Our View: Brent Is Worth $161/bbl; Diesel Shortages to Blame; Recession to Follow

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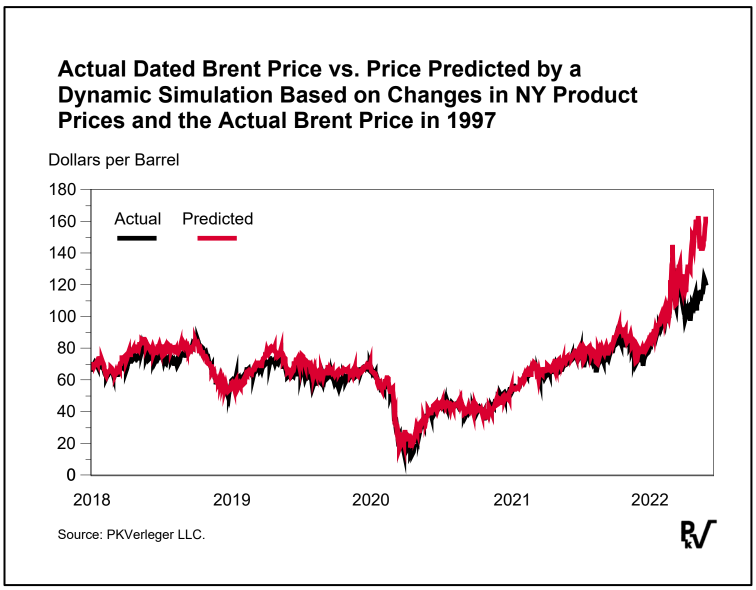
PKVerleger LLC has been predicting Dated Brent price movements based on the changes in spot diesel and gasoline prices in New York Harbor since 1998, that is, we base our projections on the 1997 Brent price and the product price changes for the subsequent 6,365 days.

The model did well at predicting the cash Brent price until Russia invaded Ukraine. The average error up until then was –$2.50 per barrel over twenty-four years, and the standard deviation was $4.50. This is a reasonably good record for a model that has never been adjusted for changes in actual crude prices.

Since the Ukraine invasion, however, the model has gone off the rails. During the more than 100 days of war, its error has ballooned to –$20 per barrel, and the standard deviation has jumped to $17. As the figure here shows, the model believes Brent should be trading for $161 per barrel. The predicted price jumps to $168 if we remove the corrections for the US Renewable Fuel Standard program from product prices.



What is behind the collapse of arbitrage between Brent and products is the inability of world refiners to increase the diesel volumes they produce. Today, little can be done to boost supply without changes in the International Maritime Organization's marine fuel sulfur content regulations—an unlikely event. The current constraint on diesel supply is pulling the world economy into recession.

Our June 6 *Notes at the Margin* ended with the following commentary:

> Macroeconomists (economic forecasters) disdain those who follow energy markets along with microeconomists and other professionals who dig deep into the data for specific economic sectors.

> In general, their scorn is well-earned. Energy economists and others in the energy industry who are unschooled in economics have a well-deserved reputation for crying wolf often. Representatives from oil-exporting countries and officials at consulting firms such as CERA have warned of energy-related recessions probably 100 times over the last 30 or 40 years and been wrong almost every time.
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> This time, though, may be different. Global gasoline and diesel fuel supplies are limited. The EU sanctions on Russia will cut supplies further. President Biden may go on bended knee to Saudi Arabia to beg for more oil and may win the Saudis' cooperation. However, there is very little that the Saudis or anyone else can do to boost distillate supply **unless the IMO marine fuel sulfur rule is relaxed.**
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> This may be the first time in 36 years in which gasoline and diesel fuel are experiencing record tightness simultaneously. According to our arbitrage model, Dated Brent should be trading between $160 and $180 per barrel, depending on the impact of the renewable fuel obligation. That is not a misprint.
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> **Product markets predict Brent should trade for between $160 and $180 today.**
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> The situation will get worse absent a significant drop in consumption caused by rationing and/or price conservation **or** a substantial decline in economic activity. The products are not there, and the products will not be there in three or six months without a reduction in use.

We expect diesel prices to rise further. The supply squeeze and high prices are already devastating African countries, as *Financial Times* reports.[1] US farmers are also confronting fuel shortages that could affect crop yields.[2]

The impact of such shortages will limit production, push inflation higher, and worsen the coming recession.

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[1] See Joseph Cotterill, "Fuel Shortages across Africa hit motorists, airlines, and radio stations," *Financial Times*, June 6, 2022 [https://tinyurl.com/4x8739az].

[2] Kim Chipman and Megan Durism, "Diesel's 100% Surge and Scarcity Deny Farmers Their 'Lifeblood,'" Bloomberg, May 19, 2022 [https://tinyurl.com/5cpjc3n9].