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HFT: The High Frequency Trading Scam

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The NY Times has blown the cover off the dark art known as "HFT", or "High-Frequency Trading", perhaps without knowing it.

> It was July 15, and Intel, the computer chip giant, had reporting robust earnings the night before. Some investors, smelling opportunity, set out to buy shares in the semiconductor company Broadcom. (Their activities were described by an investor at a major Wall Street firm who spoke on the condition of anonymity to protect his job.) The slower traders faced a quandary: If they sought to buy a large number of shares at once, they would tip their hand and risk driving up Broadcom's price. So, as is often the case on Wall Street, they divided their orders into dozens of small batches, hoping to cover their tracks. One second after the market opened, shares of Broadcom started changing hands at $26.20.
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> The slower traders began issuing buy orders. But rather than being shown to all potential sellers at the same time, some of those orders were most likely routed to a collection of high-frequency traders for just 30 milliseconds — 0.03 seconds — in what are known as flash orders. While markets are supposed to ensure transparency by showing orders to everyone simultaneously, a loophole in regulations allows marketplaces like Nasdaq to show traders some orders ahead of everyone else in exchange for a fee.
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> In less than half a second, high-frequency traders gained a valuable insight: the hunger for Broadcom was growing. Their computers began buying up Broadcom shares and then reselling them to the slower investors at higher prices. The overall price of Broadcom began to rise.
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> Soon, thousands of orders began flooding the markets as high-frequency software went into high gear. **Automatic programs began issuing and canceling tiny orders within milliseconds *to determine how much the slower traders were willing to pay*.** The high-frequency computers quickly determined that some investors' upper limit was $26.40. **The price shot to $26.39, and high-frequency programs began offering to sell hundreds of thousands of shares.**

But then the NY Times gets the bottom line wrong:

> The result is that the slower-moving investors paid $1.4 million for about 56,000 shares, or $7,800 more than **if they had been able to move as quickly as the high-frequency traders.**

No. The disadvantage was not speed. The disadvantage was that the "algos" had engaged in something other than what their claimed purpose is in the marketplace - that is, instead of providing liquidity, **they intentionally probed the market with tiny orders that were immediately canceled in a scheme to gain an illegal view into the other side's willingness to pay.**

Let me explain.

Let's say that there is a buyer willing to buy 100,000 shares of BRCM with a limit price of $26.40. That is, the buyer will accept any price **up to** $26.40.

But the market at this particular moment in time is at $26.10, or thirty cents lower.

So the computers, having detected via their "flash orders" (which ought to be illegal) that there is a desire for Broadcom shares, start to issue tiny (typically 100 share lots) "immediate or cancel" orders - IOCs - to sell at $26.20. If that order is "eaten" the computer then issues an order at $26.25, then $26.30, then $26.35, then $26.40. When it tries $26.45 it gets no bite and the order is immediately canceled.

Now the flush of supply comes at, big coincidence, $26.39, and the claim is made that the market has become "more efficient."

Nonsense; there was no "real seller" at any of these prices! This pattern of offering was intended to do one and only one thing - manipulate the market **by discovering what is supposed to be a hidden piece of information - the other side's limit price!**

With normal order queues and flows the person with the limit order would **see** the offer at $26.20 and might drop his limit. But the computers are so fast that unless you own one of the same speed you have no chance to do this - your order is immediately "raped" at the full limit price! You got screwed, as the fill price is in fact 30 cents a share away from where the market **actually** is.

A couple of years ago if you entered a limit order for $26.40 with the market at $26.10 odds are excellent that most of your order would have filled down near where the market was when you entered the order - $26.10. Today, odds are excellent that most of your order will fill at $26.39, and the HFT firms will claim this is an "efficient market." The truth is that you got screwed for 29 cents per share which was quite literally stolen by the HFT firms that probed your book before you could detect the activity, determined your maximum price, and then sold to you as close to your maximum price as was possible.

If you're wondering how this ramp job happened in the last week and a half, you just discovered the answer. When there are limit orders beyond the market outstanding against a market that is moving higher **the presence of these programs will guarantee huge profits to the banks running them and they also guarantee both that the retail buyers will get screwed as the market will move MUCH faster to the upside than it otherwise would.**

Likewise when the market is moving downward with conviction we will see the opposite - the "sell stops" will also be raped, the investor will also get screwed, and again the HFT firms will make an outsize profit.

These programs were put in place and are allowed under the claim that they "improve liquidity." Hogwash. They have turned the market into a rigged game where institutional orders (that's you, Mr. and Mrs. Joe Public, when you buy or sell mutual funds!) are routinely screwed for the benefit of a few major international banks.

If you're wondering how Goldman Sachs and other "big banks and hedge funds" made all their money this last quarter, now you know. And while you may **think** this latest market move was good for you, the fact of the matter is that you have been severely disadvantaged by these "high-frequency trading" programs and what's worse, the distortion that is presented by these "ultra-fast" moves has a nasty habit of asserting itself in an ugly snapback a few days, weeks or months later - in the opposite direction.

The amount of "slippage" due to these programs sounds small - a few cents per order. It is. But such "skimming" is exactly like paying graft to a politician or "protection money" to the Mafia - while the amount per transaction may be small the fact of the matter is that it is not supposed to happen, it does not promote efficient markets, it does not add to market liquidity, the "power" behind moves is dramatically increased by this sort of behavior and market manipulation is supposed to be both a civil and criminal violation of the law.

While the last two weeks have seen this move the market up, the same sort of "acceleration" in market behavior **can and will** happen to the downside when a downward movement asserts itself, and I guarantee that you won't like what **that** does to your portfolio. You saw an example of it last September and October, and then again this spring. As things stand it **will** happen again.

This sort of gaming of the system **must be stopped**. Trading success should be a matter of being able to actually determine the prospects of a company and its stock price in the future - that is, actually trade. What we have now is a handful of big banks and funds that have figured out ways around the rules that are supposed to prohibit discovery of the maximum price that someone will pay or the minimum they will sell at by what amounts to a sophisticated bid-rigging scheme.

Since it appears obvious that the exchanges will not police the behavior of their member firms in this regard government **must step in** and unplug these machines - all of them - irrespective of whether they are moving the market upward or downward. While many people think they "benefited" from this latest market move, I'm quite certain you won't like it if and when the move is to the downside and the mutual fund holdings in your 401k and IRA get shredded (again) by what should be prohibited and in fact result in indictments, not profits.

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