

Diesel Fuel And Future Transportation Problems

One of the worst teeth-gritting lines you can throw at any options-based hedger is, “futures are free.” No; not only does selling a futures contract below the cost of carry involve a direct cost, it involves an opportunity cost should the underlying market rise. The very best a hedger can hope for is a futures market not to be trading in backwardation, the situation where back-month futures prices are below the cash market price.

Backwardation has arrived in the futures market related to diesel fuel. This will produce greater price volatility and affect the entire transportation industry. I discussed fuel prices and their divergent impact on trucking, airline and railroad stocks in [January](#) and concluded:

“As various transportation indices such as the Dow Jones Transports hit nominal record highs, keep your eye on fuel prices. Higher fuel prices impinge, as we should expect, on trucking and air shipment firms.”

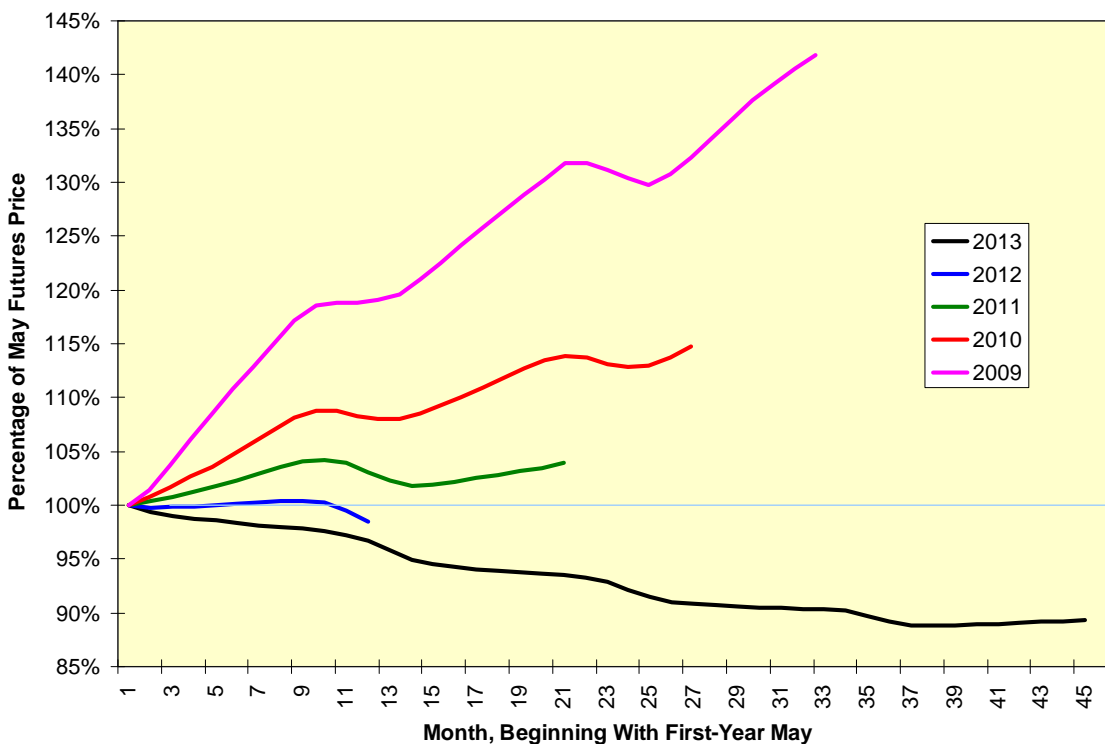
Hedge Costs And Inventories

Transport firms long have hedged the costs of jet kerosene, marine diesel and regular diesel with the heating oil futures contract (HO) launched in 1978. This first successful U.S. energy contract was based on physical delivery of heating oil to terminals in New York Harbor; various miscreants last seen wearing concrete overshoes also have been delivered to New York Harbor, but I digress.

The CME Group replaced HO with ultralow sulfur diesel fuel (ULSD) for all contracts beginning with May 2013. On the surface, this might look like nothing more than modernization, a sort of greener-than-thou back-of-the-hand to sulfur dioxide in exhaust gases. However, HO has had a pronounced albeit declining space-heating market whereas ULSD does not. Heating oil distributors used the seasonal carry in its forward curve it to build inventories throughout the late summer and early fall. These inventories provided an insurance cushion against freeze-related demand or refining system-induced supply shocks.

The chart below depicts the forward curves of HO futures from the May contract onwards taken at the end of February for the years 2009-2012 and for the current ULSD future. The HO contracts rise going into the winter months, but the ULSD market declines in a classic backwardation curve.

Seasonal Carry Shifts To Backwardation With ULSD Futures



Inventory-building and hedging are enabled by a seasonal carry in the futures market; this is when the back-months trade over the cash market price and can be sold to cover the costs of storage. A backwardated market forces the producer or inventory-holder to sell at a discount. These costs encourage just-in-time inventory policies and will stick refiners with the direct price risk of hedging their production of ULSD.

Since refiners, terminals and others in the ULSD supply chain are not in the business of charity, they will look to pass on their costs of this greater price risk to their customers in the transportation business. Fuel buyers who wish to hedge by fixing the price of future deliveries in the ULSD futures market can do so, but then they will be at risk to those fixed prices falling.

The logical alternative would be for the fuel buyers to employ call options, capping swaps or some other hedge that would allow the benefits of future price declines to flow to them. These strategies are expensive, and I can tell you from experience buyers recoil at the costs involved.

The ultimate result will be the same one you experience with home delivery of natural gas: The final customer in the chain involving the likes of Union Pacific railroad and FedEx will be the one stuck paying for everyone else's risk management.