High Frequency Trading Needs Information, Not Regulation

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The prospect of losing or gaining millions of dollars in a few seconds makes the stock market doubly spectacular and terrifying. Now, transactions that used to take traders a few minutes (or even hours back in the Roaring Twenties) can be done in a matter of milliseconds by automated trading software. In order to combat the risks that come with speedier trading, bureaucrats have promulgated waves of new regulations. However, many of these risks could be more efficiently diminished by making additional information available to traders in the same way that NASA provides information to airlines.

Traders use software to engage in high frequency trading (HFT) whenever market conditions conform to criteria in a particular trading algorithm. For example, a trader might design a piece of software that sells a stock when its price surpasses the preceding day's high, or buys a stock when the price of a normally parallel stock jumps. HFT allows traders to engage in strategies that require millisecond reaction times and take into account a dizzying stream of data that would take humans far longer to fully comprehend when trading manually.

HFT has some drawbacks. Attentive and experienced traders are able to tell when continuing down a certain speculative route would result in utter ruin. However, when investing is automated, certain signs that would be plainly apparent to human investors are missed by HFT software. Sometimes markets for large corporate stocks become slow and buyers are temporarily in short supply. While a human trader might be able to understand that the temporary illiquidity is linked to some external factor such as increased interest in other markets or bad weather, HFT software might interpret the illiquidity as a value signal and promptly sell off shares far below the market price.

A "flash crash" refers to a rapid market crash, as measured by a substantial price drop in a major index. A popular explanation for famous flash crashes, including those of 1987 and 2010, is unhampered high frequency trading. These troubles have emboldened a range of notable and vocal critics, including former Delaware senator Edward Kaufman, Michigan senator Carl Levin, and best-selling author Michael Lewis. While these critics differ in their objections, they all maintain that the problems surrounding HFT can be controlled with stricter regulations.
In the wake of these crashes, the Securities and Exchange Commission put in place regulations and enforced curbs on trading. Trading curbs, which were introduced by the SEC following the flash crash of 1987, freeze specific markets whenever an index's value drops below a preset threshold within a proportionally brief amount of time.

On the flip side of public response to the dangers of flash crashes, Holly Bell, in a recent policy paper for the Cato Institute, argues that HFT makes markets more efficient. Bell acknowledges that flash crashes are a possibility uniquely inherent to HFT. However, unlike those who advocate for stricter

regulations that build on the controls already in place, she argues that some of the problems associated with HFT—especially flash crashes—could be fixed by reducing unequal access to information.
Rather than suggesting that we give the market time to learn from its mistakes, Bell argues that it would be beneficial for a neutral third party to act as a blind receptor and distributor for relevant information. As an example, Bell highlights NASA's role as a store and distributor of valuable information for airline agencies.

NASA, through the Aviation Safety Reporting System (ASRS), receives data from airlines regarding crashes, automation failures, and human errors. It analyzes the data, strips it of any identifying features, and then makes it available to the public. Airlines thus have access to information necessary to maintain and improve flight safety.

Two years prior to the ASRS's institution, a plane from Indiana to Ohio crashed and killed 92 passengers. Following the crash, a study was commissioned by the Federal Aviation Administration, which led to the establishment of a program similar to the ASRS. Soon after in 1976, the program was moved to NASA.

Instead of tying up traders and subjecting the markets to occasional suspensions, it would be far more efficient to set up a system where traders have access to the information they need to avoid the sorts of situations that regulations aim to prevent.

No traders want to see their assets rapidly lose value. Unfortunately, when that does happen, they only have their own experiences to rely on for future guidance. Under a system similar to the one that Bell suggests, traders could access the collective experiences of their peers, which under normal circumstances would be hidden in their firms' databases.

It is tempting to enforce a regulation instead of focusing on a solution that could allow the system to operate with fewer government-imposed restrictions. Yet, it is only by shunning that temptation and looking for better solutions that traders can become more efficient. In other words, HFT markets need more information, not regulation.