How Oil Price Changes Affect the Economy

BY DOUG CAMPBELL

"Oil Prices and Consumer Spending." Yash P. Mehra and Jon D. Petersen, Federal Reserve Bank of Richmond *Economic Quarterly*, Summer 2005, vol. 91, no. 3, pp. 51-70.

When Hurricane Katrina hit, the country expected — and got — higher oil prices. With supply disrupted in the Gulf Coast, motorists nationwide paid more than $3 a gallon at the pump. Some believed this would have a negative impact on the wider economy. Northwest Airlines cited the hurricane's impact on fuel prices as a leading reason for its Chapter 11 bankruptcy filing in September.

Economists have long known that hikes in oil prices can sometimes (but not always) produce ripple effects beyond hurting consumer pocketbooks. Big jumps can raise inflation and tamp down growth. But incongruously, the flip side usually isn't true. When oil prices drop, we do not experience significant improvements in economic output. The experience is asymmetric. How come?

In a recent paper for the Richmond Fed, Yash Mehra and Jon Petersen tackle that question with particular attention to consumer spending. Their research confirmed that, as has long been assumed but not wholly understood, oil price shocks work differently on consumption depending on their direction.

This conclusion is based on analysis of how price swings work their way through economic channels. The key is what Mehra terms the "allocative channel," which is when the costs of shifting labor or capital happen in response to changes in oil prices.

Here's how it works: Energy-producing sectors of the economy would likely seek to hire more labor and expand their capital in response to increases in oil prices. Meanwhile, sectors experiencing declines because of oil prices would be trying to shed labor and capital. But the cost of all this resource allocation is significant, Mehra says. In fact, it is so significant that it can hold back growth.

"Those allocative effects work to depress the overall level of economic activity because you can't just move labor and capital that efficiently in the short run," Mehra says.

Monetary policy may also play a role. While the Federal Reserve may try to fight inflation during oil price spikes by raising interest rates, it generally doesn't respond to oil price drops with expansionary monetary policy. "The Fed may be very happy to have that oil price decline," Mehra says.

Mehra thinks that's just about the way it should be. "You will have better economic outcomes in the long run if the Fed focuses on stabilizing inflation and inflation expectations instead of trying to stabilize real output," Mehra says. In cases of oil price increases, "The proper policy response would be to keep focus on curtailing inflation rather than trying to offset effect on output through stimulative monetary policy."

"Credit and Identity Theft." Charles M. Kahn and William Roberds, Federal Reserve Bank of Atlanta Working Paper 2005-19, August 2005.

Computer hackers grab headlines when they seize control of huge amounts of personal data, but much more pervasive a problem is the everyday theft of credit cards and social security numbers. In a recent paper, Atlanta Fed economists Charles Kahn and William Roberds ask how policymakers should deal with this problem, which affects more than one in 10 Americans. How strict should data-gathering activities be for banks in a world where easy collection of personal information is crucial to the process of allocating credit?

The authors largely reject technological changes as the solution, such as moving from magnetic-stripe to chip-based payment cards. Instead, their model suggests that identity theft can be better controlled by allowing more — not less — monitoring and information collection by credit bureaus and other data aggregators.

"Our results on money and credit suggest that the availability of money may improve this trade-off: There are some circumstances where the best type of 'payment card' is one with no one's name on it."

"The Household Spending Response to the 2003 Tax Cut: Evidence from Survey Data." Julia Lynn Coronado, Joseph Lupton, and Louise Sheiner, Federal Reserve Board of Governors Finance and Economics Discussion Series Paper 2005-32, July 25, 2005.

The Jobs and Growth Tax Relief Reconciliation Act of 2003 was supposed to be a textbook case of economic stimulus. In their recent paper, the authors use survey data to conclude that's pretty much what happened: Personal consumption spending in the second half of 2003 grew by $9.7 billion as a result.

Economic theory posits that the effectiveness of tax policy depends mostly on the extent to which consumers spend in response to the tax changes. There is a wide range of estimates about how much of a given cut will be spent, from zero to one-half. The authors found in the 2003 tax cut, households spent about one-quarter and reacted equally to the child credit rebate and their reduced withholdings — which is contrary to the assumption that households should have spent a smaller share of the child credit rebate. **RF**