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CRS Report for Congress

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

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Summary

Petroleum prices have risen sharply since early 2005. 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 lower level of imports of energy-related petroleum products translates into an escalating cost for those imports. This rising cost added an estimated $70 billion to the nation's trade deficit in 2005 and $50 billion in 2006. Imported energy prices moderated in January 2007, but began rising again in February and March, following a pattern of rising prices in the spring and summer. 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 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 2005 and 2006. 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 payment for additional U.S. exports or to acquire

[1] Census Bureau, Department of Commerce. Report FT900, *U.S. International Trade in Goods and Services*, March 9, 2007. Table 17. The report and supporting tables are available at [http://www.census.gov/foreign-trade/Press-Release/current_press_release/ftdpress.pdf].

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 2006 and for 2007. The data indicate that the United States imported 4.9 billion barrels of total energy-related petroleum products in 2006, valued at $291 billion. In January 2007, the quantity of energy-related petroleum imports increased by 0.6%, while crude oil imports rose by nearly 6.0% over the same period in 2006. During the same period, the value of energy-related petroleum products imports fell by 2.5%, while the value of crude oil imports increased by 6.3%. As **Figure 1** shows, imports of energy-related petroleum products can vary sharply on a monthly basis, but averaged about 410 barrels a month in 2006.

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

	January					
	2006		2007			
	Quantity (thousands of barrels)	Value (thousands of dollars)	Quantity (thousands of barrels)	Percent change 2005 to 2006	Value (thousands of dollars)	Percent change 2005 to 2006
Total energy-related Petroleum Products	415,788	$22,579,751	418,158	0.6%	$22,010,536	-2.5%
Crude oil	302,812	$15,724,715	320,108	5.7%	$16,720,818	6.3%

	January through December					
	2006		2007			
	(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	4,887,772	$291,285,295	4,915,632	0.6%	$283,942,257	-2.5%
Crude oil	3,741,205	$216,998,507	3,954,895	5.7%	$230,744,566	6.3%

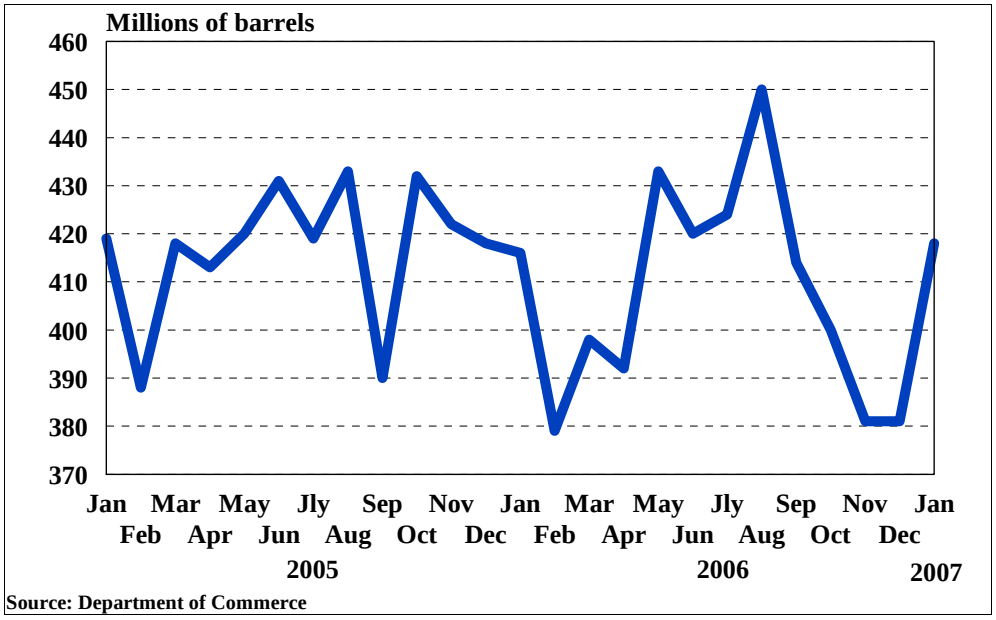
Source: Census Bureau, Department of Commerce. Report FT900, *U.S. International Trade in Goods and Services*, March 9, 2007. Table 17.

Note: Estimates for January through December of 2007 were developed by CRS from data through the first month of 2007 and data through 2006 published by the Census Bureau using a straight line extrapolation.

In value terms, energy-related imports rose from about $243 billion in 2005 to $291 billion in 2006, or an increase of 19.6% to account for about 16% of the value of total U.S. merchandise imports. An estimate for 2007, based only on data for January, indicates that the cost of imported energy will fall slightly in 2007, compared with the sharp rise experienced in 2005 and 2006. Price data for February and early March 2007, however, show a sharp run-up in the price of imported energy in those months and likely

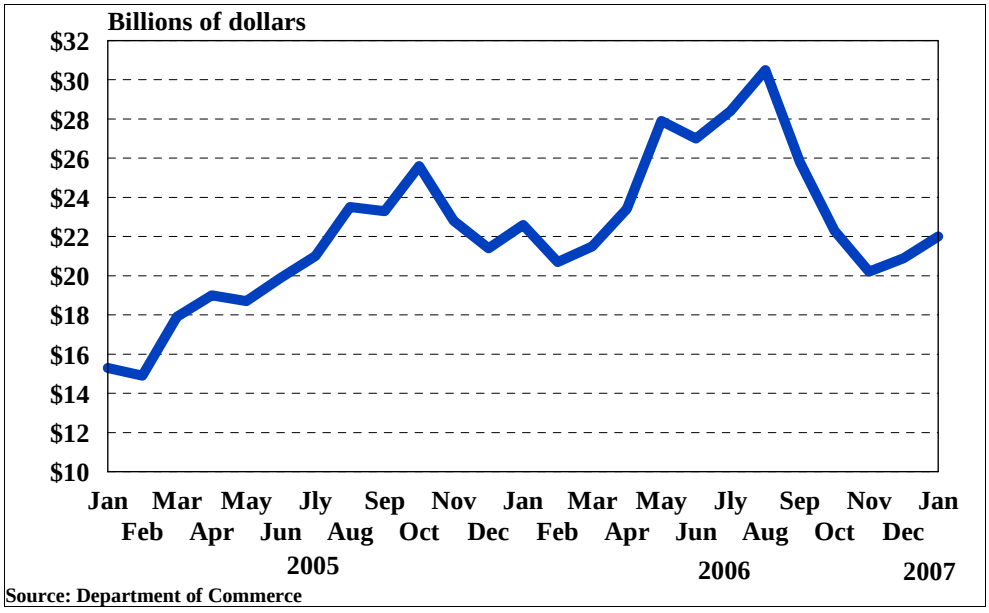
will alter the estimates for the total cost of energy imports for 2007. **As Figure 2** shows, the cost of U.S. imports of energy-related petroleum products has risen from about $15 billion per month in early 2005 to more than $30 billion a month in August 2006, before falling back to $20 billion a month in December 2006 and $22 billion in January 2007. Data for 2006 indicate that because of a slight decrease in the quantity of imports combined with nearly a 20% increase in the price of imported energy products, the U.S. trade deficit in energy trade rose by about $50 billion to reach nearly $300 billion. After rising steadily since March 2006, the average price of oil retreated in September through November before rising slightly again in December 2006.

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



Source: Department of Commerce

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



Source: Department of Commerce

At an average price of $58 per barrel in 2006, average oil import prices are 24% higher than they were in the comparable period in 2005, as indicated in **Table 2**. As a result of the overall rise in the value of energy-related imports in 2006, such imports now account for about one-third of the total value of the U.S. trade deficit, up from one-fifth in less than two years, but still account for less than the average share during much of the 1990s, when such imports at times accounted for half of the overall U.S. trade deficit.

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)
2005						
Jan - Dec.	5,004,339	243,496,863	3,754,669	10,287	175,755,341	46.81
2006						
Jan. - Dec.	4,887,772	291,285,295	3,741205	10,250	216,998,507	58.00
January	415,788	22,579,751	302,812	9,768	15,724,715	51.93
February	378,721	20,738,047	291,032	10,394	15,635,550	53.72
March	397,983	21,517,289	312,479	10,080	16,330,455	52.26
April	392,159	23,396,506	293,844	9,795	16,695,611	56.82
May	433,399	27,906,197	323,827	10,446	19,992,671	61.74
June	420,067	26,958,936	330,862	11,029	20,527,259	62.04
July	423,624	28,438,931	321,576	10,373	20,849,998	64.84
August	450,451	30,497,305	343,485	11,080	22,710,736	66.12
September	413,659	25,808,397	316,591	10,553	19,792,869	62.52
October	399,830	22,315,158	311,758	10,057	17,292,560	55.47
November	381,230	20,238,356	299,401	9,980	15,642,961	52.25
December	380,861	20,890,421	293,538	9,469	15,803,122	53.84
2007						
January	418,158	22,010,536	320,108	10,326	16,720,818	52.23

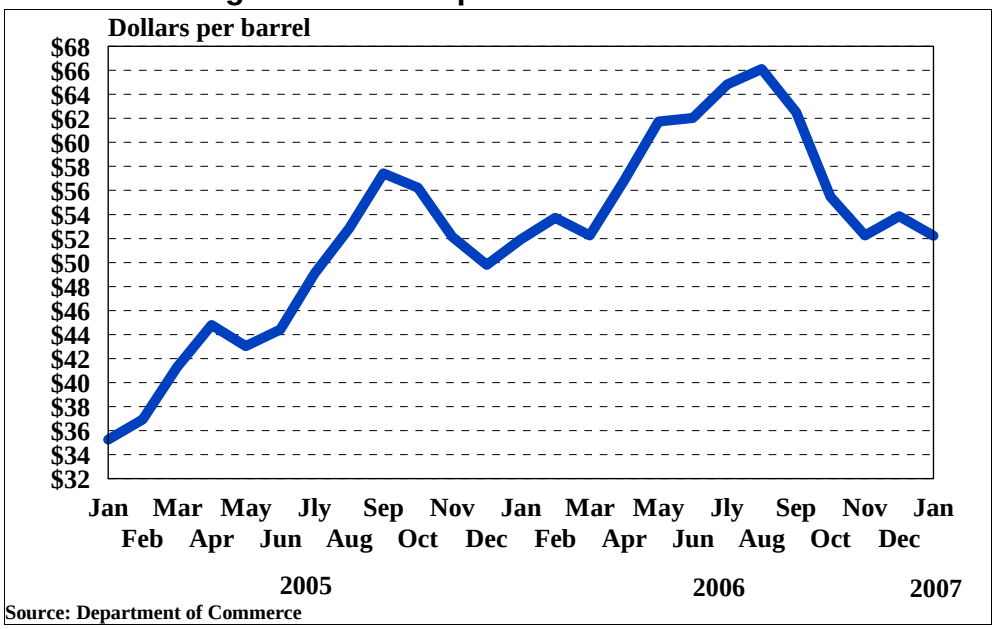
Source: Census Bureau, Department of Commerce. Report FT900, *U.S. International Transactions in Goods and Services.* March 9, 2007. Table 17.
Note: Energy-related petroleum products is a term used by the Census Bureau and includes crude oil, petroleum preparations, and liquefied propane and butane gas.

Recent data indicate that the drop in imported energy prices to about $54 per barrel toward the end of 2006 from the high of an average of $66 per barrel reached in August 2006 helped reduce the overall cost of energy imports so that the trade deficit in 2006 rose by about $50 billion, an amount equivalent to an increase of about 7% in the merchandise trade deficit due to higher oil prices. In terms of the U.S. economy, the estimated rise in the trade deficit from the increase in oil prices in 2005 is equivalent to 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 data[3] as shown in **Table 2**, imports of crude oil fell from an average of 10.28 million barrels of crude oil imports per day in 2005 to an average of 10.25 million barrels per day in 2006, or a decrease of less than one percent. In December 2006, such imports averaged 9.5 million barrels per day, or a decrease of 6.6% from the volume of such imports recorded in December 2005. Overall, data for oil imports based on year-over-year data indicate that oil volumes decreased by 0.4% in 2006 from the respective period in 2005. From 2005 to 2006, the average price of crude oil increased from $46.81 per barrel to $58.00 per barrel for an increase of 24%, as shown in **Figure 3**. As a result, the value of U.S. energy-related imports rose from about $18 billion a month in March 2005 to about $30 billion a month in September 2006, before falling to $21 billion a month in December 2006, the lowest monthly total recorded since July 2005.

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



Source: Department of Commerce

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 in 2006, but could pose a number of policy issues for Congress. The impact of the rise in energy import prices may well lessen somewhat as energy prices stabilize of fall slightly for the rest of 2006. It is likely, however, that energy prices will rise rapidly again in 2007, especially in the late

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[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*, March 9, 2007. Table 17.

spring-early summer period of 2007. Most 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.

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.