April 2000





## An Oil Price Shock—Or a Shocking Price of Oil?

The price of oil has increased dramatically. A barrel of West Texas Intermediate crude oil sold for just over \$11 at its recent low in December 1998, while it sold for more than \$29 a barrel during March of this year. This run-up in oil prices has caused some commentators to worry that the United States economy is experiencing another "oil price shock" similar to those observed in the 1970s and 1980s. Following those earlier oil shocks, the price level rose while output fell—a decidedly unpleasant combination that became known as "stagflation." Is the U.S. economy suffering through a new oil price shock that will bring economic turmoil? A closer look at the data suggests not.

To get a handle on how today's price of oil compares to prices in the past, it is important to adjust for inflation. The dollars used to purchase oil and other commodities today have-because of ongoing inflation—less purchasing power than the dollars used to purchase oil in days gone by. To correct for this, the darker line in the chart shows the price of crude oil deflated by the consumer price index for all items in 1999 dollars. According to the chart, the inflationadjusted or real price of oil was much higher in the past and, in fact, peaked around 1980. In inflation-adjusted terms, today's prices are roughly the same as they have been since the late 1980s. The chart shows that the recent run-up in the price of oil reflects not so much a high price today as a shockingly low price during the fall of 1998. The \$11 per barrel price quoted earlier, was, in real terms, the lowest price since the early 1970s.

Some commentators on the United States economy also mention that the share of oil in GDP has fallen sharply since the 1970s, and attribute this effect to increased energy efficiency in the nation. Since the share is lower, one might think that any sharp oil price movements would have less effect on the economy than they once did. In short, the story is that the economy is not as vulnerable to oil price shocks as it once was.

To obtain a rough assessment of this story, the lighter line in the chart uses the right scale and shows the share in GDP of oil and products closely related to oil. Since the mid-1980s, the share has consistently remained below the 2.5-percent share that prevailed prior to the first oil price shock during October 1973. Thus, even as the real price of oil returned to pre-1973 levels, the energy intensiveness of the economy—as measured by the quantity of oil consumed per unit of output—remained below its pre-1973 level. The fact that the real price is not very high by recent historical standards, as well as the relatively low current share of national income devoted to oil and related products, suggests that the impact of the recent run-up in oil prices on the U.S. economy will be minimal.

-James Bullard



Views expressed do not necessarily reflect official positions of the Federal Reserve System