Has oil lost the ability to shock?

Since 2003 there has been a remarkable rise in oil prices. What is equally remarkable though is the limited effect it has had on advanced economies, especially compared to previous oil price shocks that ushered in the stagflation of the 1970s.

US unemployment rate and real oil prices (annual averages)

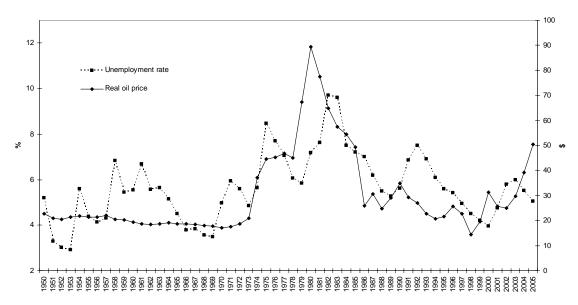


Figure 1: Source Bureau of Labor Statistics

Figure 1 plots the historical relationship between the real oil price and the US unemployment rate. Although there is some short-term volatility, there is a correlation in the general trends of the two series. However, despite the strong rise in oil prices in the last few years unemployment has shown no signs of increasing.

This is not to say that it won't, the evidence tends to suggest that movements in US unemployment are lagged to changes in oil prices. However, unlike previous oil price shocks the strong rise in oil prices has had no discernable effect on inflation. This is highlighted in figure 2, where inflation in advanced economies has fallen throughout the 1990s, and seems impervious to the recent oil price increases.

This strengthens confidence that oil prices won't induce either stagflation or recessions of the type that were seen in the past. Whilst inflation remains under control there is little need to contract monetary policy and raise interest rates. As a consequence the dent in economic growth has been and is anticipated to be relatively small compared to previous eras of high oil prices.

Oil prices and inflation in advanced economies

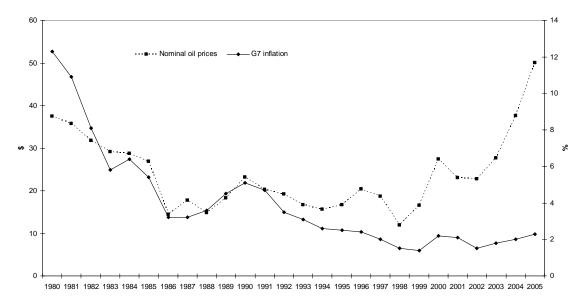


Figure 2: Source IMF World Economic Outlook database

What factors might account for the relatively subdued effect of the latest oil price shock on economic performance. First, the recent rise in oil prices have largely been the result of a growing world economy rather than the OPEC induced supply restrictions of the 1970s. Although there have been recent supply constraints in the Middle East, Nigeria and Venezuela, the main pressures on oil prices have resulted from strong demand from rapidly industrialising countries such as China. The causality has essentially been turned around. In the 1970s weak economic growth resulted from a strong rise in oil prices, whereas the current level of oil prices now seems to be a symptom of a strong global economy.

There are several explanations for the limited impact on inflation. The rise in oil prices has a deflationary element, in that higher fuel and energy costs reduce the level of disposable income available for the consumption of other goods and services. Although the impact of higher oil prices has been relatively benign so far, it has not been completely neutral either. There is some evidence, especially in the UK, that higher oil prices have been a factor in moderating consumer expenditure.

The Phillips curve paradigm identifies two channels through which an oil price rise might feed into domestic inflation. The first is the direct impact of higher energy prices- which may also feed through into higher goods prices if manufacturers pass these costs on to consumers. There is some evidence that oil prices have produced moderate increases in consumer prices inflation. This has been lower than producer price inflation which might suggest that some of the price rises are yet to feed entirely through the supply chain, but overall the inflation impact looks quite small.

There are several reasons why the direct effects might be quite small, and simply limited to petrol and energy prices rather than all goods and services. The energy intensity of most advanced economies has fallen in the last two decades as the economic structure has moved away from manufacturing to services. At the same time, manufactured goods consumed in advanced economies are increasingly imported from low cost newly industrialising economies such as China. The recent tendency has been for global goods prices to fall, suggesting that the effect of oil price rises is offset by production being carried out where wage costs are lower.

The second transmission mechanism connecting oil prices to domestic inflation is the level of price expectations. These are often termed as second round effects. If inflation starts to rise, then workers may raise price expectations which then feed through into wage demands. These then create a dynamic of their own- as higher wage demands are passed on to consumers in higher prices and so on. The resulting wage-price spiral can lead to significant increases in inflation.

The two effects are therefore quite different. The direct effects will have no long-lasting impact on inflation. Although the price level will rise, once oil prices plateau their impact on inflation figures will drop out. However, if there are strong second round effects, i.e. that oil price rises feed strongly into price expectations, then a persistent rise in inflation may result.

The absence of second round effects today stands in contrast to the experience of the early 1980s, where the resulting wage-price spiral required a strong contraction in monetary policy. The absence of clear second round effects this time have meant that inflation has remained relatively stable, and consequently monetary policy has not been tightened to the same extent. This has reduced the likelihood of recession.

Why has inflation remained so passive? The general move to independent central banks might be one answer. Inflation expectations have remained anchored close to inflation targets. If the theory works, people anticipate that interest rates would rise to offset any inflation above target, so the actual increase in inflation expectations never materialises. Therefore central bank independence provides a credible anchor maintaining low inflation.