



## Ask an Economist: Evolving link between oil prices and U.S. consumer spending

by: Nida Çakır Melek

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Research led by Kansas City Fed senior economist [Nida Çakır Melek](#) suggests that the response of U.S. consumption to oil price changes has become more muted. That analysis was detailed in a first quarter 2021 [Economic Review article](#) by Çakır Melek and Robert J. Vigfusson, assistant director of the Division of International Finance at the Board of Governors of the Federal Reserve System.

### How have oil prices behaved recently?

Prices have fluctuated widely since the 1970s. Starting around 2000, oil prices steadily rose and reached historic highs in the mid-2000s. Then, in the wake of the 2007–09 global financial crisis, oil prices plummeted. They rebounded sharply in the early stages of the subsequent economic recovery. This rebound helped fuel investment in the U.S. oil sector and propelled the widespread use of fracking, a high-pressure hydraulic drilling method that breaks up shale to extract oil. As the fracking revolution took hold and U.S. oil production ramped up, prices again fell sharply in 2014. Although oil prices began to recover again in recent years, they took yet another sharp hit in the COVID-19 economic downturn. The changes in oil prices have implications for the economy. In this article, we focus on U.S. consumer spending.

### How do oil price changes affect U.S. consumption? What has changed in this relationship?

Historically, consumers tended to increase spending on non-oil goods and services when oil prices fell. This is partly because consumers can spend less of their income on fuels and increase their spending on other goods and services, as demand for oil is relatively slow to adjust to price changes. In addition, lower oil prices would benefit a net oil importer country, because less of its income would be transferred abroad to pay for the same amount of oil imported. However, this response appears to have weakened more recently. First, the share of oil expenditures in households' budgets has fallen, even for lower-income households. Second, the domestic oil sector has grown strongly over the last decade. Consequently, the United States has become much less reliant on oil imports. As a result, oil price changes may no longer have the same effect on consumption.

## Which aspects bear watching?

The increase in work from home during the pandemic and the potential for workplace flexibility after the pandemic might lead some individuals to redirect gasoline money toward other spending. Of course, this effect is distributional in that it would benefit only those who have the flexibility to work from home and not those tied to their workplaces. Therefore, a useful area of further research would be consumption behaviors across different groups. That might help us better understand the distributional effects of oil price changes in an evolving environment.

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Nida Çakır Melek is a senior economist in the Economic Research Department of the Federal Reserve Bank of Kansas City. She joined the Bank in August 2013 after receiving her Ph.D. from UCLA. She holds a B.S. degree in Mathematics from Middle East Technical University, Ankara, Turkey and an M.A. degree in Economics from Bilkent University, Ankara, Turkey. Her primary areas of research are macroeconomics, international economics, and energy economics.

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