



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 \$112 per barrel of crude oil. At the same time the average monthly volume of imports of energy-related petroleum products has risen slightly. The combination of sharply rising prices and a slightly higher 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. Imported energy prices in 2007 rose through the summer and then more sharply in the fall, 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, at times 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, although modestly. 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*, April 10, 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-February period of 2008, the quantity of energy-related petroleum imports rose by 5.1% compared with the comparable period in 2007; crude oil imports also rose by 6.2% from the same period in 2007. Year-over-year, the average value of energy-related petroleum products imports rose by 70.7%, while the average value of crude oil imports rose by 73.9%. As **Figure 1** shows, imports of energy-related petroleum products can vary sharply on a monthly basis, but averaged about 401 barrels a month in the January-December period of 2007.

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

	January through February					
	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	749,976	\$39,357,977	788,014	5.1%	\$67,192,866	70.7%
Crude oil	572,977	\$29,543,589	608,689	6.2%	\$51,375,399	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	4,808,832	\$318,873,367	5,052,731	5.1%	\$544,388,128	70.7%
Crude oil	3,690,924	\$237,217,636	3,920,969	6.2%	\$412,514,224	73.9%

Source: Census Bureau, Department of Commerce. Report FT900, *U.S. International Trade in Goods and Services*, April 10, 2008. Table 17.

Note: Estimates for January through December of 2008 were developed by CRS from data through February 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 and February 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 nearly \$36 billion a month in January 2008, before falling back to \$31 billion a month in February 2008. The average price of imported oil in February 2008 was up 67% from the average price in February 2008, 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

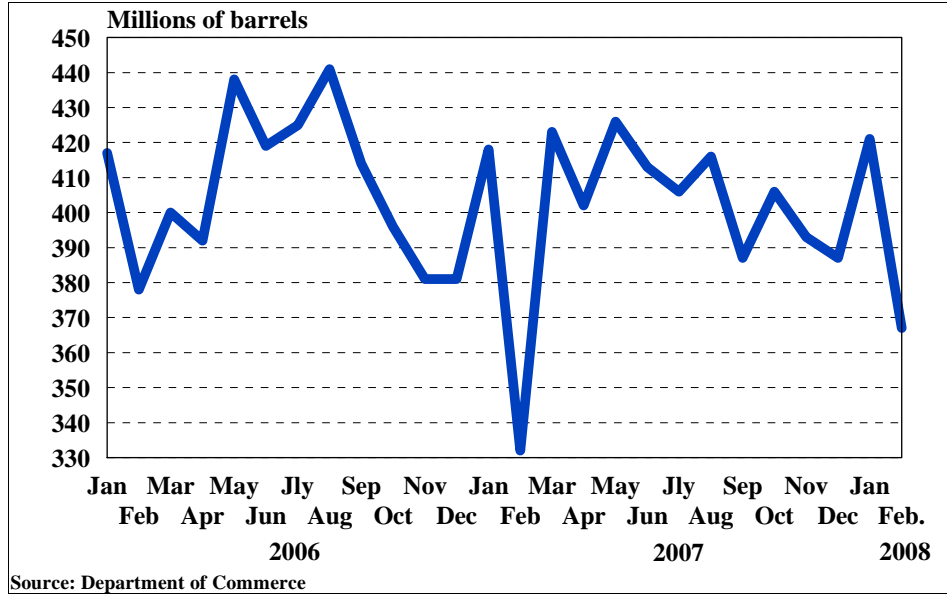


Figure 2. Value of U.S. Imports of Energy-Related Petroleum Products

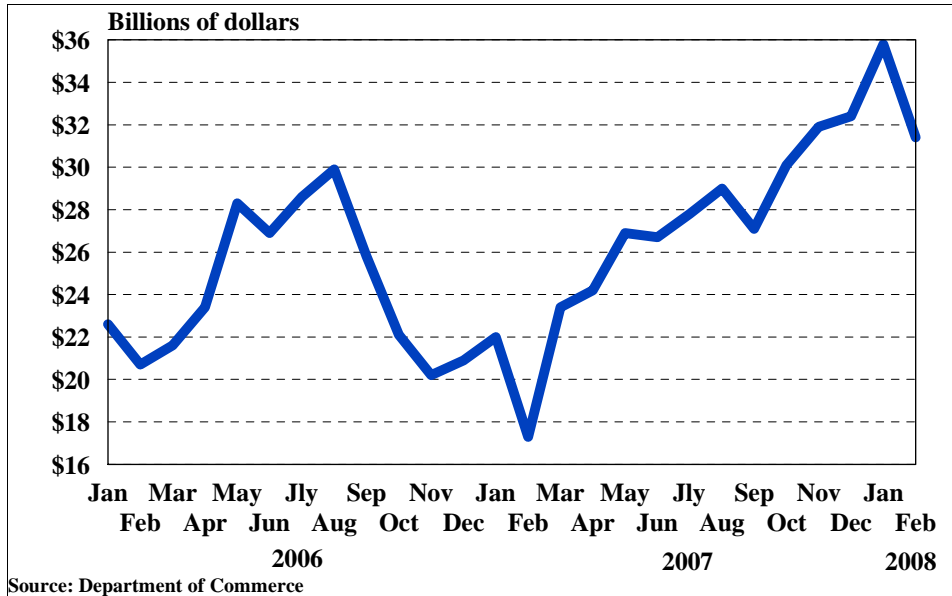


Table 2. U.S. Imports of Energy-Related Petroleum Products, Including Crude Oil (not seasonally adjusted)

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.	4,808,832	\$918,873,367	3,690,924	10,112	\$237,217,636	\$64.27
January	418,158	22,010,536	320,108	10,326	16,720,818	52.23
February	331,818	17,347,440	252,869	9,031	12,822,771	50.71
March	422,671	23,366,614	324,248	10,460	17,186,586	53.00
April	402,043	24,238,490	304,775	10,159	17,456,146	57.28
May	426,026	26,934,778	320,208	10,329	19,006,138	59.36
June	413,312	26,654,260	321,260	10,709	19,580,491	60.95
July	406,427	27,769,362	310,320	10,010	20,344,172	65.56
August	416,130	28,988,603	319,197	10,297	21,733,947	68.09
September	387,135	27,146,183	297,503	9,917	20,383,148	68.51
October	405,860	30,079,622	316,184	10,199	22,919,110	72.49
November	392,500	31,947,251	303,411	10,114	24,168,187	79.65
December	386,751	32,390,228	300,841	9,705	24,896,124	82.76
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

Source: Census Bureau, Department of Commerce. Report FT900, *U.S. International Transactions in Goods and Services*. April 10, 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.

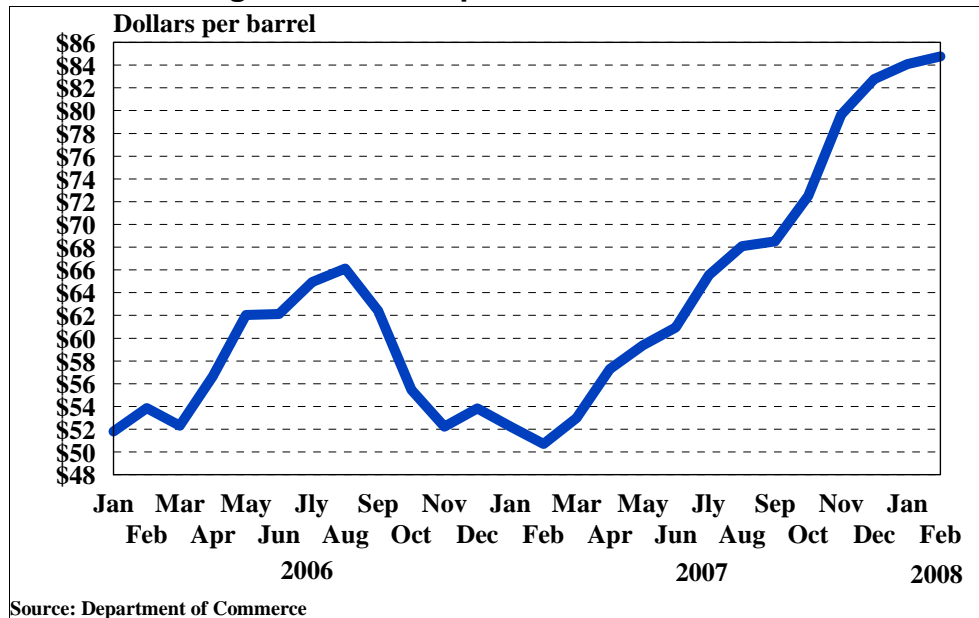
As a result of the overall rise in the value of energy-related imports in 2007, the trade deficit of such imports rose to \$293 billion to account for 36% of the total \$815 billion U.S. trade deficit, up from one-fifth of the total trade deficit in less than two years. In January-February 2008, the trade deficit in energy-related imports amounted to \$68 billion, or 48% of the total U.S. trade deficit of \$142 billion for the two-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 \$28 billion 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

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

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 February 2007 to February 2008, the average price of crude oil increased from \$50.71 per barrel to \$84.76 for an increase of 67%, as shown in **Figure 3**. As a result, the value of U.S. crude oil imports rose from about \$12.8 billion a month in February 2007 to \$24.3 billion a month in January 2008.

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



Data for the January-February 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 increase in the volumes of oil imports experienced in January and February combined to post a large jump in the overall cost of imported energy. At times, crude oil traded for more than \$112 per barrel in April 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. At an average price of \$100 per barrel, energy-related import prices could add as much as \$170 billion to the U.S. trade deficit in 2008. At an average price of \$110 per barrel, energy-related import prices could add nearly \$220 billion to the trade deficit, pushing the annual trade deficit to over \$1 trillion.

³ Report FT900, *U.S. International Trade in Goods and Services*, April 10, 2008. Table 17.

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.