

# Spotlight on role of automated trading amid Wall Street swoon

28 December 2018, by Juliette Michel



Some critics question whether the stock market's recent swoon has been exacerbated by automated trading

The recent tumult in financial markets has shined a light on the rising role of automated trading on Wall Street and whether it is exacerbating volatility.

Since the 2008 [financial crisis](#), investors have increasingly turned to computerized trading systems that have been programmed to render quickfire "buy" and "sell" orders based on [economic data](#), utterances of central bankers or complex artificial intelligence software that employ algorithms.

Though set up by humans, these trades are based on a snap assessment that lacks the subtle discernment of the human eye.

Whenever an unexpected lurch on Wall Street slams investors, fingers are pointed at such systems that increasingly dominate trading.

Critics have questioned whether the market's recent swoon—which could result in the worst December since the Great Depression—is due to a liquidity drain and other unanticipated effects of the

computerization of trading, rather than fundamental economic factors at a time when US unemployment is low and economic growth is solid.

Treasury Secretary Steven Mnuchin, in a recent interview with Bloomberg, blamed the uptick in volatility on the surge in high-frequency trading, a type of automated trading.

Trading from quantitative hedge funds relying on computer models now accounts for 28.7 percent of overall volumes in the United States, according to the Tabb Group consultancy. That is more than twice the share from five years ago and, since 2017, above the percentage held by individual investors.

JPMorgan Chase analyst Marko Kolanovic has estimated that only about one-third of the assets in the [stock market](#) are actively managed and that only 10 percent of the daily trading volume is the result of specific deliberation.

But while the rise of automated trading is undeniable, it is less clear that it is responsible for increased market turmoil.



Traders have had a nervous December, which could be Wall Street's worst since the Great Depression

Tabb Group Founder Larry Tabb said most electronic trading firms employ algorithms that identify and take advantage of price discrepancies between the price of a given security and what it fetches elsewhere.

"They are looking to buy the cheap ones," Tabb said, adding, "most models actually dampen volatility rather than enhance volatility."

### **'Flash Crash'**

At the same time, Tabb concedes that the proliferation of exchanges where stocks are bought and sold can result in limited liquidity on platforms. That can make markets vulnerable to a "flash crash," although this possibility was mitigated with circuit breakers instituted after 2010.

The system of automated [trading](#) is "all about supply and demand like it's always been," Tabb said. "It's just a supply and demand at a quicker pace."

Another oft-cited risk is the tendency for computers to behave with "herd"-like behavior because they are engineered in a similar fashion.

"Because of the design similarities, they tend to buy and sell futures at similar price levels," said Peter Hahn, co-founder of Bridgeton Research Group.

"When they are hitting 'sell' stop-loss levels at similar times they can add significant price pressure at the beginning of down-trends," said Hahn, adding that the impact is more muted when trades are triggered by fundamental factors, such as an economic indicator.

Kolanovic warned that the shift away from active investment could pinch the market's ability to "prevent and recover from large drawdowns."

"The \$2 trillion rotation from active and value to passive and momentum strategies since the last crisis eliminated a large pool of assets that would be standing ready to buy cheap public securities and backstop a market disruption," Kolanovic said.

APA citation: Spotlight on role of automated trading amid Wall Street swoon (2018, December 28)  
retrieved 21 January 2021 from <https://phys.org/news/2018-12-spotlight-role-automated-wall-street.html>

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