Flash Orders and Tipping Insider Information: A Comment
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This commentary is on Skjeltorp, Sojli and Tham (2016) titled
“Flashes of Trading Intent at NASDAQ.”

Abstract

Being aware of the conflicting reality to the argument that flash orders are beneficial to NASDAQ and all the investors whose orders are flashed made by Skjeltorp, Sojli and Tham (2016), the commentary raises the following four questions based on the arguments made by Skjeltorp, Sojli and Tham (2016). Firstly, if the flash-order functionality improves the liquidity of NASDAQ, is it beneficial to all of the stocks listed there? Secondly, does the flash-order functionality increases transparency for the entire market? Thirdly, if the flash-order functionality promotes inter-exchange competition, does it improve competition for trading profit among market participants? Fourthly, is the flash-order functionality the same as sunshine trading? By looking into the details of related references and providing our own analysis, we find it difficult to agree with Skjeltorp, Sojli and Tham (2016) about flash order’s role in promoting liquidity, transparency, or competition. Nor do we find it similar to sunshine trading, in today’s market dominated by high-frequency trading.

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1 The authors are grateful to Dr. Xin Yan for inspiration. They are responsible for any error in this article.
I. Introduction

In the February 2016 issue, Skjeltorp, Sojli and Tham state “Although flash orders appear to be beneficial to NASDAQ and provide significant price improvements for submitters,…” (Skjeltorp, Sojli and Tham, 2016, p. 181). If flash orders are beneficial to both the exchange and all the investors whose orders are flashed, why did NASDAQ and BATS as well as DirectEdge voluntarily stop providing flash orders since there was no immediate legal risk? Skjeltorp, Sojli and Tham (2016) did not address this question. Instead, the three authors made several statements based on their quantitative study of the flash orders data during the introduction time on NASDAQ. This commentary selects four of them to discuss. Firstly, the flash-order functionality improves the liquidity of NASDAQ, which is beneficial to all of the stocks listed there. Secondly, the flash-order functionality increases transparency for the market. Thirdly, the flash-order functionality promotes inter-exchange competition. Fourthly, the flash-order functionality is the same as sunshine trading. Since the three authors focus on NASDAQ, this commentary will follow suit.

What is the motive of providing flash orders by NASDAQ? Firstly, flash orders are marketable ones submitted to NASDAQ. Secondly, they are away from NBBO (National Best Bid and Offer). Thirdly, NASDAQ keeps them on the exchange by flashing them to subscribing traders to see if any of those traders wants to take the other side of the orders. Thus NASDAQ avoids routing all or large portion of those orders to competing exchanges where NBBO are quoted (Skjeltorp, Sojli and Tham, 2016, p. 170). Therefore, the flash-order functionality is a way for NASDAQ to get around Regulation National Market System to avoid losing certain revenue (Harris and Namvar, 2011). It is not intended for improving the liquidity or other market quality features on NASDAQ or other exchanges.

According to Skjeltorp, Sojli and Tham (2016), there is controversy regarding if flash orders create a two-tier market and enable few speedy traders to profit at “flashed”
investors’ loss. The Securities and Exchange Commission (SEC) proposed to ban flash orders in September 2009. But the SEC never implements the ban up to the end of 2016 (SEC, 2016). The controversy still remains. This commentary joins the debate by providing new insights when commenting on Skjeltorp, Sojli and Tham (2016).

II. Is liquidity improvement always beneficial?

“A comparison of various liquidity and activity measures around the flash introduction and removal periods shows that market liquidity improves (deteriorates) significantly when flash orders are introduced (removed), for stocks listed on both NASDAQ and the New York Stock Exchange/American Stock Exchange (NYSE/AMEX). We find that market volatility decreases (increases) substantially when flash orders are introduced (removed).” Skjeltorp, Sojli and Tham (2016, pp. 166-167)

A comparison is meaningful if a reference is well defined. Skjeltorp, Sojli and Tham (2016) claim that market liquidity improves significantly when flash orders are introduced. We cannot find any proof that market liquidity is insufficient on NASDAQ before the introduction of flash orders. Neither can we find any sentence that implies that market liquidity is supplied with the right amount then. Based on the unknown reference, how can they claim the market liquidity improvement is beneficial for all the listed stocks?

Liquidity is more meaningful when referring to one individual stock or other type of exchange-traded security. There are certain large-cap popular stocks that are very liquid. There are many small-cap stocks that do not have sufficient liquidity or even illiquid. Improvement of the entire market’s liquidity can not exclude the possibility of adding unnecessary liquidity to overly liquid stocks without changing the illiquid status of other stocks. This possibility exists in the current reality dominated by high-frequency trading (Kauffman, Liu, and Ma, 2015). Several recent empirical studies show that high-frequency traders prefer low-priced liquid stocks (Brogaard 2010; Gai, Yao, and Ye 2013; Brogaard, Hendershott, and Riordan 2014). The preference of very liquid stocks and low price per share by high-frequency traders is understandable because they need to have
quick and frequent turnover intraday. However, high-frequency traders provide substantial liquidity when liquidity is excessive (Partington et al. 2015).

III. Is flash-order functionality transparency for all investors?

“On the one hand, an increase in transparency leads to lower information asymmetry, which reduces adverse selection costs.” (Skjeltorp, Sojli and Tham, 2016, p. 168)

Assume 1 million investors send their orders to NASDAQ on one typical trading day. The exchange flashes certain incoming orders to 100 subscribing high-frequency traders. Hence, these 100 user-traders enjoy the increased transparency which reduces their adverse selection costs. The other 999,900 investors do not have the same transparency. Furthermore, some of them encounter increasing risk being frontrun, thus increasing their transaction cost. This is true particularly for those slow investors who post large orders (Powell, 2014; Partington et al. 2015). Just as Skjeltorp, Sojli and Tham (2016) have noticed in p. 168: “On the other hand, transparency exposes liquidity traders to undue risk, which can reduce market liquidity, as liquidity providers are less willing to provide free options to the market in the form of limit orders.” How can this asymmetric transparency reduce adverse selection costs for all the investors in the entire market?

In fact, flash-order facility is not transparency for the majority of market participants but only few subscribing investors. It is similar to tipping insider information to few by corporate executives before public disclosure of earnings information.

IV. Does flash-order functionality promote competition for trading profit?

“The improvement in execution quality and trading costs for flash-order users in NASDAQ and BATS Global Markets (BATS), which increases interplatform competition, might trigger liquidity providers in other trading venues to compete more aggressively. Thus, the increase in interplatform competition among liquidity suppliers
leads to an improvement in market-wide liquidity.” Skjeltorp, Sojli and Tham (2016, p. 167).

Skjeltorp, Sojli and Tham (2016) find that flash-order users, who are likely high-frequency traders, benefit from the flash-order functionality by improving their execution quality and trading costs. However, Skjeltorp, Sojli and Tham (2016) did not study what happens to those investors whose orders are flashed but who do not use the flash-order functionality. Nor did they study what occurred to other investors who simply follow flash-order users. The three authors state that the flash-order functionality, that benefits a small portion of the market participants on NASDAQ, increases inter-exchange competition. But the authors do not define it. Does it mean that other exchanges will follow NASDAQ by introducing the flash-order functionality? If so, only a small number of flash-order users, who are almost certainly a few high-frequency traders or algorithmic traders, will benefit in those exchanges. This so-called inter-exchange competition only increases the episodes where participating exchanges’ order information is tipped to few flash-order users before disseminating to the entire market. It does not improve competition among all of the participating investors for trading profit. Rather, it gives absolute advantage to the users while increasing transaction costs to the investors whose orders are flashed. In other words, introduction of flash orders is more likely anti-competitive for the competition among all of the market participants.

V. Is flash-order functionality sunshine trading?

“A second potential explanation for our findings comes from the perspective of sunshine trading as modeled by Admati and Pfleiderer (1991), in which the preannouncement of trades (flash) by uninformed traders reduces overall riskbearing costs.” Skjeltorp, Sojli and Tham (2016, p. 167).

The prerequisite condition for sunshine trading is that the announcement of intended orders reaches all traders in the market (Admati and Pfleiderer, 1991). While in the case of flash orders, the announcement reaches a small group of speedy traders only. The
number of those privileged traders represents a negligible percentage of all traders in NASDAQ. Obviously, the conclusion made by Admati and Pfleiderer (1991), when there was no predatory high-frequency trading around, does not support the claim made by Skjeltorp, Sojli and Tham (2016). Rather, the concept of predatory trading developed by Brunnermeier and Pedersen (2005) fits the situation of flash orders very well.

In addition, sunshine trading means that the announcement of intent to trade is made by the traders voluntarily (Admati and Pfleiderer, 1991). However, no reference is given by Skjeltorp, Sojli and Tham (2016 p. 165) to support their argument that all the flash orders are voluntarily submitted. To the opposite, there are several recent lawsuits initiated by pension funds against exchanges such as BATS and NASDAQ over front-running by high-frequency traders who are given “preferred access to material trade data.” The consequence is increasing transaction costs for affected institutional investors (for example, Powell, 2014). Pension fund and other institutional investors have been victimized by flash orders without their knowledge.

VI. Discussion and conclusion

It is common knowledge that a stock exchange is the most powerful monopoly relative to its participating investors. One fact is that the stock exchange possesses asymmetric market information over the participating investors. The asymmetric information includes the order and trade data. This information has great price-moving potential. Once it is disseminated through brokers and other market data providers to the investing community, it carries enormous power to move the market. The power has three components. The primary one is the price-moving potential of the information. The second one is the credibility of the information generator, the stock exchange that enjoys utmost credibility among all investors. The third one is the publicity that the information has gained after its dissemination to numerous investors simultaneously. Together they form the power that persuades a great number of investors to buy or sell stocks. It is informational monopoly power. It is called information monopoly by Klein, Dalko, and Wang (2012).
Stock exchanges are privately owned in this country. They have the monopoly power in the form of information gathering and dissemination. They seek rent by selling order and trade information to brokers and market data providers. For example, the limit orders that rest on the order book are seen by numerous subscribing investors. The limit order book on NASDAQ is called TotalView (NASDAQ, 2016). As all professional investors and part of retail investors have access to the limit order book at the same time, the information asymmetry is virtually eliminated relative to most market participants. This scenario is similar to the earnings information disclosure by public companies to the entire market (Klein, Dalko, and Wang, 2012). The potentially price-moving corporate insider information, which was asymmetric, becomes public upon mandatory disclosure. Trading on the disclosed price-moving information without knowing it in prior is not insider trading.

However, when the stock exchange “flashes” the incoming orders to selected few before disclosing to the market, what will be the consequence to the market? The “flash” lasts as brief as 30 milliseconds. They are too short for manual traders who are not faster than 0.1 seconds. But 30 milliseconds are long for high-frequency traders whose order-processing takes as short as sub-microseconds. Thus the subscribing traders can mainly be high-frequency traders. They can frontrun the market with sure profit. Most other market participants are not aware of the frontruning trades before the order information they have seen. This scenario is de facto the same as that the stock exchange tips the few subscribing high-frequency traders with insider information. This incurs a conflict of interest to the investing public.

In the case of “flash orders,” the stock exchange possesses information monopoly. The exchange profits from it by selling the information to few subscribing high-frequency traders. The latter utilize the information monopoly in their trading strategies. They make monopolistic profit by trading ahead of the public dissemination of the order information. Hence, the flash-order subscribers act more like temporary insiders.
Based on the above analysis and references, we find it difficult to share the optimism expressed in Skjeltorp, Sojli and Tham (2016) about flash order’s role in promoting liquidity, transparency, or competition. Nor do we find it similar to sunshine trading, in today’s market dominated by high-frequency trading.