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The Ukraine war’s effects on US commodity prices

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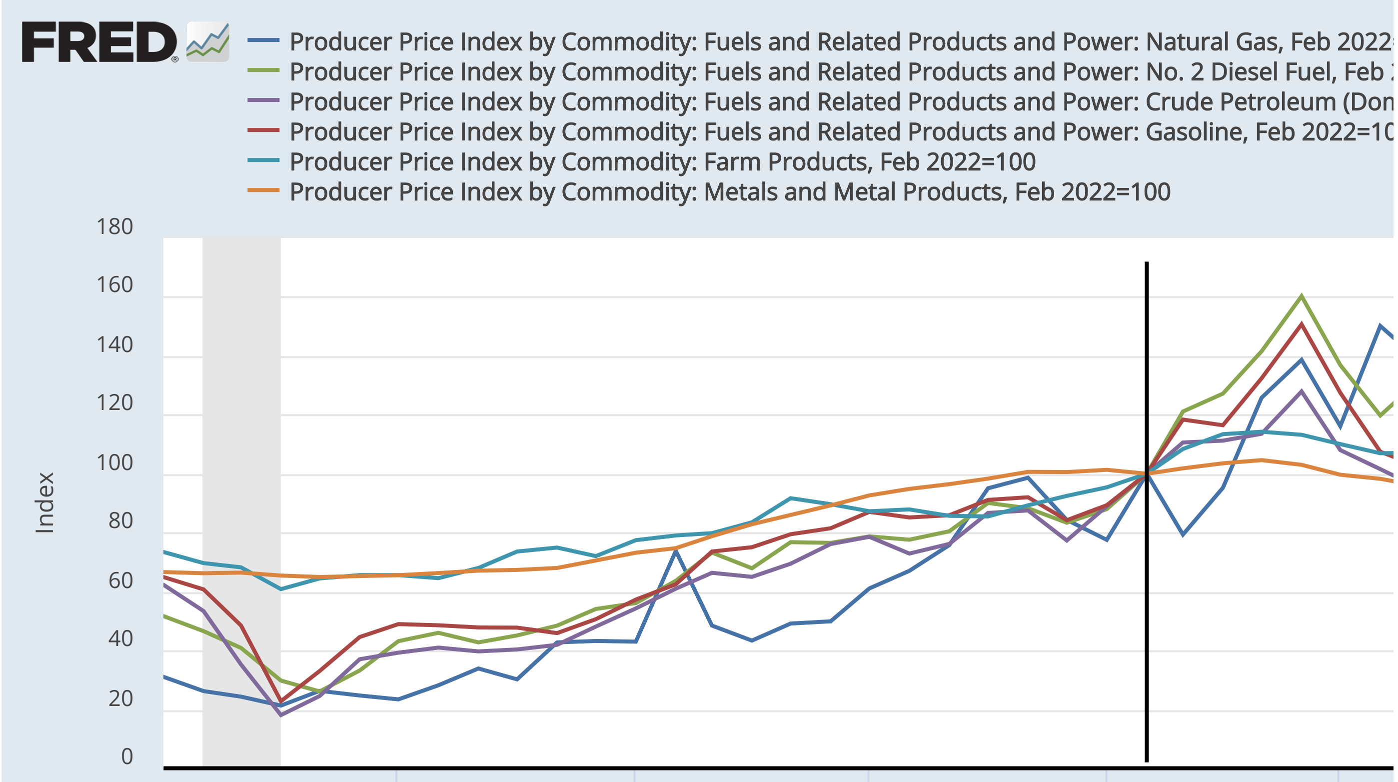

US gasoline prices rose sharply after Russia invaded Ukraine in February 2022 and the European Union and the United States imposed economic sanctions. The attention paid to these economic events was certainly warranted: In June 2022, the producer price index (PPI) for gasoline had jumped 85% above what it was a year earlier.

Oil prices were clearly affected, but how do those changes compare with price changes for other commodities? FRED has US price data for a variety of commodities, and the FRED graph above plots the PPI for natural gas, diesel fuel, crude petroleum, gasoline, farm products, and metal products from January 2020 to the latest available data at the time of this writing.

Metal and farm products

The orange and light blue lines in the graph show metal and farm product prices, respectively: These prices barely changed compared with the others, which is quite remarkable for commodities. Keep in mind that these are prices in the United States, and prices closer to the conflict did change more.

Archives

Energy commodities

On the other hand, energy markets have typically been more volatile. Before February 2022, diesel, gasoline, oil, and natural gas prices followed similar trends. The price of diesel and gas (both of which are connected to the price of crude oil) immediately increased after Russia invaded Ukraine. However, their paths diverged greatly thereafter. Gas and diesel both peaked in June 2022, but diesel's PPI was about 109% more than in June 2021 compared with 85% for gasoline. Diesel prices rose higher because diesel fuel is scarcer worldwide: There simply weren't enough refineries to meet diesel demand, especially after the US and other countries stopped purchasing energy exports from Russia.

These price indices have decreased considerably since then, showing that markets have been able to absorb the upheaval in early 2022.

How this graph was created: In FRED, search for and select "Producer Price Index by Commodity: Fuels and Related Products and Power: Natural Gas, Index 1982=100, Not Seasonally Adjusted." From the "Edit Graph" menu, click the "Add Line" tab: Search for the producer price index of other commodities, and click "Add data series." Once all lines have been added, change units to 100 in 2022-02-01 and apply to all. Then, add a user-defined line, with start and end dates on 2022-02-01 with values that go from maximum to minimum value in the graph. Finally, go to the "Format" tab and turn the vertical line black.

Suggested by Hoang Le and Paulina Restrepo-Echavarria.