Streetwise Professor



High-Speed Traders Stir the Pot in Natural-Gas Market

BY CRAIG PIRRONG, UNIVERSITY OF HOUSTON

The Wall Street Journal early this week wrote on allegedly disruptive high-frequency trading strategies employed in the natural-gas futures markets immediately surrounding the release of the U.S. Energy Department's weekly gas storage report.

Exactly what is going on here is hard to surmise, but what makes most sense to me is that HFT traders at issue are "gunning the stops."

That is, they are entering big orders to blow through the standing limit orders, moving prices, hoping to trigger buy stops (if they are buying) or sell stops if they are selling. The triggering of the stops creates the kind of short-term momentum that HFT traders can profit from by taking the other side of the stops.

Another example, as if one is needed, of the dangers of stops.

And it should be noted that gunning the stops is not the product of this newfangled electronic trading. It happened on the trading floors with some frequency. There are manipulation cases from the 1960s, if memory serves, related to gunning stops.

It's also worth noting the *Wall Street Journal* story cited one key data point, on August 16. It would be worthwhile to see if similarly allegedly anomalous price action took place prior to late 2006, when the market migrated to the screens. I'm betting you could find more than one.

The article suggests that what is attracting HFTs to the gas market is not the opportunity to play games for a few minutes once a week. Instead, entry of HFT is being spurred by wide spreads in the gas market, as compared to equities. **HFT competition has narrowed spreads to virtually nothing in equities, so HFT traders are looking for markets with fatter margins, which is why they are moving into commodities.**

High-frequency firms — whose activities can range from market-making on behalf of clients to trading for their own accounts — have wrung profits from equity and other markets for years. **But recently, their increased action in commodities, natural-gas in particular, is spooking some veteran traders.** That could leave the market reliant on computerized trading systems and potentially reduce liquidity when it is most needed.

"We can fight over fractions of a penny in stocks, or full pennies and more in natural gas," a programmer at a New York high-frequency trading fund told the *Wall Street Journal*.

Umm... that's the way markets are supposed to work.

New entrants lead to reduced prices and drive returns to just cover the cost of capital. That's exactly why some veteran traders are "spooked." They can't compete against HFT. Their "oxen are being gored," just as traditional market makers' oxen were gored in equities.

The new entrants may play shenanigans like gunning stops, but "veteran traders" did that too -- another reason for "veterans" to resent HFT, for elbowing in on their racket. Such shenanigans should be addressed by more targeted deterrents, rather than European-style attempts to hamstring HFT.

I expect that spreads in natural gas, and commodities generally, will narrow as HFT technology and capital moves into those markets.

As for fears that this liquidity will dry up when it is needed most, again, this is not unique to electronic markets or HFT. It is a feature of market-making in general. Market-makers reduce their supply of liquidity when they suspect order flow is toxic, or when risk is rising substantially.

It was so when market makers wore handle bar mustaches and button up shoes and stood in trading pits. It will be so when market-makers are co-located servers. It's inherent in the nature of market-making, not in the technology.

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