

What ‘Backwardation’ Has to Do With US Diesel Squeeze

By
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A crisis is once again brewing in the US for the diesel fuel that powers trucks and heats homes. Global shortages and a market phenomenon known as backwardation are frustrating Biden administration efforts to bolster dangerously low domestic inventories and keep prices from soaring as winter approaches. Officials are now considering steps like export restrictions that would be unprecedented -- and that critics say could well backfire.

Three Reasons There's a Diesel Shortage in the US

1. What's happening?

The country is down to 25 days of diesel supply with stockpiles at their lowest level for this time of year in records going back to 1993. In the Northeast, where more people burn fuel for home heating than anywhere else in the country, inventories are a third of their typical levels heading into winter. National Economic Council Director Brian Deese called the levels “unacceptably low.” By late October, diesel prices had risen for more than two weeks to 50% above where they were a year ago.

2. What does backwardation have to do with it?

Backwardation and contango are names for curve structures that map traders' guesses about what a given contract will be worth in the future. In the former, the curve is downward sloping, meaning prices are expected to fall in the future; in the latter, it's the reverse and upward sloping. Right now, traders are paying more for prompt deliveries than longer-term ones. This backwardated market structure incentivizes suppliers to sell now instead of holding onto the product -- the opposite of what President Joe Biden wants them to do.

3. How is that driving markets?

In October, the diesel curve had become so backwardated that sellers risked losing as much as 30 to 40 cents a gallon holding onto the product until the next month, compared with less than 1 cent at the same time last year. Not only was the spread unusually large, but the backwardation had lasted unusually long: Typically the diesel market flips into contango in the summer, allowing suppliers to replenish fuel ahead of peak harvest and heating season. This year, that never happened.

4. What do exports have to do with it?

Refiners in Texas and Louisiana can export diesel out of the Gulf Coast to buyers in Latin America and Europe for an immediate profit -- and they have been doing just that. The market backwardation means domestic deliveries that take longer are risky. This is a key reason that the country's major fuel pipeline connecting Gulf Coast refiners and East Coast consumers was underused for months while East Coast seasonal diesel stockpiles languished at record lows -- the product can lose a lot of its value in the two to three weeks it takes to move through the pipeline.

5. What else is causing the crunch?

Diesel supplies have also tightened due to a steady decline in East Coast refining capacity in recent years, which has made the region more reliant on overseas imports, some of which come from across the Atlantic -- Europe and Russia. Shipments from both sources have dried up/decreased. Europe is exporting less fuel as it grapples with the sharp drop in oil and natural gas imports from Russia, and sanctions imposed by the US after Russia's invasion of Ukraine have stopped shipments from there. At the same time, US seasonal demand for diesel is at the highest level since 2007. Farmers are burning the fuel to harvest crops, residents of the Northeast are filling up their heating oil tanks before prices rise even more and trucks moving goods on the country's highways have geared up ahead of the holiday shopping season.

6. What is the administration considering?

Deese told Bloomberg TV that “all options are on the table” to build supplies and reduce retail prices. Here are some of the steps available:

- The administration could release 1 million barrels of fuel from its strategic fuel reserves in the Northeast. That could help the region in a pinch, but the relatively small volume available in the diesel reserve means the relief won't last very long: At the current national demand level, 1 million barrels of fuel will be gone in less than 6 hours.
- The Department of Energy could expand strategic fuel reserves. This would provide a much-needed cushion of supply in the most vulnerable regions and forestall shortages. But building up government supplies out of domestic production may reduce exports and drive up global prices further.
- The US can also limit exports, which critics say could backfire in a similar way, damaging US relations with allies in Europe and Latin America. It would also likely force some producers to reduce operations to protect margins. For example, around 40% of diesel produced on the US Gulf Coast is exported. Taking away such a big, lucrative outlet will almost certainly cause refiners to adjust output.
- The administration has the option of waiving a shipping law that requires cargoes like fuel be carried between domestic ports only on US-built, -flagged and -crewed vessels. Waiving the century-old Jones Act would make shipping diesel fuel to the East Coast more economical and possibly more profitable than exporting it. But the act is very popular with unions, shipbuilders and owners who have significant clout in Washington.

7. Is this only happening in the US diesel market?

No. The market for diesel-type fuel in northwest Europe is also extremely tight, with stockpiles forecast to hit their lowest since at least 2011 this winter. Like in the US, the region's diesel futures market is also extremely backwardated, with November delivery product at a more than \$70 a ton (\$9.40 a barrel) premium to December on Thursday.

Europe's already strained market is also set to come under further pressure when European Union sanctions on seaborne deliveries from Russia -- the region's single biggest external supplier -- begin in early February.

In addition, the US gasoline market is also backwardated, about three times as much as it was this time last year. This could prevent the winter-time stockbuilding that typically happens, raising the risk of a thinner-than-usual supply cushion going into spring.

— With assistance by Jack Wittels and Alex Longley