



CRS Report for Congress

U.S. Trade Deficit and the Impact of Rising Oil Prices

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Summary

Petroleum prices have continued to rise sharply in 2008, at one time reaching more than \$140 per barrel of crude oil. At the same time the average monthly volume of imports of energy-related petroleum products has fallen slightly. The combination of sharply rising prices and a slightly lower level of imports of energy-related petroleum products translates into an escalating cost for those imports. This rising cost added an estimated \$50 billion to the nation's trade deficit in 2006 and another \$28 billion in 2007. The prices of energy imports have been on a steady rise since summer of 2007, defying the pattern of declining energy import prices in the fall. This report provides an estimate of the initial impact of the rising oil prices on the nation's merchandise trade deficit. This report will be updated as warranted by events.

Background

According to data published by the Census Bureau of the Department of Commerce,¹ the prices of petroleum products over the past year have risen sharply, generally rising considerably faster than the change in demand for those products. As a result, the price increases of imported energy-related petroleum products worsened the U.S. trade deficit in 2006 and 2007, and again in 2008. Energy-related petroleum products is a term used by the Census Bureau that includes crude oil, petroleum preparations, and liquefied propane and butane gas. Crude oil comprises the largest share by far within this broad category of energy-related imports. The increase in the trade deficit is expected to have a slightly negative impact on U.S. gross domestic product (GDP) and could place further downward pressure on the dollar against a broad range of other currencies. To the extent that the additions to the merchandise trade deficit are returned to the U.S. economy as

¹ Census Bureau, Department of Commerce. Report FT900, *U.S. International Trade in Goods and Services*, September 11, 2008. Table 17. The report and supporting tables are available at [http://www.census.gov/foreign-trade/Press-Release/current_press_release/ftdpress.pdf].

payment for additional U.S. exports or to acquire such assets as securities or U.S. businesses, some of the negative effects could be mitigated.

Table 1 presents summary data from the Census Bureau for the change in the volume, or quantity, of energy-related petroleum imports and the change in the price, or the value, of those imports for 2007 and for 2008. The data indicate that the United States imported 4.8 billion barrels of total energy-related petroleum products in 2007, valued at \$319 billion. In the January-July period of 2008, the quantity of energy-related petroleum imports fell by 3.7% compared with the comparable period in 2007; crude oil imports also fell by 1.5% from the same period in 2007. Year-over-year, the average value of energy-related petroleum products imports rose by 64%, while the average value of crude oil imports rose by 74%. As **Figure 1** shows, imports of energy-related petroleum products can vary sharply on a monthly basis, but averaged about 390 million barrels a month in the January-July period of 2008.

Table 1. Summary Data of U.S. Imports of Energy-Related Petroleum Products, Including Oil (not seasonally adjusted)

	January through July					
	2007		2008			
	Quantity (thousands of barrels)	Value (thousands of dollars)	Quantity (thousands of barrels)	Percent change 2007 to 2008	Value (thousands of dollars)	Percent change 2007 to 2008
Total energy-related Petroleum Products	2,824,464	\$168,587,079	2,719,841	-3.7%	\$276,905,841	64.3%
Crude oil	2,157,296	\$123,335,329	2,123,861	-1.5%	\$214,478,822	73.9%

	January through December					
	2007		2008			
	(Actual values)		(Estimated values)			
	Quantity (thousands of barrels)	Value (thousands of dollars)	Quantity (thousands of barrels)	Percent change 2007 to 2008	Value (thousands of dollars)	Percent change 2007 to 2008
Total energy-related Petroleum Products	4,807,811	\$318,822,423	4,629,721	-3.7%	\$523,668,787	64.3%
Crude oil	3,690,568	\$237,211,653	3,633,369	-1.5%	\$412,508,539	73.9%

Source: Census Bureau, Department of Commerce. Report FT900, *U.S. International Trade in Goods and Services*, September 11, 2008. Table 17.

Note: Estimates for January through December of 2008 were developed by CRS from data through July 2008 and data through 2007 published by the Census Bureau using a straight line extrapolation.

In value terms, energy-related imports rose from about \$291 billion in 2006 to \$319 in 2007, or an increase of 9.6% to account for about 17% of the value of total U.S. merchandise imports. Data for 2008 indicate that the sharp rise experienced in energy prices in 2007 continued in January through July 2008, not following previous trends of falling during the winter months. As **Figure 2** shows, the cost of U.S. imports of energy-

related petroleum products has risen from about \$17 billion per month in early 2007 to \$53 billion a month in July 2008. The average price of imported oil in July 2008 was up 90% from the average price in June 2007, reflecting the continued run-up in imported oil prices in 2007 and 2008, as indicated in **Table 2**.

Figure 1. Quantity of U.S. Imports of Energy-Related Petroleum Products

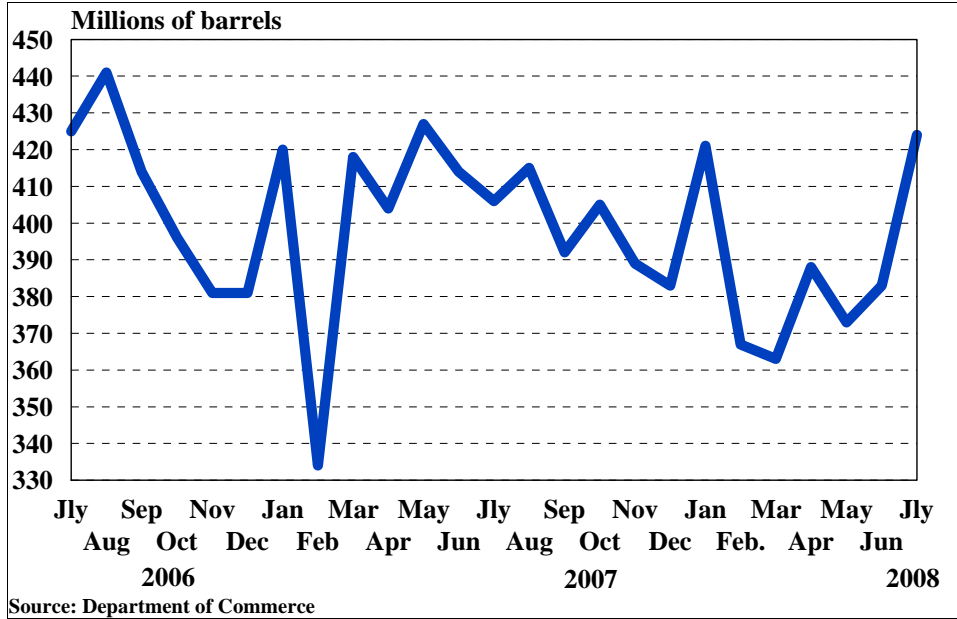


Figure 2. Value of U.S. Imports of Energy-Related Petroleum Products

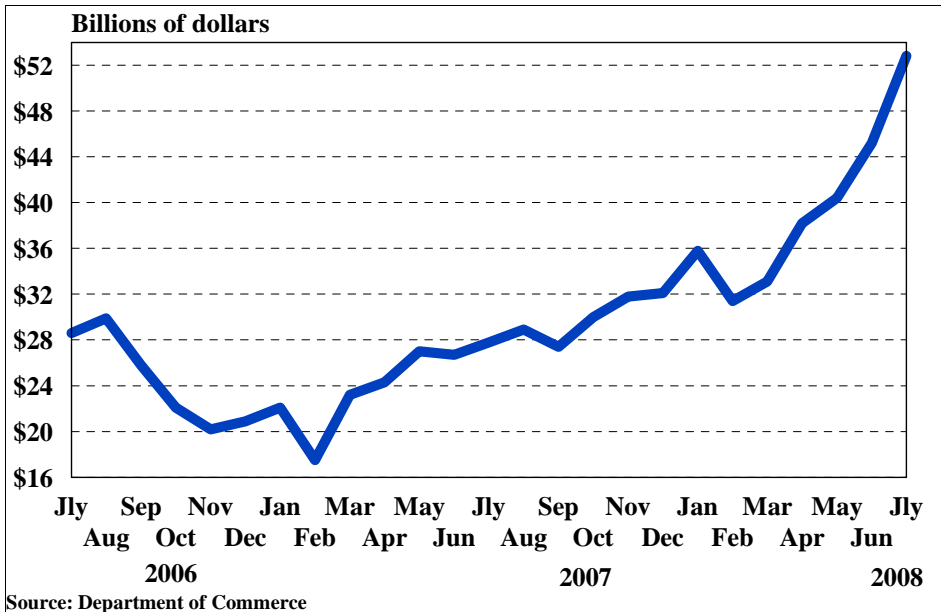


Table 2. U.S. Imports of Energy-Related Petroleum Products, Including Crude Oil (not seasonally adjusted)

Period	Total energy-related petroleum products ^a		Crude oil			
	Quantity (thousands of barrels)	Value (thousands of dollars)	Quantity (thousands of barrels)	Thousands of barrels per day (average)	Value (thousands of dollars)	Unit price (dollars)
2007						
Jan.- Dec.	4,807,811	\$318,822,423	3,690,568	10,111	\$237,211,653	\$64.28
January	419,828	22,065,916	321,272	10,364	16,763,529	52.18
February	334,586	17,471,845	256,750	9,170	13,001,677	50.64
March	418,262	23,186,425	318,783	10,283	16,941,702	53.15
April	404,329	24,344,989	305,965	10,199	17,514,576	57.24
May	427,007	27,038,265	322,212	10,394	19,128,841	59.37
June	414,174	26,723,896	321,757	10,725	19,623,027	60.99
July	406,277	27,755,742	310,556	10,018	20,361,977	65.57
August	414,665	28,897,623	317,585	10,245	21,647,893	68.16
September	391,646	27,435,637	302,410	10,080	20,700,725	68.45
October	404,808	30,039,497	315,071	10,164	22,869,846	72.59
November	389,483	31,771,542	300,371	10,112	23,990,094	79.87
December	382,745	32,091,045	297,836	9,608	24,667,796	82.82
2008						
January	420,916	\$35,836,371	322,206	10,394	\$27,093,581	\$84.09
February	367,098	31,356,495	286,483	9,879	24,281,817	84.79
March	363,252	33,146,123	278,571	8,986	25,030,666	89.85
April	388,145	38,185,528	303,050	10,102	29,339,760	96.81
May	373,287	40,360,232	293,995	9,484	31,245,288	106.28
June	382,675	45,207,376	297,532	9,918	34,850,146	117.13
July	424,467	52,813,717	342,024	11,033	42,637,563	124.66

Source: Census Bureau, Department of Commerce. Report FT900, *U.S. International Transactions in Goods and Services*. September 11, 2008. Table 17.

Note: Energy-related petroleum products is a term used by the Census Bureau and includes crude oil, petroleum preparations, and liquefied propane and butane gas.

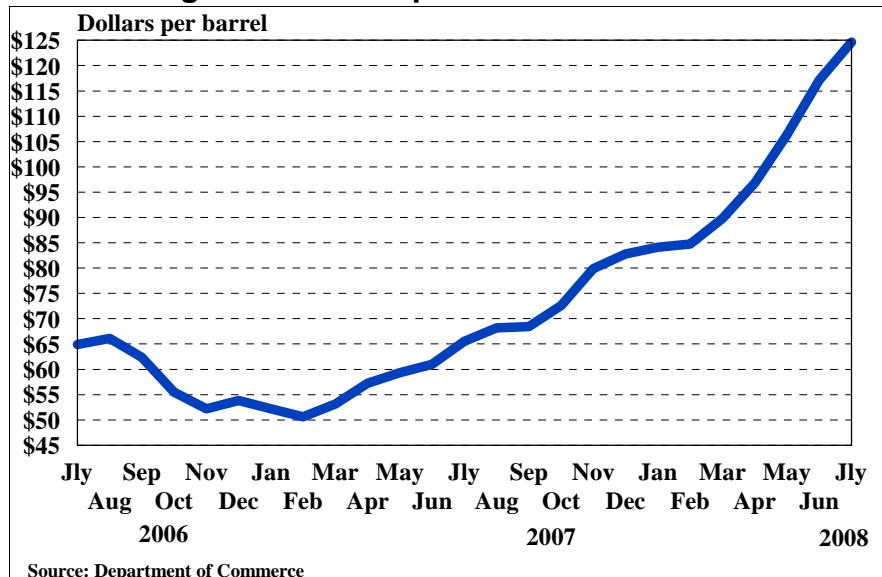
As a result of the overall rise in the value of energy-related imports in 2007, the trade deficit of such imports rose to \$293 billion to account for 36% of the total \$815 billion U.S. trade deficit, up from one-fifth of the total trade deficit in less than two years. In January-July 2008, the trade deficit in energy-related imports amounted to \$246 billion, or 49% of the total U.S. trade deficit of \$502 billion for the seven-month period.

The quantity of energy imports in 2007 fell by 1.5% below the quantity imported in 2006, but the total price of U.S. energy imports rose by about 10% in 2007 above that for 2006, largely as a result of the continued rise in the prices of imported energy in the October-December period of 2007. In testimony before Congress, Federal Reserve Board Chairman Ben Bernanke indicated that the rise in oil prices, along with other commodity

prices, likely would increase the overall rate of inflation in the economy, an important consideration in policy-making by the Federal Reserve.²

Crude oil comprises the largest share of energy-related petroleum products imports. According to Census Bureau data³ as shown in **Table 2**, imports of crude oil fell from an average of 10.23 million barrels of crude oil imports per day in 2006 to an average of 10.15 million barrels per day in 2007, or a decrease of 1.2%. In December 2007, such imports averaged 9.7 million barrels per day, or an increase of 2.5% over the volume of such imports recorded in December 2006. Data for crude oil imports in 2007 indicate that the total quantity of imported oil decreased by 1.2% from the comparable period in 2006. In December 2007, however, despite a 57% rise in the price of crude oil imports year over year, average crude oil imports rose by about 2.5% from December 2006. From June 2007 to June 2008, the average price of crude oil increased from \$61 per barrel to \$117 per barrel for an increase of 92%, as shown in **Figure 3**. As a result, the value of U.S. crude oil imports rose from about \$19 billion a month in June 2007 to \$35 billion a month in June 2008.

Figure 3. U.S. Import Price of Crude Oil



Data for the January-July 2008 period indicate that a number of factors combined to push oil prices to record levels. The sharp rise in prices combined with a small decrease in the volumes of oil imports experienced combined to post a large jump in the overall cost of imported energy. At times, crude oil traded for nearly \$148 per barrel in July 2008, indicating that the cost of energy imports will have a significant impact on the overall costs of U.S. imports and on the value of the U.S. trade deficit. Since those record prices, the price per barrel of imported crude oil has fallen to nearly \$100 per barrel in September 2008. With current expected volumes of energy-related petroleum products

² Bernanke, Ben, *The Economy and Financial Markets*, Testimony Before the Banking, Housing, and Urban Affairs Committee, U.S. Senate, February 14, 2008.

³ Report FT900, *U.S. International Trade in Goods and Services*, September 11, 2008. Table 17.

imports and at an average price of \$120 per barrel, energy-related import prices could add nearly \$216 billion to the trade deficit on an annual basis, pushing the annual trade deficit to nearly \$1 trillion. With current expected volumes of energy-related petroleum products imports and at an average price of \$130 per barrel, energy-related import prices could add \$260 billion to the annual trade deficit. Similarly, at a price of \$140 per barrel, energy-related import prices could add more than \$300 billion to the annual trade deficit.

Issues for Congress

The sharp rise in prices of energy imports experienced since early 2007 is expected to affect the U.S. rate of inflation, likely will have a slightly negative impact on the rate of economic growth in 2008, and pose a number of policy issues for Congress. Various factors are combining to push up the cost of energy imports to record levels at a time when they traditionally have followed a cyclical pattern that has caused energy prices to decline in the winter. A slowdown in the rate of economic growth in the United States in the spring and summer likely would lessen demand for energy imports and might help restrain the prices of energy imports. An important factor, however, will be the impact Atlantic hurricanes have on the production of crude oil in the Gulf of Mexico. Most immediately, higher prices for energy imports will worsen the nation's merchandise trade deficit, add to inflationary pressures, and have a disproportionate impact on the energy-intensive sectors of the economy and on households on fixed incomes.

Over the long run, a sustained increase in the prices of energy imports will permanently increase the nation's merchandise trade deficit, although some of this impact could be offset if some of the dollars are returned to the U.S. economy through increased purchases of U.S. goods and services or through purchases of such other assets as securities or U.S. businesses. Some of the return in dollars likely will come through sovereign wealth funds (SWFs), or funds controlled and managed by foreign governments, as foreign exchange reserves boost the dollar holdings of such funds. Such investments likely will add to concerns about the national security implications of foreign acquisitions of U.S. firms, especially by foreign governments, and to concerns about the growing share of outstanding U.S. Treasury securities that are owned by foreigners. Over the long-run it is possible for the economy to adjust to the higher prices of energy imports by improving its energy efficiency, finding alternative sources of energy, or searching out additional supplies of energy. There may well be increased pressure applied to Congress to assist in this process.

For Congress, the increase in the nation's merchandise trade deficit could add to existing inflationary pressures and complicate efforts to stimulate the economy should the rate of economic growth slow down. In particular, Congress, through its direct role in making economic policy and its oversight role over the Federal Reserve, could face the dilemma of rising inflation, which generally is treated by raising interest rates to tighten credit, and a slowing rate of economic growth, which is usually addressed by lowering interest rates to stimulate investment. A sharp rise in the trade deficit may also add to pressures for Congress to examine the causes of the deficit and to address the underlying factors that are generating that deficit. In addition, the rise in prices of energy imports could add to concerns about the nation's reliance on foreign supplies for energy imports and add impetus to examining the nation's energy strategy.