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Oil Shocks: They Ain't What They Used to Be

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There have been two periods of large and sustained increases in oil prices during the last four decades. The first took place in the 1970s, and the real increase in oil prices came with large increases in inflation and a sharp economic slowdown. The second started in the late 1990s and has continued through the current decade. Yet, during that time, growth has been sustained, and inflation has remained low. Why? In a new paper, "The Macroeconomic Effects of Oil Prices: Why are the 2000s so Different from the 1970s?," Class of 1941 Professor Olivier Blanchard (Ph.D. '77) and Jordi Galí (Ph.D. '89), Director of CREI in Barcelona, offer a series of explanations.

Figure 1 shows the change in real oil prices over time in the United States. The real oil price is expressed as an index, where 1970 equals one hundred. There are four periods of sharply rising prices: from late 1973 to early 1974; from early 1979 to mid 1980; from early 1999 to the end of 2000; and from early 2002 through the third quarter of 2005 (which is when the study ends). In each case, the real price of oil roughly doubled; that is, the

index rises by roughly 100 points during each of these four episodes. The figure shows that the real oil price increases of the recent period have been as large as the price changes in the 1970s.

The similarity of the real oil price changes is surprising, since there was much more discussion of the adverse macroeconomic consequences of oil price changes in the 1970s than in recent years. Figure 2 superimposes on Figure 1 the change in the Consumer Price Index (CPI). During the two oil shocks in the 1970s, CPI inflation rose almost in lock-step with oil prices. Yet, during the two oil price increases in the 2000s, CPI inflation has barely budged.

FIG. 1 - LOG REAL OIL PRICE (1970=100)

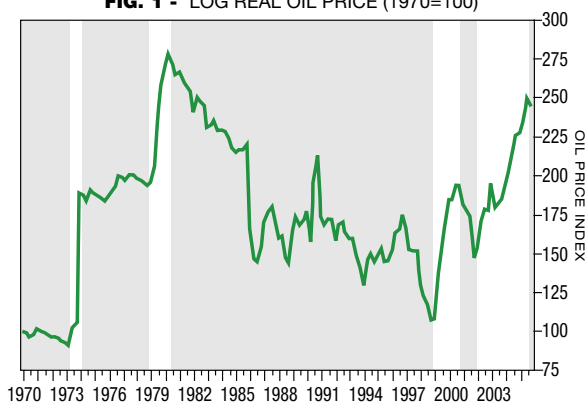
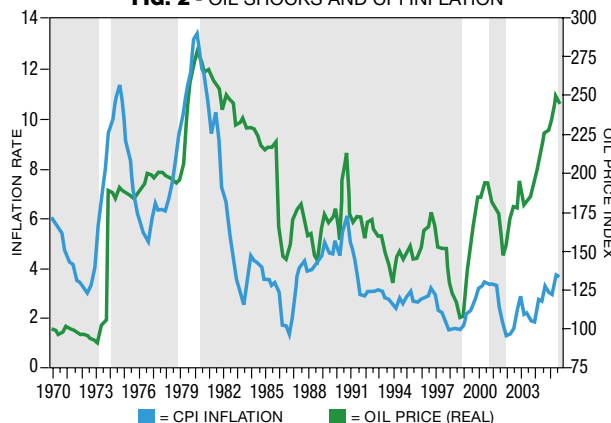


FIG. 2 - OIL SHOCKS AND CPI INFLATION





Blanchard and Galí offer two lines of explanation for the lower impact of oil shocks in the later period. The first is that there were very different corresponding changes in the macro-economy during these two periods. The effects of higher oil prices in the 1970s were compounded by other adverse shocks, most notably a decrease in productivity growth. By contrast, in the 2000s, they were offset by favorable shocks, from sustained productivity growth to low world real interest rates. They also find, however, that even controlling for these other factors, the adverse effects of oil prices in the last decade are much smaller than they were in the 1970s. This leads to their second explanation for the change: a change in the structure of the U.S. economy.

Three factors appear relevant for understanding how the shifting economy has blunted the impact

of oil price shocks. The first is that oil accounts for a smaller share of the costs of production of goods in the U.S. economy in the 2000s than in the 1970s. This decline is sizeable enough to significantly reduce the link between oil prices and U.S. economic performance. Second, wage adjustment appears to be more flexible in the current decade than it was in the 1970s. Because real wage flexibility enables the economy to adjust in response to an oil price shock, and prevents dramatic changes in output, this factor can explain some of the changing impact of oil price movements. Third, the monetary policy regime of the 2000s is more credible and effective than that of the 1970s. The more credible commitment to fight inflation on the part of the Fed means that the economy reacts less to changes in oil prices, since firms and consumers know that the Fed will help insulate the economy from an inflationary spiral.

Blanchard and Galí emphasize that their paper does not imply that the U.S. economy is immune to changes in the price of oil; indeed, the recent spike in oil prices may have created a drag on economic performance. But they convincingly demonstrate that shifting economic conditions make it unlikely that oil price shocks of the magnitude that were experienced in the 1970s would have similar adverse effects on the U.S. economy today.



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