Chart of the Week #2022-41
Revisited: Overview of Tight Distillate Markets

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Global demand recovery and new applications, coupled with declines in refining capacity and global inventories, are driving distillate (diesel and heating oil) prices to record highs.

U.S. retail prices have risen from a national average of $3.50/gallon at the beginning of 2022 to a peak $5.50 in May. There has been little relief since then.
Distillate Inventories Viewed Nationally and along the Atlantic Coast

As COVID-19 has been abating and demand has recovered, U.S. distillate inventories have declined considerably in the last year. In particular, Atlantic Coast inventories are at levels last seen in the early 1950s.

New England (part of the Atlantic Coast data) typically has 12-15 million barrels of inventory. It currently holds 3.3.
U.S. Refining Utilization and Capacity

While U.S. refinery utilization is at ~90% and above trend, a 500-600 thousand barrel per day decline in U.S. refining capacity has helped to increase distillate constraints.

United States - U.S.: Weekly Refinery Total Capacity trailing twelve months through 10/21/2022

United States - U.S.: Weekly Refinery Capacity Utilization trailing twelve months through 10/21/2022

Analysis based on EIA Data
U.S. Refining Crack Spreads: 3-2-1 & Simple

Crack spreads (measures of the implied refining margin) are at all-time highs. While gasoline cracks are high, distillate cracks are being driven even higher due to strong demand.

Note the rebound in October.
U.S. Distillate Futures Markets – What do the curves tell us?

While generally flat, distillate forward curves have steepened into deep backwardation in 2022, raising the cost to holding inventories.

Calendar spreads, generally non-existent, are at all-time highs.
U.S. Distillate Trade and Domestic Movement

The U.S. exports about 1 MBD of distillate primarily from the Gulf Coast (USGC).

High Jones Act clean product waterborne freight rates impede moving more distillate into Atlantic Coast consuming regions. While most USGC distillate trade is under contract, there are some spot cargos available that would alleviate Atlantic Coast shortfalls this winter.
Overview of Tight Distillate Markets

• Global demand recovery and new applications, coupled with declines in refining capacity and global inventories, continue to drive distillate (diesel and heating oil) prices to record highs. U.S. retail prices have risen from a national average of $3.50/gallon at the beginning of 2022, peaking at $5.50 in May, and there has been little relief since then with the national average staying firmly above $5/gallon.

• Distillate, in its primary form as diesel, is the bedrock fuel for rail and truck freight movement, most agricultural machinery, and electricity production in select markets such as Hawaii. There are no substitutes available. In addition, co-generation facilities use diesel when natural gas prices are higher on an energy basis.

• With the IMO2020 desulfurization regulations, distillate consumption was expected to expanded in maritime usage. That was delayed by the pandemic; but now with the pandemic receding and the increase in maritime trade, distillate consumption has expanded in maritime usage.

• With the Russian war against Ukraine, Russian distillate exports, especially to Europe, have declined substantially as embargoes loom. In addition, Russia’s war has caused more of its distillate to be used in its land-based military equipment.

• Despite considerable U.S. Gulf Coast production, high Jones Act clean product waterborne freight rates prevent more distillate from being moved into Atlantic Coast consuming regions where it is used to heat buildings.

• This slide deck is available on the EPRINC Website

• For more information on this chart, please contact Larry Goldstein (larryg@eprinc.org) or Max Pyziur (maxp@eprinc.org).