

The Rule of One

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Secretary Securities and Exchange Commission

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Re: File No. S7-02-10, Concept release on Equity Market Structure

I have been a full-time proprietary trader for the last 11 years. I have worked for four companies that have been structured as hedge funds, LLC's, and proprietary shops. I have only traded NYSE listings in my professional accounts. Therefore, my opinions are almost exclusively of the NYSE listings based on about 275,000 trades entered manually.

Over the last four years, the integrity of the exchange has sunk below the moral low tide level. Order anticipation is front running. If you place a market order in a mid or small cap stock there is a very high likelihood that you will get a price $1/10^{\text{th}}$ of a cent better than the best limit order with volume greater than or equal to that market order. Should we rejoice for the great savings to John Q. Investor of $1/10^{\text{th}}$ of a cent per share? The two percent of firms, Goldman Sachs and a dozen hedge funds, who just bilked John Q. say we should. The two percent who are placing an implied tax on nearly every trade that occurs in the mid and small capitalizations say they are adding liquidity. They say they are improving prices. With the war chests they suck from the market hourly, the 2%

probably hired some loud voices to say these things and keep the status quo. I can't yell over their din, but I hope you hear my voice.

I used to describe my job to friends as: I'm a mouse in a closet full of elephants eating cheese. I try to eat their crumbs without getting stepped on. Now, I just say: I'm playing Dodge ball with God. He knows where I'm going to throw the ball before I do.

The laser guided approach that the High Frequency Trading (HFT) firms (anyone using low latency algorithm's) use to anticipate orders, or front run for the sake of picking up a liquidity rebate, have created a shell game to find the real liquidity. By simply watching the time and sales log of any stock on the NYSE that trades less than three million shares but more than 400,000 shares a day, you will see the flash dance being performed. 90% of quotes are immediately canceled. Imagine if you went grocery shopping and as you are walking down an aisle you reach out to grab a bottle of ketchup. As your arm extends towards the ketchup you notice the yellow price tag changes price and goes up by 49 cents. Why 49 cents? Because the grocery store down the street is selling it for 50 cents more. Thinking "that's weird", you pull your arm back away from the ketchup, and poof! The price tag for the ketchup is back down 49 cents to the original price. This happens all day, every day, in every single listing that falls within the above volume parameters.

The hand full of hedge funds and Goldman Sachs that make up this two percent are dominating to say the least. Since the vast majority of their trades are riskless their business model is simply: expand. John Q. Investor thought he was saving 1/10th of a cent per share. When do you think Goldman will tell John Q. that he could have had the stock 11 cents lower? The mere fact that it's only 11 cents per share John Q. might think:

“Well on a several thousand dollar investment, do I care about missing out on a \$100 savings? Or, do I have any recourse if I did care?” It is this kind of apathy paired with the esoteric nature of order anticipation, and HFT in general, that Goldman et al., are banking on. They have created a two tier system, where they can see quotes first, have their co-located computers on the exchange’s floor make an actionable decision, execute a trade accordingly, and then have a counter trade posted and waiting. They can do all this well before the rest of the world can see the original quote. In the case of John Q. Investor, when his market order was sent to the exchange, Goldman Sachs intercepted it. Goldman then sent out trades to sweep all small orders up just in front of John Q. Investor’s market order. The small orders might consist of a couple of odd lot orders, and three or four other 100 or 200 share orders. When Goldman has swept up enough small orders to satiate the market order, John Q. then gets filled at the absolute worst price possible, 1/10th of cent below the next order with equal or more volume than John Q’s order. Goldman just completed an absolutely riskless trade with an 11 cent profit per share. An 11 cent tax per share that John Q. will never know he paid.

Order anticipation is riskless. As soon as the HFT firm’s computer sees the small imbalance, the process then is a foregone conclusion. The money made is calculated when the imbalance is first recognized. This is not arbitrage in anyway. It is front running with privileged information that only two percent of firms have. This is how Goldman went from having no HFT profits to averaging \$100 million a day in net profit¹ from HFT in less than three years. It is a tax levied on nearly all trades aside from limit

¹ Financial Times.com (available at http://www.ft.com/cms/s/0/d2aa1cb8-c96d-11de-a071-00144feabdc0.html?nclick_check=1)

The Huffington Post (available at www.huffingtonpost.com/2009/11/04/at-goldman-sachs-its-most_n_346260.html)

orders. Anyone who has bought or sold stock on the NYSE since 2005 in a mid or small capitalization paid the Goldman tax. The tax is rarely more than 40 cents a share, usually in the 4 to 6 cent range, and can be as low as a fraction of a cent. Alone, one skim won't turn heads, but when you can do it on the vast majority of the trades being made by the public, the money piles up.

The two percent of firms along with Goldman will yell that they have done nothing illegal. They are simply financial alchemists. After all, they employ the smartest, most gifted, and mathematically capable. Maybe they are able to start a new revenue stream in equity trading that pulls out \$100 million a day. Maybe it is possible to add liquidity, help the long term investor, all while pulling out \$100 million a day from the market. *Maybe.*

Maybe not. When I hear that the volume on the NYSE is up 300% ²over the last five years, I find it hard to process. Getting filled on any order larger than 100 shares at a single price is extremely difficult in the mid and small cap area, regardless of the quote. There is ten times as much misinformation in the quotes as there is real authentic bids and asks. These smoke and mirror distractions will continue to erode the integrity of the exchange until an enforcement agency steps up to the plate to say, "This is institutionalized fraud!" The exchanges will not curtail these actions, for they are making too much money allowing the HFT. The pinging, and order anticipation, has arisen because of a void during the George Bush years of enforcement with teeth. Why wouldn't a profit maximizing firm game the system if they know the only penalty they could possibly face is a fine attached to the statement: "We neither admit nor deny any

² NYSE Euronext, Consolidated Volume in NYSE Listed Issues 2000-2009 (available at <http://www.nyxdata.com/nysedata/NYSE/FactsFigures/tabid/115/Default.aspx>).

wrong doing in this case”? In recent years the chance of paying a fine has been low, and if the fine does occur, it is a tiny fraction of the profits made by the firm. HFT firms have made the business decision to cheat, even if they do get caught.

The SEC is concerned mostly with long term investors. I think this is the appropriate group to protect. I am not a long term investor. I am in the trenches everyday looking for “crumbs”. However, mutual funds, endowments, and retirement plan managers who are working for the long term investor deal with the same scandalous quotes that I do on a daily basis. The ability to get a fill at a desired price is inversely related to the size of the order. Big orders are much harder to fill than small ones. The mutual fund, endowment, and retirement managers all have large orders because they represent large pools of long term investors. The Goldman tax will always be bigger on larger orders. The lack of true visible liquidity has given rise to the dark pools. Dark pools are a derivation of corrupt quotes that obfuscate real liquidity. If the SEC fixes the underlying market, make quotes real again, then the dark pools will dry up.

The Rule of One

It is clear that HFT helps no one, except for those who pick up their massive paychecks from implementing it. I have a suggestion. It is by no means flawless, but it addresses several of the inequities that are current rules don't.

The Rule of One is simple: Place a **one second** speed limit on all quotes and fills. Each quote is updated on the second, and any orders going into the exchange that second are bunched together in blocks. Each second a new bunch is blocked. To eliminate the unfair advantage of co-location, each order in a block will be randomly chosen to be filled. Only one order should be allowed per listing, per account, per second. To help

eliminate flash quotes, all quotes must be real for at least that second, and cannot be canceled within the second.

One cent must be the lowest tradable increment allowed (except for stocks trading under \$5). There is no benefit to any participants in the market of an \$80 stock that constantly trades large volumes $1/10^{\text{th}}$ of cent above or below a large limit order. This happens all the time, where an algorithm is set up to front run any large orders by only $1/10^{\text{th}}$ of a cent. The algorithm does not let any trades touch the large limit order. Once the algorithm determines that enough interest has formed to trade through the large limit order, in less than a blink of the eye the algorithm will sweep the entire large limit order up, allow no one else to purchase (or sell) it. Then immediately a counter trade is placed by the algorithm $1/10^{\text{th}}$ of cent below (above) the next large order. The only use for $1/10^{\text{th}}$ of cent pricing is to front run large participants.

One exchange must post the inside bid and ask associated with one of its listings. This must include orders that are in dark pools if they are the best price. If it is a large order in the dark pool, and the market participant behind the order is concerned about scaring away the market, a minimum of say 1000 shares must be posted. It is not fair to segregate volume so only a select few can have access to it or know where it is. After all, each individual stock is purchased and sold in a commoditized form: A share. The participants in the dark pools don't care who takes the other side of their trades. They just want liquidity without excessive impact on price. As I have said above, dark pools are a derivative of poor liquidity visibility. If a listing on the NYSE is required to post all inside bids and asks, including those off the exchange, volume dissemination becomes easier.

One round lot should be the minimum allowable increment for professionals. I do not know what the threshold should be to distinguish between 12 year old Johnny Q. Investor who has \$270 saved and wants to get involved in the stock market by buying an odd lot and that of Goldman Sachs who routinely will ping orders with a single share. But there should be a distinction, and the professional should not be allowed to ping this way.

The stock market is a zero sum game. The \$100 million dollars a day that lines the pockets of the Goldman fat cats comes from two places: short term proprietary traders like me and the long term investor (whether investing on their own or thru an investment vehicle such as a retirement plan or mutual fund). It is fool hardy to think the HFT profits of the 2% is created for the good of the public. I am reminded of Enron when I think about these enormous revenue streams that seem to blossom overnight. Enron grew the trading markets for natural gas and oil pipelines and electricity transfers in a similar time frame. Enron took the volumes for these sleepy markets and suddenly ballooned them into highly liquid commodities. Enron's tactics were not for the good of the markets, as we now know.

The NYSE has been around for 218 years. Over that time it has steadily grown in trading volume. Except for the last five years, in which the steady growth became exponential. Do you really think the 2% reinvented the trading wheel? Are the HFT firms earning these mega paydays all while helping the liquidity for the long term investor?

Unlike the specialist firms that used to control the quotes, HFT firms have no obligation to step in and provide real liquidity when the market becomes erratic. The

HFT actually increase volatility by running their momentum ignition programs. They make more when they force the market out of whack by sweeping up the stop orders at unreasonable prices. In their best days collectively, the specialist firms never made in a year what the HFT firms suck from the markets in a week. In their most underhanded days, the specialist firms never stooped to the level of fraud that HFT firms engage in every second of the trading day.

This will end badly unless enforcement action is taken. The SEC must be bold. Half measures will not work. If the SEC does not take progressive action the HFT community will become more emboldened. The two percent of firms who use HFT techniques will go from their current 60%³ market share of all trades, to close to 90% with in the next few years. Those few, who the 2% haven't been able to cheat, will be cheated. In my industry of proprietary trading, the two percent will eliminate an estimated 50,000 jobs of traders and their back office support. The dark pools will get larger, and the exchanges will increasingly become a smaller part of trading. The long term investor will continue to pay the Goldman tax. This will come to the public's attention. In a few years, 60 Minutes will do an exposé on HFT. There will be no doubt about the theme of the piece: Where was the SEC?

Justin

³ See, e.g., Jonathan Spicer and Herbert Lash, Who's Afraid of High-Frequency Trading?, Reuters.com, December 2, 2009 (available at <http://www.reuters.com/article/idUSN173583920091202>)

