Mystery predators may have contributed to fiscal collapse in 2007: research

December 19 2011

Market activity for Citigroup over a two-year period starting January 1, 2007. Top panel shows vertical bars for the daily high and low stock price. Lower panel shows total short interest (yellow), trading volume (gray), and daily change in short interest (red). Arrows indicate November 1, 2007. Image: arXiv:1112.3095v1 [q-fin.GN]

(PhysOrg.com) -- As the nation bristles, camps out, and opines against the destructive role of banks in bringing down the economy, a group of scientists has released a study that shows a critical piece of the puzzle went missing, and that piece continues to go ignored, to everyone's peril, including the banks.

Their new study shows that banks themselves were under attack by other players on Wall Street. The study authors at the New England Complex Systems Institute (NECSI) retraced events to show that at a critical point

in the financial crisis, the stock of Citigroup was attacked by traders by selling borrowed stock (short-selling) which may have caused others to sell in panic. The subsequent price drop enabled the attackers to buy the stock back at a much lower price.

This kind of illegal market manipulation is called a bear raid and the new study supports earlier suspicions that the raids played a role in the market crash.

The study has direct evidence. Through its analysis of stock market data not generally available to the public, namely the borrowing of shares, NECSI reconstructs the chain of events.

On November 1, 2007, the number of borrowed Citigroup shares jumped by 100 million shares, a value of almost $6 billion. Six days later, a similar number of shares was returned on a single day.

Shares are generally borrowed to sell on the market. The trading on November 1 was almost four times the usual volume. The newly borrowed shares represented over three-quarters of the volume on that day. When a large volume of shares is sold it can drive prices down. The price of shares that day dropped by almost 7 percent. By the time the shares were returned, it had dropped nearly 20 percent.

Professor Yaneer Bar-Yam, President of NECSI, maintains this was no "freak" or coincidental event. "When 100 million shares are borrowed on a single day and then returned on a single day, the evidence that this is a concerted action is hard to refute. The likelihood of such an event happening by coincidence is one in a trillion."

The NECSI scholars are also voicing concern about how the incident was allowed to happen. Selling shares to deliberately cause a price drop to induce others to buy or sell is illegal, but enforcing the law after it is

violated is much less effective than preventing it from happening in the first place, they maintain.

"There used to be a rule that prevented it from happening by forbidding borrowed shares from being sold in large blocks that drive the price down," said Bar-Yam. "The Securities and Exchange Commission repealed that rule, known as the price test or uptick rule, on July 6, 2007."

Last year, the authors of the report sent preliminary results of their study to the financial services committee of Congress, and Congressmen Barney Frank and Ed Perlmutter sent it to the SEC.

Unfortunately, Professor Bar-Yam says that he hasn't seen any action by the SEC to identify or prosecute those responsible or to prevent its occurring in the future.

After the market crash, the SEC received thousands of requests from the public to reinstate the price test rule. Hedge funds that invest the money of wealthy individuals opposed its reinstatement. Eventually, the SEC put into place an "alternative" rule that only applies a price test when the price of a share drops more than 10 percent.

Professor Bar-Yam points out, "This watered-down rule would not have stopped the bear raid on Citigroup on November 1, 2007. This is only one example of the deleterious effects of the weakened rule. The overall effect of unregulated selling of borrowed shares is surely much larger and continues today."

More information: Evidence of market manipulation in the financial crisis, arXiv:1112.3095v1 [q-fin.GN] arxiv.org/abs/1112.3095

Abstract

We provide direct evidence of market manipulation at the beginning of the financial crisis in November 2007. The type of manipulation, a "bear raid," would have been prevented by a regulation that was repealed by the Securities and Exchange Commission in July 2007. The regulation, the uptick rule, was designed to prevent manipulation and promote stability and was in force from 1938 as a key part of the government response to the 1928 market crash and its aftermath. On November 1, 2007, Citigroup experienced an unusual increase in trading volume and decrease in price. Our analysis of financial industry data shows that this decline coincided with an anomalous increase in borrowed shares, the selling of which would be a large fraction of the total trading volume. The selling of borrowed shares cannot be explained by news events as there is no corresponding increase in selling by share owners. A similar number of shares were returned on a single day six days later. The magnitude and coincidence of borrowing and returning of shares is evidence of a concerted effort to drive down Citigroup's stock price and achieve a profit, i.e., a bear raid. Interpretations and analyses of financial markets should consider the possibility that the intentional actions of individual actors or coordinated groups can impact market behavior. Markets are not sufficiently transparent to reveal even major market manipulation events. Our results point to the need for regulations that prevent intentional actions that cause markets to deviate from equilibrium and contribute to crashes. Enforcement actions cannot reverse severe damage to the economic system. The current "alternative" uptick rule which is only in effect for stocks dropping by over 10% in a single day is insufficient. Prevention may be achieved through improved availability of market data and the original uptick rule or other transaction limitations.

Provided by New England Complex Systems Institute