Monetary Trends

May 2005

Federal Reserve Bank of St. Louis

Has the Bond Market Forgotten Oil?

The financial press often links daily activity in financial markets to general economic news. As of late, the world price of oil has been one of the most often cited causes of fluctuations in securities prices. Rising oil prices have been blamed for declining stock prices, weakness in the dollar exchange rate, and, to some extent, movements in government bond yields. Still, compared with other periods of rising oil prices, the bond market's reaction has been limited.

Since the oil crises of the 1970s, the yields on government securities have typically risen when the price of oil has risen, and fallen when the price of oil has fallen. In the 1970s, a rising price of oil often presaged a sustained increase in the rate of inflation; bond investors responded by demanding higher nominal yields to protect their real returns. Similarly, in the 1980s and 1990s, when oil prices and inflation generally fell, bond yields also fell.

The chart illustrates the positive long-run correlation between the price of oil and government security yields from the 1970s through the 1990s. Alongside the price of oil, the chart shows the yield on 10-year U.S. Treasury securities. To highlight longer-term relationships, both series are plotted as eight-quarter moving averages, which smoothes out short-run fluctuations in the data.

The chart also illustrates that the yield on government securities trended downward between 2001 and 2004, even as the price of oil more the doubled, and offers a clue for this unusual pattern: The increase in the price of oil was not accompanied by a significant increase in the overall rate of inflation (shown here as the eight-quarter moving average of the year-over-year percent change in the consumer price index).

The price of oil hit its recent low in December 1998 and has risen almost continuously since December 2001. While the increase in the price of oil in 1999 and 2000 was accompanied by a modest increase in bond yields and consumer price inflation, the increase that began in 2001 has had little or no perceptible effect on either bond yields or inflation. The current lack of a response of bond yields to the rising price of oil probably reflects both the overall condition of the U.S. economy when the price of oil began to rise and confidence on the part of bond investors that even a large increase in the price of oil will not have a substantial impact on the long-run rate of inflation.

The U.S. economy was just beginning to emerge from a recession when the price of oil began to rise in late 2001. Inflation was low and, unlike most recoveries, payroll employment failed to grow. Few analysts viewed inflation as a threat and, as employment continued to lag, a few warned that deflation was possible. In this environment, government security yields remained low.

More recently, employment growth has resumed and deflation fears have evaporated. However, the rising price of oil is still not widely viewed as a precursor to higher inflation. In part, this could reflect the fact that U.S. firms are more energy efficient than they were in the 1970s. Many analysts also believe that the price of oil will decline from its recent high level. In addition, however, many commentators argue that the Federal Reserve is unlikely to allow higher energy prices to result in a sustained increase in the rate of inflation. When the price of oil rose in the 1970s, the Fed failed to tighten monetary policy sufficiently to prevent higher inflation and bond yields. The importance of maintaining a stable price level is much more widely recognized today than in the 1970s, and the bond market has considerable faith that the Fed will not allow inflation to rise (or fall) significantly from its present level. As long as such faith persists, the price of oil can rise and fall without causing large movements in bond yields.

—David C. Wheelock

Oil Prices, Government Security Yields, and Inflation, 1970-2004