Is Oil Trending? How Twitter Influences Oil Price Volatility

By Daniel J. Graeber - Oct 19, 2015, 5:12 PM CDT

Crude oil prices don't care what's #trending.

Just as negativity lingers, volatility breeds more volatility. Wild periods repeat and feed upon themselves. In the global marketplace, dramatic swings in Asia can spread to the West with ferocity. For a company or personality looking for an edge on social media platforms like Twitter, capitalizing on that volatility makes good business sense. And with more data online and available in real-time, markets and traders may be more prone to react unevenly to that volatility, making what would otherwise be a spark a full-fledged blaze. For something like crude oil prices, long-term trends suggest the opposite is true. Once the media ride is over, prices usually return to previous levels.

Real-time news has a real-time market influence. Iranian media outlet Press TV in March 2012 reported an explosion hit crude oil pipelines "in the flashpoint Saudi Arabian city of Awamiyah in the kingdom's oil-rich Eastern Province." At the time, much of the Middle East was in the grips of the wave of democratic reforms dubbed the Arab Spring. Muammar Gadhafi, the long-time leader of oil-rich Libya, was killed during an uprising five months earlier and Egypt was on the cusp of seating its first president ever elected by a democratic vote. Saudi Arabia was largely spared from protests, though its Eastern Province had witnessed small-scale demonstrations at least since the Arab Spring movement began. News from Iran of the pipeline explosion caused crude oil prices to spike more than $5 per barrel, or around 4 percent, to $128 to its highest level in four years.

Prices fell back to the recent weeks' average quickly after Saudi officials denied the accuracy of the Press TV story which, despite the viral reaction on Twitter, was the only outlet to actually report the explosion. Despite the volatility, Brent crude ended 2012 essentially where it started, at about $110 per barrel.**Related: Oil Market Showdown: Can Russia Outlast The Saudis?**

In 2015, twin July crashes on the Shanghai Composite Index and some of the first emerging signs of Chinese economic weakness helped lead to an Aug. 21 drop of 530 points on the Dow Jones Industrial Average, capping off its worst week since 2011. The pressure leaked into crude oil markets, causing prices to drop more than 8 percent from Thursday, Aug. 20, to Tuesday, Aug. 25.

During the Cuban Missile Crisis, decades before the widespread use of even email, President Kennedy had six days to consider his options in quiet and without the public hysteria that would've greeted such an event in today's media age. Today, real-time data delivery through media like Twitter prompts a real-time, knee-jerk reaction. Commenting during the height of the cable-news era in the mid 1990s, U.S. State Department spokesman Nicholas Burns lamented that "instantaneous reporting of events" demands "instant analysis." In the digital age, that's evolved to instantaneous reactions.

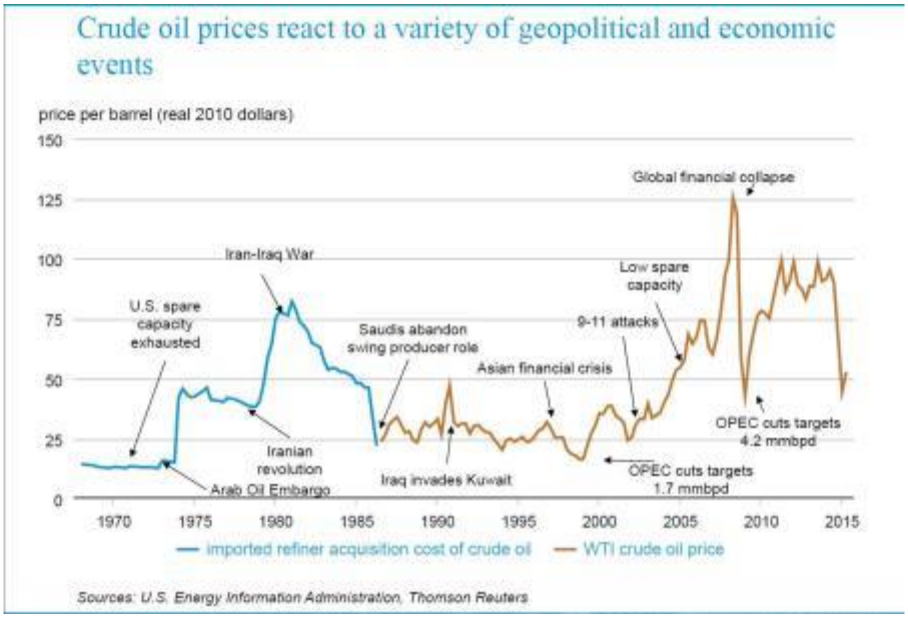
Media theorists like Marshall McLuhan and Neil Postman note that, with each evolutionary media step forward, some part of the functionality of the message is left behind. The average reader took about 2 minutes to get this far, but it would take roughly 3.5 minutes to speak the same amount of text. If speech were the dominant form of media, the argument goes, an audience would not only be more patient, but potentially have a better grasp of the issue at hand because of the time spent with the message.

In 2015, oil market analysts have real-time knowledge of when Baker Hughes will release its weekly report on rig counts and at precisely what time OPEC publishes its monthly market report. When those expectations are not met, like when OPEC's market report was delayed in May, there are real-time reactions on social media.

Were such a delay to have occurred during the Kennedy administration, it's unlikely the market would've noticed. Speaking in 1995, Postman said the 20th century was remarkable for the closure of what could be considered an information gap. But in doing so, society has created a new problem in that much of the information is at best incoherent or at worst meaningless.

"We have transformed information into a form of garbage and ourselves into garbage collectors," he wrote. "Like the sorcerer's apprentice, we are awash in information without even a broom to help us get rid of it."**Related: Downturn Hits Bottom But High Oil Storage Could Delay Recovery**

Most of the world's oil, at least before the U.S. shale boom, is found in parts of that world that are historically unstable. Price shocks during the 1970s, the 1990s and the early 2010s were tied to Arab Oil Embargo, the Persian Gulf War and the Arab Spring, respectively, events that played out in the news, and later, social media. Given this trend, market players and observers should always be concerned about events like a delayed OPEC market report or a one-day crash on the Dow Industrial Average, which by themselves could lead to short-term volatility in crude oil markets. Adding this risk premium in an age when the media cycle is accelerated seems to contribute to the cycle of volatility.



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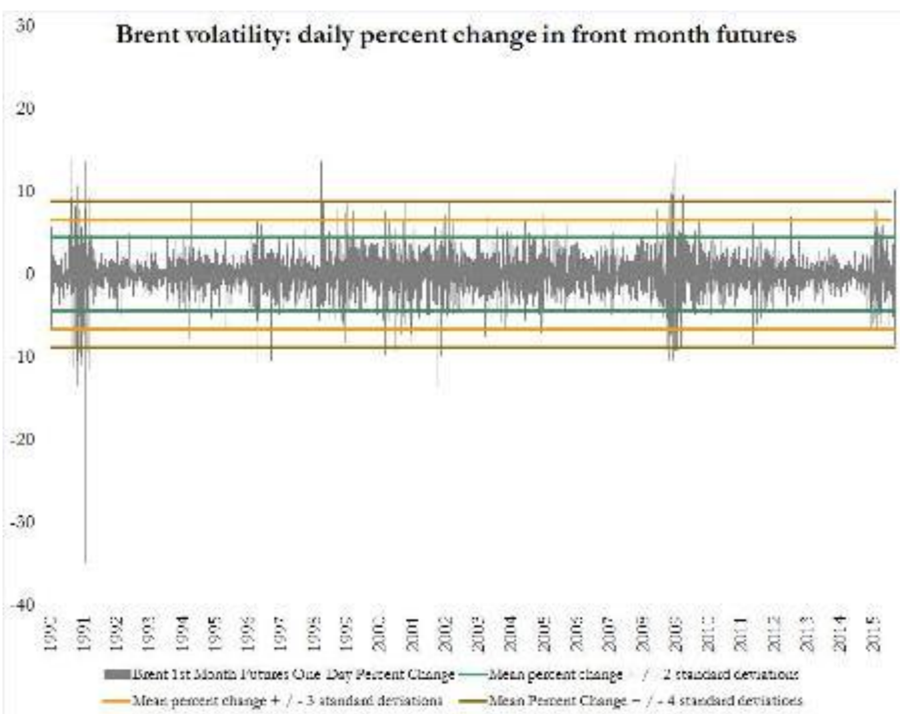
Researchers looking at data from 1983-2008 revealed no major relationship, however, between news and energy prices long term. As apparent with daily fluctuations in the Dow Industrial Average, which has since recovered the losses from the late August crash, the influence of real-time media is relatively short-lived. Once the frenzy is over, crude oil prices tend to return to their previous levels.



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John Kemp, senior market analyst for commodities and energy at Reuters, suggested that, at the micro-level, major fluctuations in prices may seem extreme and, in the case of recent stock market trends, sometimes lead to panic. Investment analysts urged patience after the Dow's steep loss in August. The same goes for the crude oil market, which like other markets, is a marathon characterized by long-term trends, not a sprint.

"Volatility is itself volatile showing distinct quiet and wild periods, but it hasn't been trending over time," Kemp said.

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