

CRS Report for Congress

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

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Summary

Petroleum prices have risen sharply since early 2004. At the same time the average amount of imports of energy-related petroleum products has fallen slightly. The combination of sharply rising prices and a slightly decreased level of demand for imports of energy-related petroleum products translates into an escalating cost for those imports. This rising cost could add an estimated \$60 to \$90 billion to the Nation's trade deficit in 2005, depending on how sustainable are the recent price increases. 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.

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 considerably faster than the change in demand for those products. As a result, it is estimated that the price increases of imported energy-related petroleum products will worsen the U.S. trade deficit in 2005. Energy-related petroleum products is a term used by the Census Bureau and 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 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 2004 and for the first six months of 2005. Based on the data for the January through July 2005 period, estimates are provided for the values for the full year 2005.

¹ Census Bureau, Department of Commerce. Report FT900, *U.S. International Trade in Goods and Services*, August 12, 2005. Table 17.

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

	January through July					
	2004		2005			
	Quantity (thousands of barrels)	Value (thousands of dollars)	Quantity (thousands of barrels)	Percent change 2004 to 2005	Value (thousands of dollars)	Percent change 2004 to 2005
Total energy-related Petroleum Products	2,843,827	\$92,840,031	2,904,996	2.2%	\$126,573,327	36.4%
Crude oil	2,226,715	\$70,030,230	2,218,494	-0.4%	\$93,408,579	33.4%

	January through December					
	2004		2005			
	(Actual values)		(Estimated values)			
	Quantity (thousands of barrels)	Value (thousands of dollars)	Quantity (thousands of barrels)	Percent change 2004 to 2005	Value (thousands of dollars)	Percent change 2004 to 2005
Total energy-related Petroleum Products	4,917,591	\$174,499,173	5,023,365	2.2%	\$237,980,105	36.4%
Crude oil	3,820,979	\$131,742,664	3,806,872	-0.4%	\$175,772,613	33.4%

Source: Census Bureau, Department of Commerce. Report FT900, *U.S. International Trade in Goods and Services*, September 13, 2005. Table 17.

Note: Estimates for January through December of 2005 were developed by CRS from data through the first seven months of 2005 published by the Census Bureau using a straight line extrapolation.

The data indicate that the United States imported 4.9 billion barrels of total energy-related petroleum products in 2004, valued at \$174 billion. In the January through July period, imports increased from a total of 2.8 billion barrels in 2004 to 2.9 billion barrels in 2005, for an increase in the volume of total energy-related petroleum products imports of 2.2%. As **Figure 1** shows, imports of energy-related petroleum products can vary sharply on a monthly basis, but averaged about 410 million barrels a month over the January 2004 to July 2005 period.

In value terms, energy-related imports in the January-June period rose from over \$92 billion in 2004 to \$126 billion in 2005, or an increase of 36.4%. As **Figure 2** shows, the cost of U.S. imports of energy-related petroleum products has risen from about \$11.5 billion per month in early 2004 to nearly \$21 billion a month in July 2005. Based on the data for the January-July 2005 period, imports of total energy-related petroleum products for the full year 2005 are projected to rise to 5.0 billion barrels from 4.9 billion barrels in 2004 and to rise in value to an estimated \$238 billion from the \$174 billion spent in 2004 on such imports, or an increase in the U.S. trade deficit by an estimated \$64 billion due to the increase in oil prices. This estimate of the value of energy-related petroleum products imports is based on an increase in demand at the current rate and on prices at the July 2005 level. This estimate could be low as a result of the rise in oil prices that has

occurred since the July data. For instance, by August 2005, such prices had climbed to more than \$60 per barrel. If the price of \$60 per barrel were maintained for the remaining seven months of 2005 from June to December, the estimated cost for imports of energy-related petroleum products could rise to as much as \$270 billion, or an increase in the trade deficit by about \$90 billion.

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

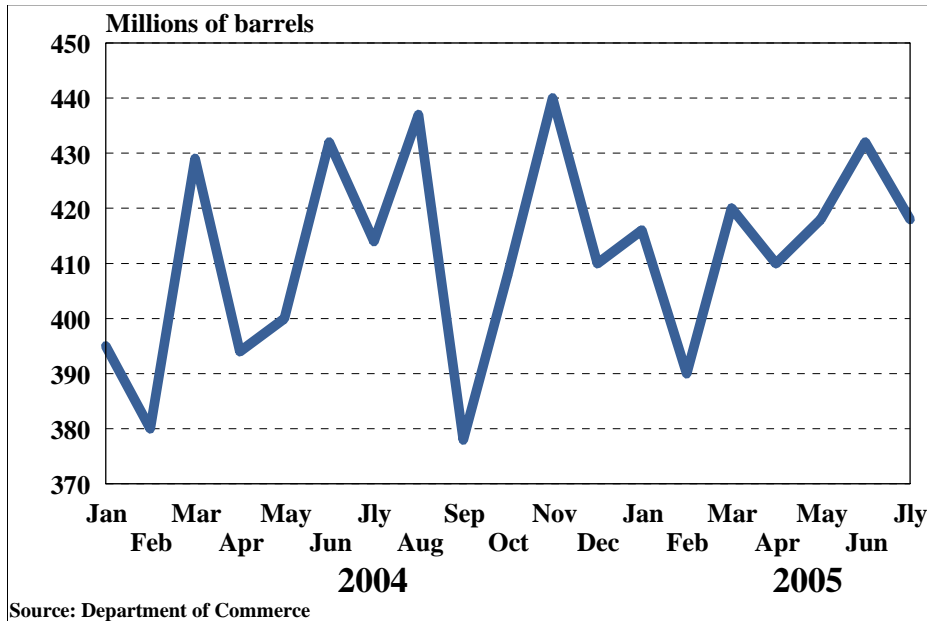


Figure 2. U.S. Import Price Per Barrel of Crude Oil

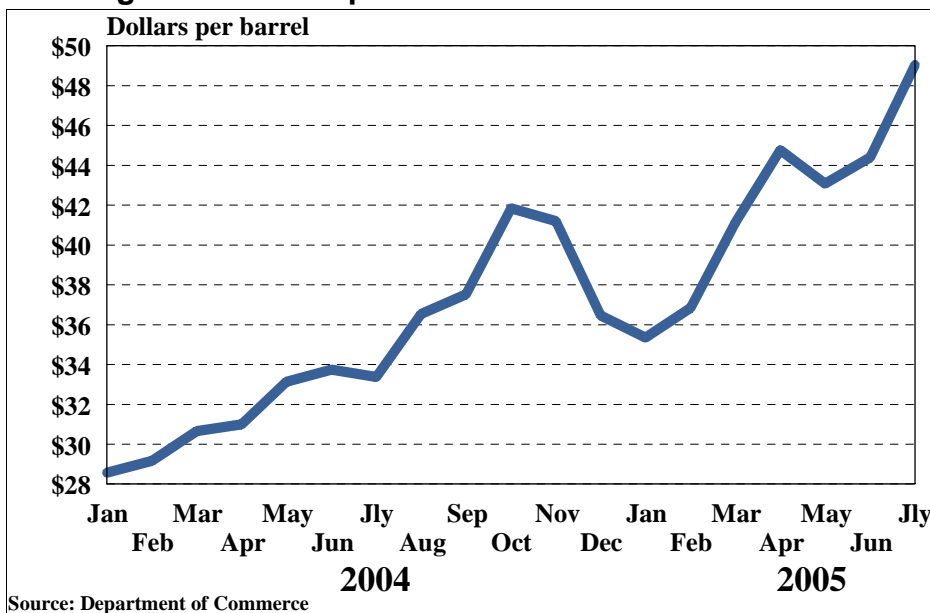


Table 2. U.S. Imports of Energy-Related Petroleum Products, Including Crude Oil (not seasonally adjusted)

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)
2004						
Jan.- Dec.	4,917,591	\$174,499,173	3,820,979	10,440	\$131,742,664	\$34.48
Jan.- July	2,843,827	92,810,031	2,226,715	10,454	70,030,230	31.45
January	395,226	11,654,763	309,876	9,996	8,852,497	28.57
February	380,038	11,481,124	288,494	9,948	8,414,097	29.17
March	429,420	13,662,246	329,991	10,645	10,118,324	30.66
April	393,788	12,660,588	311,663	10,389	9,661,668	31.00
May	398,862	13,815,254	317,854	10,253	10,534,772	33.14
June	432,235	15,124,648	344,729	11,491	11,631,044	33.74
July	414,258	14,411,409	324,108	10,455	10,817,829	33.38
August	437,516	16,400,730	333,756	10,766	12,196,274	36.54
September	377,861	14,557,549	297,013	9,900	11,142,685	37.52
October	408,187	17,557,812	313,249	10,105	13,107,077	41.84
November	439,794	17,892,337	329,660	10,989	13,577,287	41.19
December	410,406	15,280,713	320,586	10,341	11,689,111	36.46
2005						
Jan.-July	2,904,996	126,573,327	2,218,494	10,465	93,408,579	42.10
January	416,368	15,226,958	322,803	10,413	11,410,258	35.35
February	389,832	14,947,342	296,929	10,605	10,942,242	36.85
March	420,260	17,955,052	325,979	10,515	13,410,140	41.14
April	410,265	18,941,511	313,811	10,460	14,044,645	44.76
May	418,308	18,608,834	318,630	10,278	13,726,092	43.08
June	432,053	19,928,053	328,321	10,944	14,577,503	44.40
July	417,911	20,968,576	312,022	10,065	15,297,700	49.03

Source: Census Bureau, Department of Commerce. Report FT900, *U.S. International Transactions in Goods and Services*. September 13, 2005. Table 17.

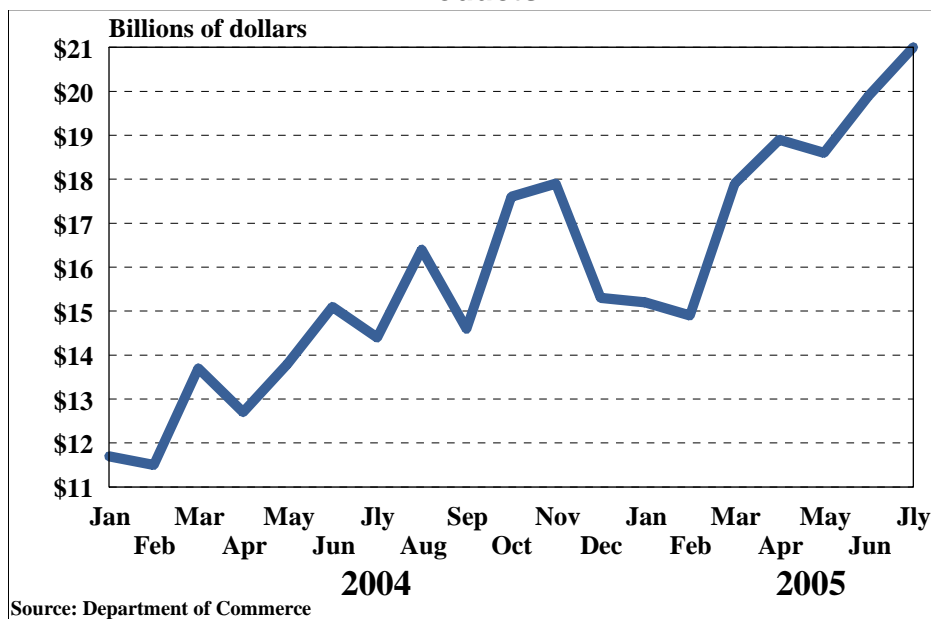
a. Energy-related petroleum products is a term used by the Census Bureau and includes crude oil, petroleum preparations, and liquefied propane and butane gas.

Due to the variability in oil prices and the limited amount of data that are available for 2005, it is not possible to provide a precise estimate of the annual merchandise trade deficit for 2005 that will arise as a result of the increase in oil prices so far. It seems reasonable to assume, however, that an increase in the trade deficit in the \$60 to \$90 billion range would be equivalent to an increase of 9% to 13% in the merchandise trade deficit as a result of higher oil prices. In terms of the U.S. economy, the estimated rise in the trade deficit from the increase in oil prices is about one-half of a percentage point of U.S. nominal GDP. In a letter to Congress' Joint Economic Committee, Federal

Reserve Board Chairman Alan Greenspan estimated that higher energy prices since the end of 2003 have lowered U.S. GDP by three-fourths of a percentage point in 2005 after having reduced growth by about one-half a point in 2004.²

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 rose from an average of 10.45 million barrels of crude oil imports per day in the January-July 2004 period to an average of 10.46 million barrels per day in the January-July 2005 period, or an increase of about 1 %. At the same time, the average price of crude oil increased from \$28.57 per barrel in January 2004 to \$49.03 per barrel in July 2005 for an increase of about 72%. As a result, the value of U.S. energy-related imports rose from about \$11.5 billion a month in January 2004 to about \$21 billion a month in July 2005, as shown in **Figure 3**. The data also indicate, however, that the average prices for crude oil can vary considerably from month to month, depending on a range of factors.

Figure 3. Value of U.S. Imports of Energy-Related Petroleum Products



Issues For Congress

The rise in prices of energy imports experienced since early 2004 is expected to have a relatively minor impact on the rate of economic growth through the remainder of the year, but could pose a number of policy issues for Congress. The impact of the rise in energy import prices so far could become more pronounced if such prices continue to rise at the rapid rate experienced in the late spring-early summer period of 2005. Most

² Aversa, Jeannine, "Oil Prices Said to Slow U.S. Economy a Bit." *The Washington Post*, July 18, 2005.

³ Report FT900, *U.S. International Trade in Goods and Services*, September 13, 2005. Table 17.

immediately, the higher prices of energy imports will worsen the Nation's merchandise trade deficit and have a disproportionate impact on the energy-intensive sectors of the economy and on households on fixed incomes. The full impact of such price increases on the trade deficit will be more fully understood once it is known how high and how rapidly they have climbed through the remainder of the year.

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. Also, 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.

For Congress, the increase in the Nation's merchandise trade deficit could add to existing pressures 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. The increased outflow of dollars may well add to public and Congressional concerns about foreign acquisitions of U.S. firms and to concerns about the growing share of outstanding U.S. Treasury securities that are owned by foreigners. While the rise in energy prices can be expected to lead eventually to improvements in energy efficiency and to alternative sources of energy, there may well be increased pressure applied to Congress to assist in this process.