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High-Frequency Firms Triple Trades in Rout

By Nina Mehta - Aug 12, 2011

The stock market's fastest electronic firms boosted trading threefold during the rout that erased $2.2 trillion from U.S. equity values, stepping up strategies that profit from volatility, according to one of their biggest brokers.

The increase from Aug. 1 to Aug. 10 over their 2011 average surpassed the 80 percent rise in U.S. equity volume, showing that high-frequency traders made up more of the market during the plunge, Gary Wedbush, executive vice president and head of capital markets at Wedbush Securities, said in a telephone interview. Wedbush is the largest broker supplying bids and offers on the Nasdaq Stock Market, according to exchange data.

"We're seeing a tremendous amount of high-frequency trading," said Wedbush, whose company is one of the biggest execution and clearing brokers catering to high-speed firms. "Their business is a trading business, and volatility creates far more opportunities. Some of their algorithms and automated systems are trading two, three or five times as many shares as they would have in a more normalized volatility environment."

The role of high-frequency firms in periods of market swings has come under scrutiny since the May 6, 2010, crash that briefly erased $862 billion from U.S. share values. In contrast to their behavior this month, the traders and other professional investors were said to have withdrawn bids as the 2010 selloff worsened, according to a Sept. 30 report from the Securities and Exchange Commission and Commodity Futures Trading Commission.

Rising Volume

Equity volume from Aug. 4 through Aug. 10 was a record for any five-day period, according to data compiled by Bloomberg and Credit Suisse Group AG. The daily average of 15.97 billion shares beat the previous record of 15.94 billion from Sept. 15

through Sept. 19, 2008. Lehman Brothers Holdings Inc. (LEHMQ) filed for bankruptcy on Sept. 15.

Wedbush, which has about 1,000 employees including about 400 in Los Angeles, has been the largest provider of bids to buy and offers to sell shares on Nasdaq every month this year, according to data from Nasdaq OMX Group Inc. (NDAQ) The next-largest was Morgan Stanley in New York.

Daily volume averaged 7.5 billion shares in the first half of 2011 when the Chicago Board Options Exchange Volatility Index, or VIX, was 18.04. It rose 80 percent to 13.6 billion shares from Aug. 1 through Aug. 10 while the VIX climbed to 32.69 and the S&P 500 slid 13 percent. The VIX measures the cost of using options as insurance against declines in the Standard & Poor's 500 Index. Bloomberg LP, the parent company of Bloomberg News, processed a record 43.7 billion ticks, or price quotes, globally on Aug. 10, compared with 27.5 billion on May 6, 2010.

Rapid Orders

High-frequency trading is a technique that relies on the rapid and automated placement of orders, many of which are immediately updated or canceled, as part of strategies such as market making and statistical arbitrage and tactics based on momentum. It accounted for about 53 percent of trading earlier this year, down from 61 percent in 2009, according to Tabb Group LLC, a New York-based financial industry research firm. In 2006 it was 26 percent of the market, Tabb said.

Wedbush estimated the firms have made up 75 percent of American equity volume in August. They have boosted trading in shares of Apple Inc. (AAPL), Google Inc., Bank of America Corp. and Goldman Sachs Group Inc. since early July after reducing business the first half of 2011, Wedbush said. The traders are active in the SPDR S&P 500 ETF Trust, iShares Russell 2000 Index Fund and other exchange-traded funds, he said.

Regulatory Probe

U.S. prosecutors have joined a regulatory investigation into whether some high-speed traders are manipulating markets by posting and immediately canceling waves of rapid-fire orders, two officials said in April. Justice Department investigators are working with the SEC to review practices "that are potentially manipulative," according to Marc Berger, chief of the Securities and Commodities Task Force at the U.S. Attorney's Office for the Southern District of New York.

Algorithms, or strategies that execute bigger orders by breaking them into smaller pieces and sending them to different exchanges, also use high-frequency techniques. Mutual, pension and hedge funds employ algorithms built by brokers or vendors to automate some of their trading instead of manually placing orders in markets or turning to humans to buy or sell blocks.

Wedbush said professionals who add bids and offers on exchanges make trading more efficient and reduce the cost to investors of buying and selling shares.

Adding Liquidity

"The bulk of high frequency traders are adding liquidity to the marketplace," Wedbush said. "Automated traders employ a myriad of strategies that seek to profit from a stock's short- term volatility, but the mass of HFT is adding liquidity by being on both sides of the market or doing creation/redemption arbitrage for ETFs."

Authorized brokers can buy the stocks in an index and swap them for shares in an ETF based on the benchmark, or sell ETF units and get shares of its companies. That reduces price differences between an ETF and the index on which it's based.

High-frequency firms generally focus on the most active securities, with about 80 percent of their trading limited to the 20 percent that are the most popular, Wedbush said.

The S&P 500 climbed 0.7 percent at 10:31 a.m. in New York today after the gauge surged 4.6 percent to 1,172.64 yesterday. The index had plunged as much as 18 percent from its 2011 high and traded at 12.3 times reported earnings on Aug. 10, the lowest valuation since March 2009, according to data compiled by Bloomberg. Dow Jones Industrial Average futures rose 28 points, or 0.3 percent, to 11,112 today.

63% of Volume

Tim Quast, founder of ModernNetworks IR LLC, a Denver-based consulting firm that advises Cisco Systems Inc., Accenture Plc and other companies about market structure and trading, estimates that high-frequency firms are handling about 63 percent of U.S. equities volume, up from about 61 percent in July and down from last year's 70 percent.

Surges and rapid declines in the S&P 500 are being driven by institutional investors turning over baskets of stocks and investment banks hedging positions in response to actions by central banks in Japan, Switzerland, Europe and the U.S., Quast said. Institutional investments generally focus on correlation between products and asset classes whereas speculative trading is driven by divergence from historical price relationships among stocks, indexes, currencies and other gauges, he said.

"Institutions are engaged in massive efforts to transfer risk across multiple asset classes because of fluctuations in the yen, franc, euro and U.S. dollar," Quast said. His firm saw shifts in institutional money increase beginning on Aug. 4. "This is causing volume and volatility to increase, which in turn attracts volatility traders," he said.

Trading Range

The S&P 500 has moved in an average range of 2.65 percentage points between intraday highs and lows in the past month, the biggest gyrations since the 20-minute crash on May 6, 2010. That pushed the VIX up 50 percent to 48 on Aug. 8, the biggest surge since February 2007, then down 27 percent the next day for the second-largest drop in its 21-year history.

"You can look at a VIX chart and that's almost perfectly correlated to high-frequency trading volumes," said Wedbush, who returned early from a family vacation in Lake Arrowhead, California, to monitor trading at the firm as volatility rose.

Other senior executives cut short their holidays, Wedbush said. Employees in the company's technology and operations department, who normally get to the office at 3 a.m. Los Angeles time, have worked extra hours each day to run reports and deal with trade breaks that must be reconciled. The only problems Wedbush has seen is delays in reports about trades settling at the end of the day.

'Heightened' Monitoring

The brokerage is conducting the same type of risk and technology monitoring it does every day although it's been "heightened," Wedbush said. The investment bank also buys and sells shares for institutional customers like mutual funds and engages in proprietary trading. He added that one reason the securities industry has functioned smoothly even as volume surged is increased automation.

“There’s been a tremendous amount of investment by broker- dealers and exchanges in the last three years,” he said. “Because of cost-saving efforts and the commission environment being squeezed, people have had to automate their systems. Automation brings less chance for human errors and it’s paid off in this time of high risk, volume and volatility.”

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