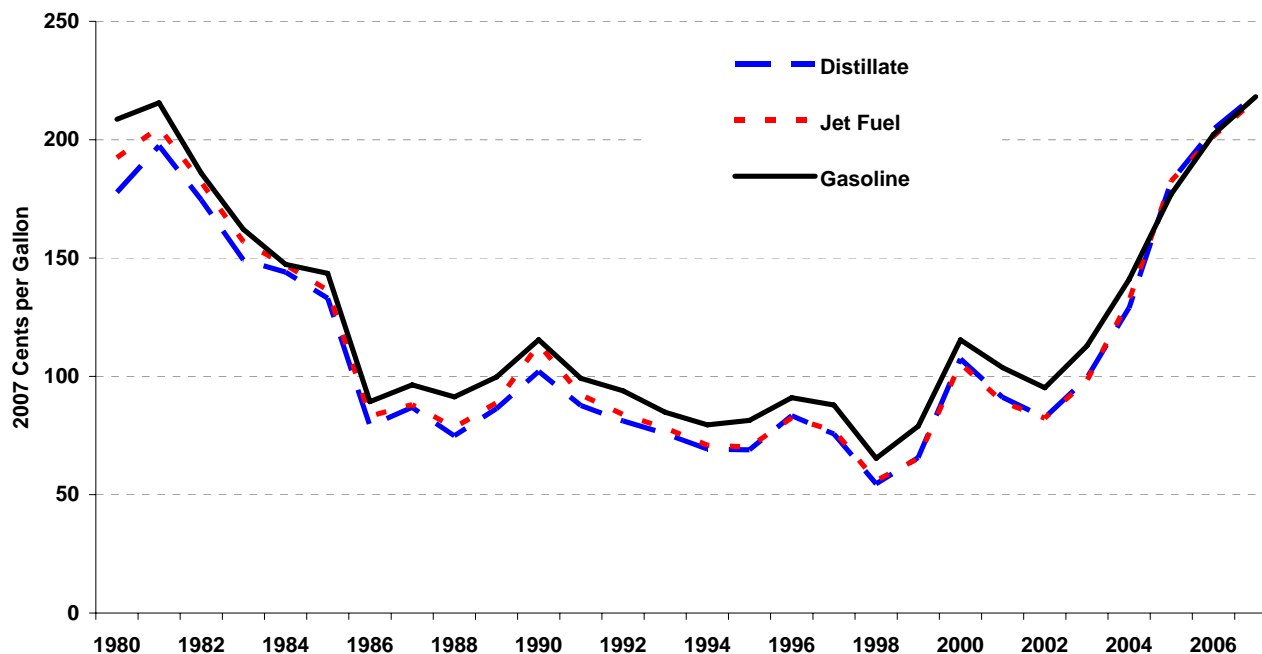
World oil demand increased 0.9 million barrels per day (mmbd) (1.0 percent) from the 2006 level to 85.8 mmbd in 2007 (**Table 21**). The rate of increase has dropped each of the last 3 years (**Figure 35**). Supply, which includes the production of crude oil, natural gas liquids (NGLs) and other liquids, and refinery processing gain, was 84.4 mmbd in 2007. Supply was nearly unchanged from 2006 and remained lower than demand, resulting in a bigger

⁹¹ Unless otherwise indicated, all dollar values and percentage changes in this report are based in constant 2007 dollars, adjusted using the gross domestic product implicit price deflator.

⁹² Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035 (2008/09) (Washington, DC, September 2008), Table 9.1.

⁹³ Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035 (2008/09) (Washington, DC, September 2008), Table 9.11.

Figure 34. Refiner Prices of Petroleum Products for Resale, 1980-2007



Source: Energy Information Administration, Refiner Petroleum Product Prices by Sales Type, available at http://tonto.eia.doe.gov/dnav/pet/xls/pet_pri_refoth_dcu_nus_a.xls (as of October 13, 2008).

Table 21. World Petroleum Balance, 2006-2007
(Million Barrels per Day)

	Quarterly 2007				Annual	
	Q1	Q2	Q3	Q4	2006	2007
Demand	85.8	84.9	85.6	86.9	84.9	85.8
Supply	83.9	84.2	84.2	85.3	84.5	84.4
Supply from Inventories	1.9	0.7	1.3	1.7	0.4	1.4

Note: Supply from Inventories includes statistical discrepancy.

Source: Energy Information Administration, *International Petroleum Monthly* (September 2008), Table 2.1.

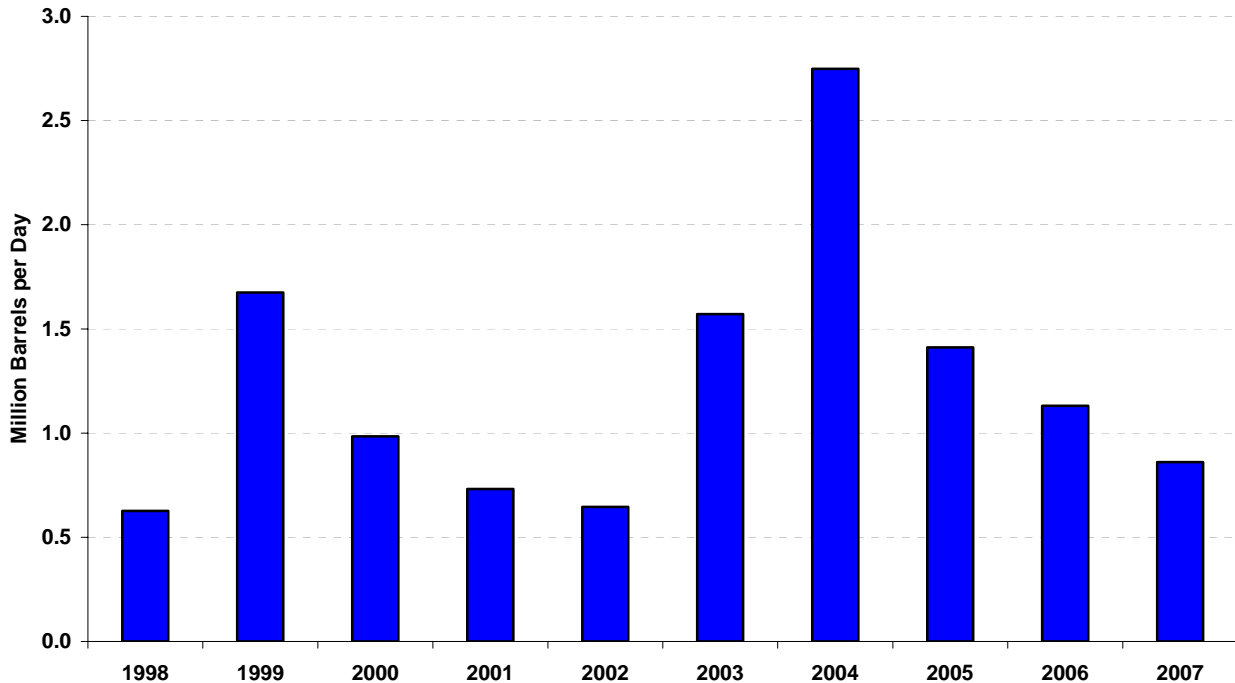
decrease in petroleum inventories of 1.4 mmbd in 2007. Worldwide reserve additions replaced 95 percent of crude oil and NGL production in 2007. The reserve replacement rate for non-Organization of the Petroleum Exporting Countries was 93 percent.⁹⁴

Petroleum product demand (represented by petroleum product supplied) in the United States remained level in 2007 at 20.7 mmbd (Table 22). This steady demand follows the previous year's decline of 0.6 percent, the first decline since 2001. Small increases in gasoline, distillate, and residual fuel consumption in 2007 were offset by decreases in jet fuel and other petroleum products (Figure 36).

Domestic crude oil production fell 38,000 barrels per day (0.7 percent) in 2007 from 2006, while NGL production grew 44,000 barrels per day (2.5 percent). Net imports of petroleum decreased by 355,000 barrels per day (2.9 percent) in 2007. The balance of demand was met by 341,000 barrels per day from petroleum product inventories and other inputs.

⁹⁴ Calculated from reserves and production data in BP plc, *BP Statistical Review of World Energy* (June 2008), pp. 6, 8.

Figure 35. World Oil Consumption, Change from Previous Year, 1998-2007



Source: Energy Information Administration, *International Petroleum Monthly*, September 2008, Table 4.6, available at <http://www.eia.doe.gov/ipm/> (as of October 13, 2008).

Table 22. U.S. Petroleum Balance, 2006-2007
(Million Barrels per Day)

	Quarterly 2007				Annual	
	Q1	Q2	Q3	Q4	2006	2007
Demand	20.8	20.6	20.7	20.6	20.7	20.7
Crude Oil Production	5.1	5.2	4.9	5.0	5.1	5.1
NGL Production	1.7	1.8	1.8	1.9	1.7	1.8
Other Inputs	1.5	1.8	1.6	1.7	1.5	1.6
Net Imports	12.0	12.5	12.2	11.5	12.4	12.0
Supply from Inventories	0.5	-0.6	0.1	0.6	-0.1	0.1

Note: Other Inputs includes adjustments and refinery processing gain.

Source: Calculated from Energy Information Administration, *Monthly Energy Review*, DOE-EIA-0035 (2008/09) (Washington, DC, September 2008), Tables 3.1 and 3.2.

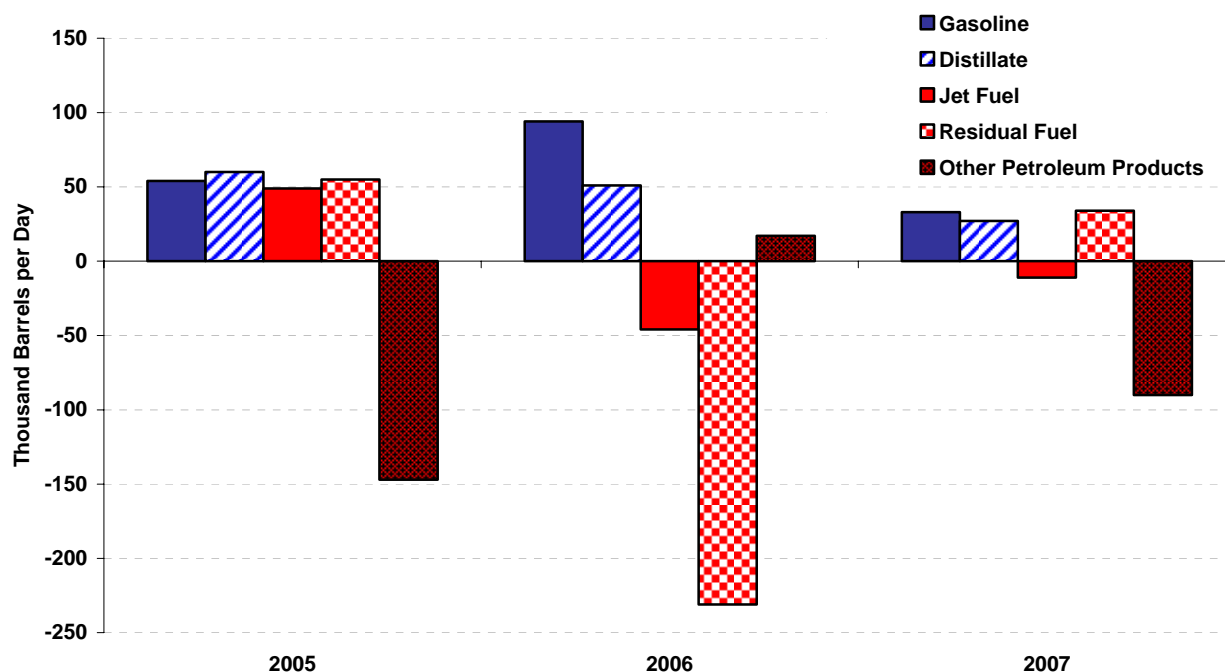
Crude oil and NGL reserve additions in the United States in 2007 exceeded production for the year; the combined reserve replacement rate for crude oil and NGLs was 140 percent.⁹⁵

U.S. refineries increased output in 2007 by 19,000 barrels per day (0.1 percent) from 2006.⁹⁶ That increase in output, combined with level petroleum product demand, led to the 2.9-percent drop in net imports of petroleum previously mentioned.

⁹⁵ Reserve additions include revisions and adjustments, net sales and acquisitions, and total discoveries. Energy Information Administration, *Advance Summary: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 2007 Annual Report* (October 2008), Table 1.

⁹⁶ Calculated from Energy Information Administration, U.S. Refinery and Blender Net Production Data, available at http://tonto.eia.doe.gov/dnav/pet/xls/pet_pnp_refp_dc_nus_mbbldpd_a.xls (as of October 17, 2008).

Figure 36. U. S. Petroleum Product Consumption, Change from Previous Year, 2005-2007



Source: Calculated from Energy Information Administration, Petroleum Product Supplied Data, available at http://tonto.eia.doe.gov/dnav/pet/xls/pet_cons_psup_dc_nus_mbbldpd_a.xls (as of October 13, 2008).

Table 23. U.S. Natural Gas Balance, 2006-2007
(Trillion Cubic Feet)

	Quarterly 2007				Annual	
	Q1	Q2	Q3	Q4	2006	2007
Demand	7.1	4.9	5.2	5.9	21.7	23.1
Natural Gas Production	4.6	4.8	4.9	5.0	18.5	19.3
Other Inputs	0.1	0.1	0.0	-0.4	0.2	-0.2
Net Imports	1.0	1.0	1.0	0.8	3.5	3.8
Supply from Inventories	1.5	-1.0	-0.7	0.4	-0.4	0.2

Note: Other Inputs includes supplemental gaseous fuels and the balancing item.

Source: Energy Information Administration, *Monthly Energy Review*, DOE-EIA-0035 (2008/09) (Washington, DC, September 2008), Table 4.1.

Natural gas demand in the United States increased 6.5 percent in 2007 to 23.1 trillion cubic feet (**Table 23**). Domestic natural gas production increased 4.3 percent in 2007 over 2006 production. The jump in natural gas demand caused natural gas imports to increase by 9.3 percent, nearly bringing supply and demand into balance for the year. U.S. natural gas reserve additions more than doubled production for 2007, with a reserve replacement rate for natural gas of 237 percent.⁹⁷

⁹⁷ Reserve additions include revisions and adjustments, net sales and acquisitions, and total discoveries. Energy Information Administration, *Advance Summary: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 2007 Annual Report* (October 2008), Table 1.