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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 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 could add $80 - $100 billion in 2006, depending on how sustainable is the rate of 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.

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 likely will do so again in 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 such assets as securities or U.S. businesses, some of the negative effects could be mitigated.

[1] Census Bureau, Department of Commerce. Report FT900, *U.S. International Trade in Goods and Services*, November 9, 2006. Table 17. The report and supporting tables are available at [http://www.census.gov/foreign-trade/Press-Release/current_press_release/ftdpress.pdf].

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 2005 and for 2006. The data indicate that the United States imported 5.0 billion barrels of total energy-related petroleum products in 2005, valued at $243 billion. In January through September 2006, the quantity of imports decreased slightly form the same period in 2005 as the volume of energy-related petroleum products imports fell 0.2%. As **Figure 1** shows, imports of energy-related petroleum products can vary sharply on a monthly basis, but averaged about 417 barrels a month in 2005 and about 400 barrels a month in 2006.

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

	January through September					
	2005		2006			
	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	3,731,808	$173,700,343	3,725,851	-0.2%	$227,841,360	31.2%
Crude oil	2,825,498	$126,815,316	2,836,509	0.4%	$168,259,864	32.7%

	January through December					
	2005		2006			
	(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	5,004,339	$243,496,863	4,996,351	-0.2%	$319,392,901	31.2%
Crude oil	3,754,669	$175,755,341	3,769,301	0.4%	$233,193,992	32.7%

Source: Census Bureau, Department of Commerce. Report FT900, *U.S. International Trade in Goods and Services*, November 9, 2006. Table 17.

Note: Estimates for January through December of 2006 were developed by CRS from data through the first nine months of 2006 and data through 2005 published by the Census Bureau using a straight line extrapolation.

In value terms, energy-related imports rose from about $174 billion in January-September 2005 to $228 billion in the same period in 2006, or an increase of 31.2%. If the rate of price increases experienced through September 2006 hold for the year, the value of U.S. energy-related imports could rise to $320 - $340 billion in 2006, or more than $80 -$100 billion more than in 2005. **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 more than $26 billion a month in September 2006. Based on the data for 2005, the increase in the price of imports of total energy-related petroleum products added $70 billion to the annual U.S. trade deficit. An estimate for 2006 indicates that an increase

in the quantity of imports at the current rate and if oil import prices hold in the range of $65-$70 per barrel throughout 2006, the U.S. trade deficit in energy trade could rise by more than $80-$100 billion to reach about $320 billion. After rising steadily since March 2006, the average price of oil retreated in September, falling by 5% from August 2006. A continued decline in prices, or even a leveling out of prices, could reduce the estimated impact of oil prices on the trade deficit in 2006 below $80 billion.

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

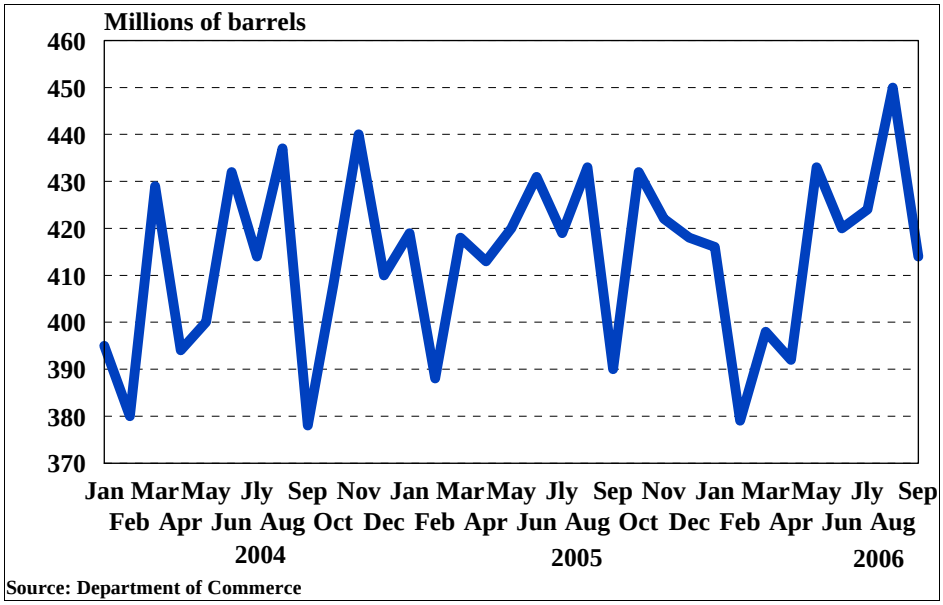
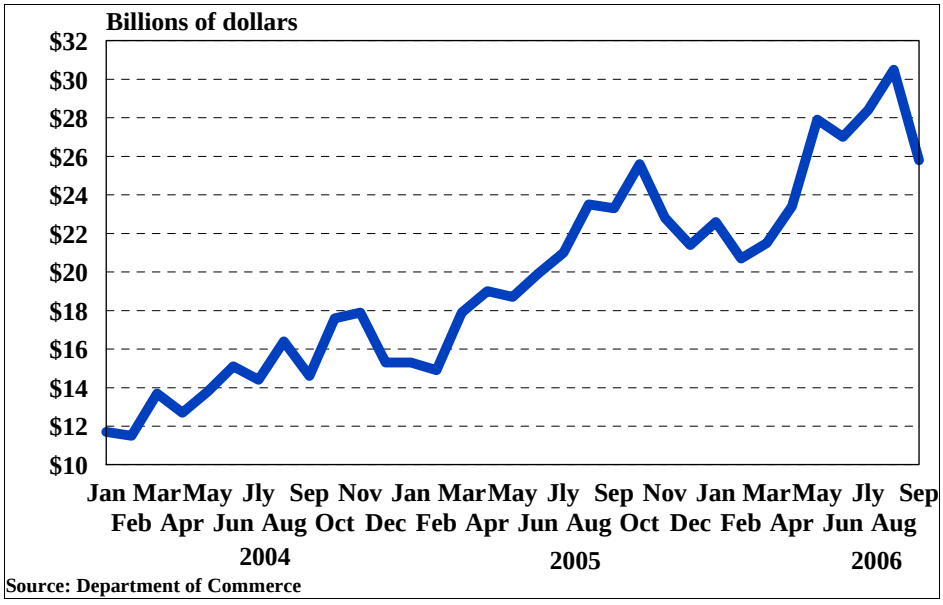


Figure 2. Value of U.S. Imports of Energy-Related Petroleum Products



At an average price of over $62 per barrel in September 2006, oil prices continued to set new records in 2006, as indicated in **Table 2**. As a result of this sharp rise in the

value of energy-related imports in 2006, such imports now account for nearly 40% 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)

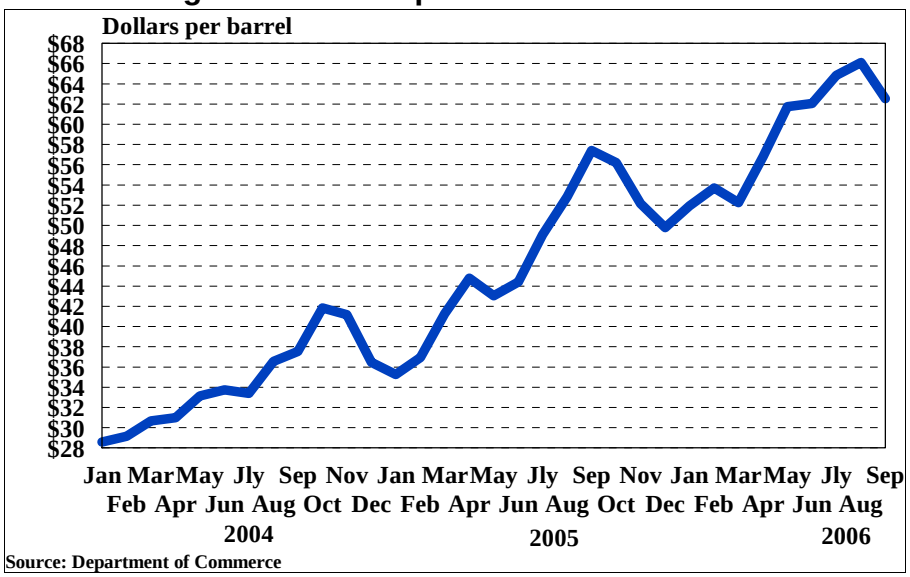
Period	Total energy-related petroleum products [a]		Crude oil			
	Quantity (thousands of barrels)	Value (thousands of dollars)	Quantity (thousands of barrels)	Thousands of barrels per day (average)	Value (thousands of dollars)	Unit price (dollars)
2005						
Jan - Dec.	5,004,339	243,496,863	3,754,669	10,287	175,755,341	46.81
Jan.- Sept.	3,731,808	173,700,343	2,825,498	10,350	126,815,316	44.88
January	419,291	15,301,289	325,786	10,509	11,491,026	35.27
February	387,899	14,907,930	293,425	10,479	10,835,581	36.93
March	418,418	17,923,939	324,180	10,457	13,383,428	41.28
April	413,267	19,086,805	315,528	10,518	14,128,664	44.78
May	420,464	18,688,573	319,982	10,322	13,773,585	43.04
June	430,594	19,878,379	327,865	10,929	14,559,106	44.41
July	419,157	21,046,507	312,106	10,068	15,314,485	49.07
August	433,073	23,534,564	329,039	10,614	17,391,215	52.85
September	389,645	23,332,358	277,589	9,253	15,938,226	57.42
October	432,162	25,567,322	300,884	9,706	16,911,547	56.21
November	422,459	22,790,054	314,028	10,468	16,380,931	52.16
December	417,910	21,439,144	314,259	10,137	15.647,547	49.79
2006						
Jan. - Sept.	3,725,851	227,841,360	2,836,509	10,390	168,259,864	59.32
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	412,659	25,808,397	316,591	10,553	19,792,869	62.52

Source: Census Bureau, Department of Commerce. Report FT900, *U.S. International Transactions in Goods and Services.* November 9, 2006. 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.

Due to the variability in oil prices, it is not possible to provide a precise estimate of the annual merchandise trade deficit for 2006 that will arise as a result of the increase in oil prices, but it is reasonable to assume that the trade deficit in 2006 could rise by about $80 - $100 billion, an amount equivalent to an increase of at least 10% 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 10.4 million barrels of crude oil imports per day in 2004 to an average of 10.3 million barrels per day in 2005 period, or a decrease of 1.5 %. In September 2006, such imports averaged 10.4 million barrels per day, or an increase of 14.0% over the volume of such imports recorded in September 2005, although the increase in oil imports based on year-over-year data for January-September indicate that oil volumes increased by 0.4% in 2006 from the respective period in 2005. From 2004 to 2005, the average price of crude oil increased from $34.48 per barrel in 2004 to $46.78 per barrel in 2005 for an increase of 33%, as shown in **Figure 3**. As a result, the value of U.S. energy-related imports rose from about $11.6 billion a month in January 2004 to about $21 billion a month in December 2005. In September 2006, crude oil prices retreated from the rise experienced throughout much of 2006 and fell to about $62 per barrel, or an increase of 9% over the price of a barrel of oil in September 2005. As a result, the cost of total energy imports rose to $35.8 billion in September 2006.

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



[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*, November 9, 2006. Table 17.

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 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.