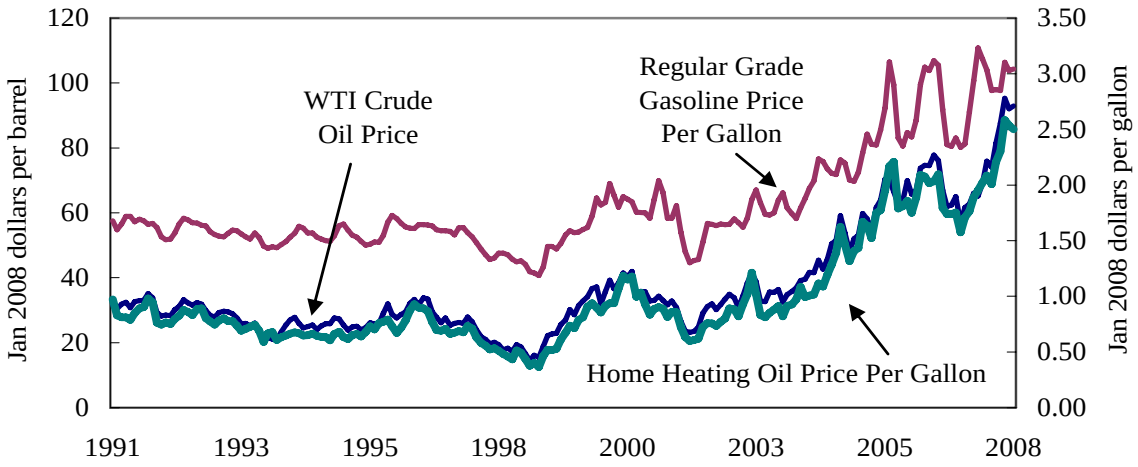
The Joint Economic Committee
ECONOMIC FACT SHEET
Chairman, Senator Charles Schumer
Vice Chair, Congresswoman Carolyn Maloney
February 27, 2008

High Oil Prices Have Significant Effects on Consumers and the U.S. Economy

This analysis estimates the impact of sustained high oil prices on consumers and the U.S. economy. Since 2002, real oil prices have risen dramatically. Recently, oil futures traded for more than $100 a barrel. Crude oil prices for January 2008 were $92.95/barrel, and monthly prices are rapidly closing in on the all-time inflation-adjusted high of $98.94/barrel, which was reached in April 1980. There are numerous causes for the recent rise in oil prices, including decisions made by OPEC and other oil-producing countries, stagnant production in Iraq, and ongoing concerns about political and supply stability in a number of oil-producing countries. However, it is the longer-term structural factors in the rise in oil prices, most notably greatly increased demand in developing countries such as China and India, which have led many experts to believe that we are likely to have sustained high oil prices for the foreseeable future.[1]

Real Crude Oil, Gasoline, and Heating Oil Prices
Monthly, February 1991 to January 2008



Sources: Wall Street Journal, U.S. Department of Energy and U.S. Department of Labor.

Energy analysts generally agree that due to increases in energy efficiency and the changing composition of output, the U.S. economy is less vulnerable to high oil prices than it was during the oil shocks of the 1970s. However, a growing number of economists have concluded that the mild effects of recent oil price increases have depended on a variety of other factors, including monetary policy decisions and the absence of concurrent price shocks.[2] It is therefore not certain that the economy will continue to shrug off increases in the price of oil in the future.

In fact, given the current weak state of the U.S. economy, the risk that increasing oil prices will produce significant negative consequences is rising. Even in a robust economy, sustained high oil prices

[1] See, e.g., Energy Information Administration, International Energy Outlook, 2007 available at http://www.eia.doe.gov/oiaf/ieo/world.html; International Energy Agency, World Energy Outlook 2007 – China and India insights.
[2] See Olivier Blanchard and Jordi Gali (August 2007), The Macroeconomic Effects of Oil Price Shocks: Why are the 2000's So Different From the 1970's, Massachusetts Institute of Technology Working Paper 07-21.

can produce undesirable effects on aggregate output, employment, and inflation. When economic growth is weak, and inflation rates are high, rising oil costs add to the drag on output and employment, and can help push price inflation even higher.

In addition, rising oil prices will increase wealth transfers to oil-exporting countries, which may or may not be friendly to the U.S. They also will continue to hit consumers in their pocketbooks, imposing a disproportionate burden on low-income consumers and some regional economies.

Impact of High Oil Prices on Economic Growth and Employment

Oil price increases can reduce economic growth because of their effects on consumer spending and producer costs. Rising oil prices raise the price of domestic goods and services. As the prices of gasoline and heating oil rise, so do the prices of goods and services that use oil products as inputs. Since the majority of U.S. oil is purchased from other nations, an increased oil price means higher revenues for the oil producers. Unless this increased oil revenue is recycled as demand for U.S. goods and services, higher oil prices lead to lower overall demand, which reduces domestic output and employment. In addition, cost increases that cannot be passed along as price increases may make it unprofitable to produce certain products.

The Energy Information Agency has estimated that a sustained ten percent increase in the price of oil results in a loss of real U.S. GDP in the range of 0.05 to 0.1 percent.[3] Assuming this EIA rule of thumb is correct, a $10 per barrel increase in the price of oil would reduce U.S. GDP by approximately $6.9 to $13.8 billion in current dollars.[4]

Impact of High Oil Prices on Consumers and Households

Crude oil prices affect the prices of gasoline and diesel fuel, which are central to transportation in the U.S., and can cause significant hardships for American consumers. In the U.S., higher gasoline prices are generally seen during the summer driving season. But this year, we have seen substantial increases during the winter time. During last winter's heating season, U.S. gasoline prices ranged from $2.17/gallon to $2.61/gallon. This winter, prices have already ranged from $2.76/gallon to $3.13/gallon.[5]

Prices for diesel fuel have also increased in recent months. These increases will start to have an impact on food and other consumer goods, because the costs to transport those goods to markets will increase. In 2006, diesel prices ranged from $2.44/gallon to $3.07/gallon (with peaks during the summer driving season). In 2007, diesel prices ranged from $2.41/gallon to $3.44/gallon, with prices steadily increasing through the winter months.[6] So far in 2008, diesel fuel prices have ranged from $3.26/gallon to $3.55/gallon.

Crude oil also affects prices paid by households who depend on fuel oil to heat their homes. [7] Based on its oil price forecast, the Energy Information Administration (EIA) currently predicts that

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[3] This is relative to a baseline without the price increase. See Government Accountability Office (August 2006), Strategic Petroleum Reserve, GAO-06-872, p. 58. This rule of thumb was derived by EIA using a macroeconomic model that accounts for the direct effects of oil price increases on consumption, as well as indirect effects on investment demand, employment, personal income and financial markets

[4] With oil near $100 per barrel, a $10 price increase is approximately a 10 percent increase. Since in 2007 nominal GDP was $13.8 trillion, the rule of thumb gives the GDP reduction of approximately $6.9 to $13.8 billion cited in the text.

[5] See weekly retail regular gas prices and diesel (all types) at Energy Information Administration, Department of Energy (all prices are inclusive of taxes) http://tonto.eia.doe.gov/dnav/pet/pet_pri_gnd_a_epmr_pte_cpgal_w.htm.

[6] Some of the observed price increase is due to new requirements that diesel fuel contain less than 15 ppm of sulfur ("ultra low sulfur" diesel). Previously, diesel could contain up to 500 ppm of sulfur.

on average United States home heating costs will be 33.7% higher for homes heated with heating oil, 5.6% higher for those using natural gas, and 2.3% higher for those using electricity, when compared to last year's heating season.[8] If crude oil prices remain higher than EIA forecasts, winter home heating costs are also likely to exceed the substantial increases already predicted in EIA's

Short-Term Energy Outlook.[9]

EIA has made regional predictions of winter heating cost increases:

1. In the Northeast, this winter's home heating costs were predicted to exceed last winter's cost by $57 for natural gas users, $500 for fuel oil users, and $51 for electricity users.

2. In the Midwest, this winter's home heating costs were predicted to exceed last winter's cost by $56 for natural gas users, $429 for fuel oil users, and $50 for electricity users.

3. In the South, this winter's home heating costs were predicted to exceed last winter's cost by $33 for natural gas users and $295 for fuel oil users. Electricity users saw a modest decline of $2 in their expenditures.

4. In the West, this winter's home heating costs were predicted to exceed last winter's cost by $37 for natural gas users, $313 for fuel oil users, and $34 for electricity users.

High Oil Prices Can Lead to Inflation

Because the cost of oil affects the cost of transportation, power generation, chemicals, and other products, increases in the price of oil can lead to inflation. For example, in November 2007 the Consumer Price Index for All Urban Consumers (CPI-U) rose sharply, at a seasonally adjusted annual rate of 10 percent. About 70 percent of the overall increase in the CPI-U was a result of energy price increases.

Persistent energy price increases can also translate into core PCE increases. When making inflation related policy decisions, the Federal Reserve focuses its attention on the so-called "core" Personal Consumption Expenditures (PCE) deflator, which excludes the costs of food and energy. The Fed does so because both food and energy prices are volatile, and it wants to adjust policy to respond to meaningful underlying trends. However, increases in the price of energy inputs can raise the cost of other goods and services, and they also can change the expectations of firms and households, who may respond by increasing prices or money wage demands in anticipation of future price changes. When the PCE deflator or inflation expectations are affected, the Fed may respond by raising interest rates. While the resulting reduction in output and employment may help contain inflation, the short term consequences for firms and workers are negative.

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[7] Outside of the transportation sector, distillate fuel oil is mostly used for home heating, primarily in the Northeast. Nationwide, distillate fuel oil accounted for only 8 percent of the energy delivered to the residential sector in 2006, but 76 percent of that consumption occurred in the Northeast. There are large sunk costs involved in switching home heating fuel, and because the costs in the Northeast of heating homes using fuel oil have historically been lower than costs of heating using other fuels, a large number of homes are still heated using fuel oil.

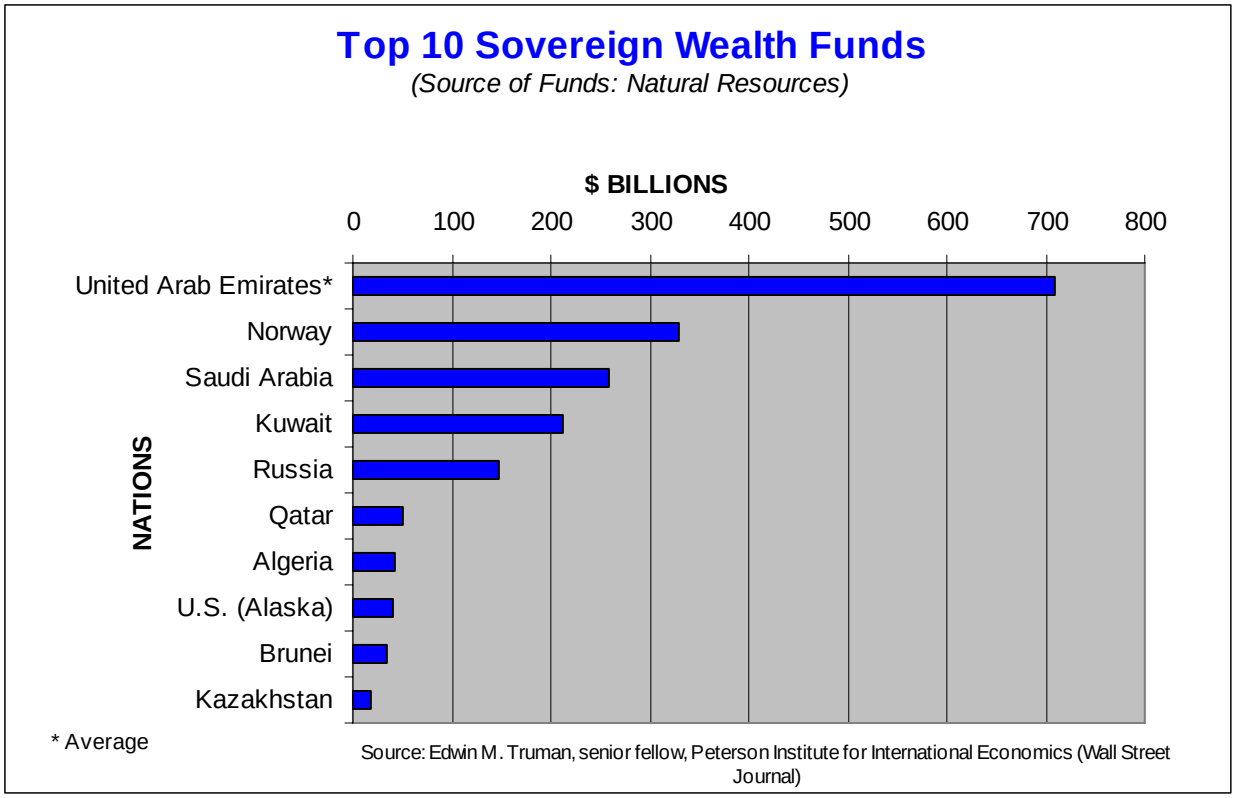
[8] Table WFOL: Selected U.S. Average Consumer Prices and Expenditures for Heating Fuels During the Winter, February 2008, available at http://www.eia.doe.gov/emeu/steo/pub/wf-table.pdf.

[9] According to EIA, heating oil prices paid by consumers are determined by the cost of crude oil, the cost to produce the product, the cost to market and distribute the product, as well as the profits (sometimes losses) of refiners, wholesalers and dealers. In 2005, crude oil accounted for 58 percent of the cost of a gallon of heating oil. The next largest component, distribution and marketing costs, accounted for approximately 21 percent of the cost of a gallon of heating oil. Lastly, refinery processing costs accounted for another 21 percent.

Oil-Related Transfers of Wealth

An increase in the price of oil produces a direct transfer of wealth from U.S. consumers to foreign oil producers. Moderate changes in the price of oil can have large effects on the size of these transfers. For example, the Joint Economic Committee estimates that the Iraq war has added $5.00 per barrel to the cost of oil. Between 2003 and 2008, this will lead to an estimated net transfer of $124 billion[10] out of the United States.

Oil-related wealth transfers have helped create growing sovereign wealth funds in many of the oil exporting nations, including countries such as the UAE, Saudi Arabia, and Venezuela. These funds are impacting capital markets and may allow their governments to purchase strategically significant firms in whole or part in many countries, including the United States. While some of the largest sovereign wealth funds are operated by countries that are not primarily natural resource exporters (e.g. China and Singapore), the top ranks are dominated by the oil-rich countries, such as the United Arab Emirates, Saudi Arabia, Kuwait, Russia, Brunei and Qatar.



[10]See Joint Economic Committee Majority Staff (November 2007), War At Any Price? The Total Economic Costs of the War Beyond the Federal Budget, available at http://www.jec.senate.gov/Documents/Reports/11.13.07IraqEconomicCostsReport.pdf