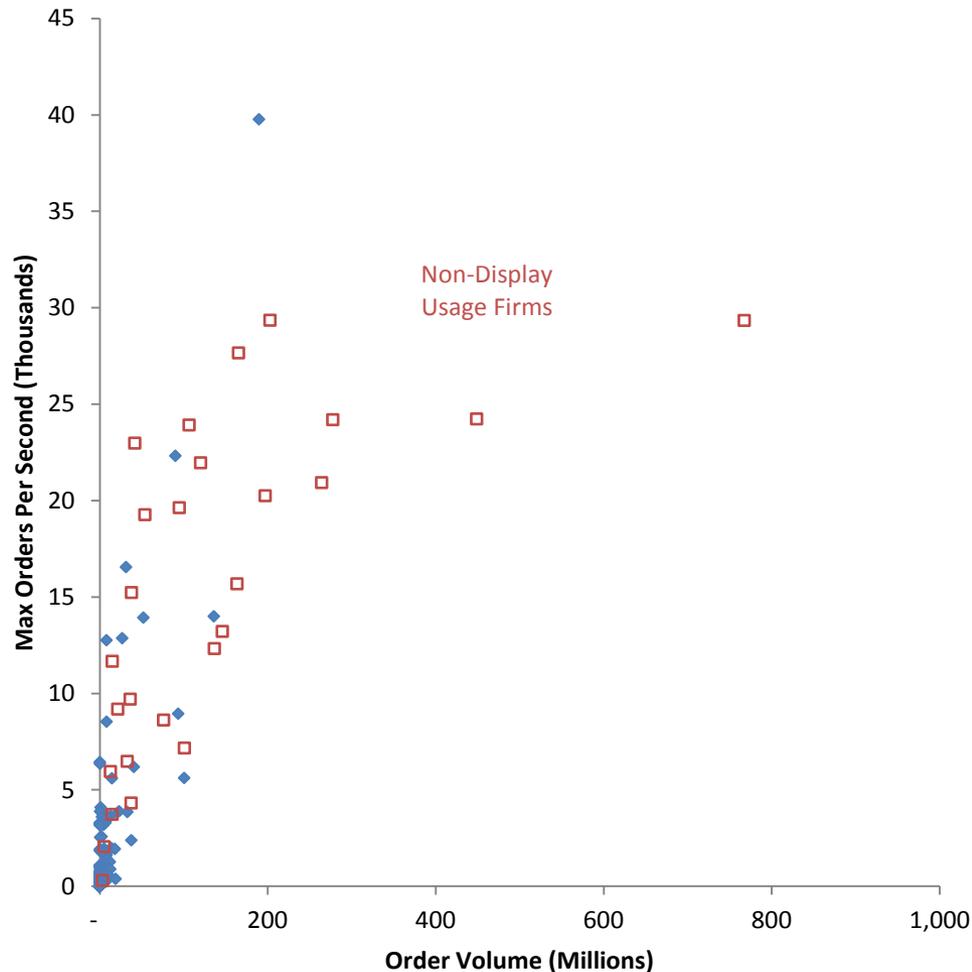


Order Intensity

This chart displays NASDAQ order volume over January 2012 on the x-axis against maximum orders received per second over the same time period on the y-axis. There are 370 firms in this sample with positive order volume for this time period. One firm is removed from the data as an outlier with 5 times the next greatest firm's maximum orders per second. Of the remaining 369 firms, 27 are highlighted red, representing the likely Non-Display Usage firms.

If we look at firms with over 5,000 orders per second we see 23 of 38 firms are target firms (61%).

Order Intensity

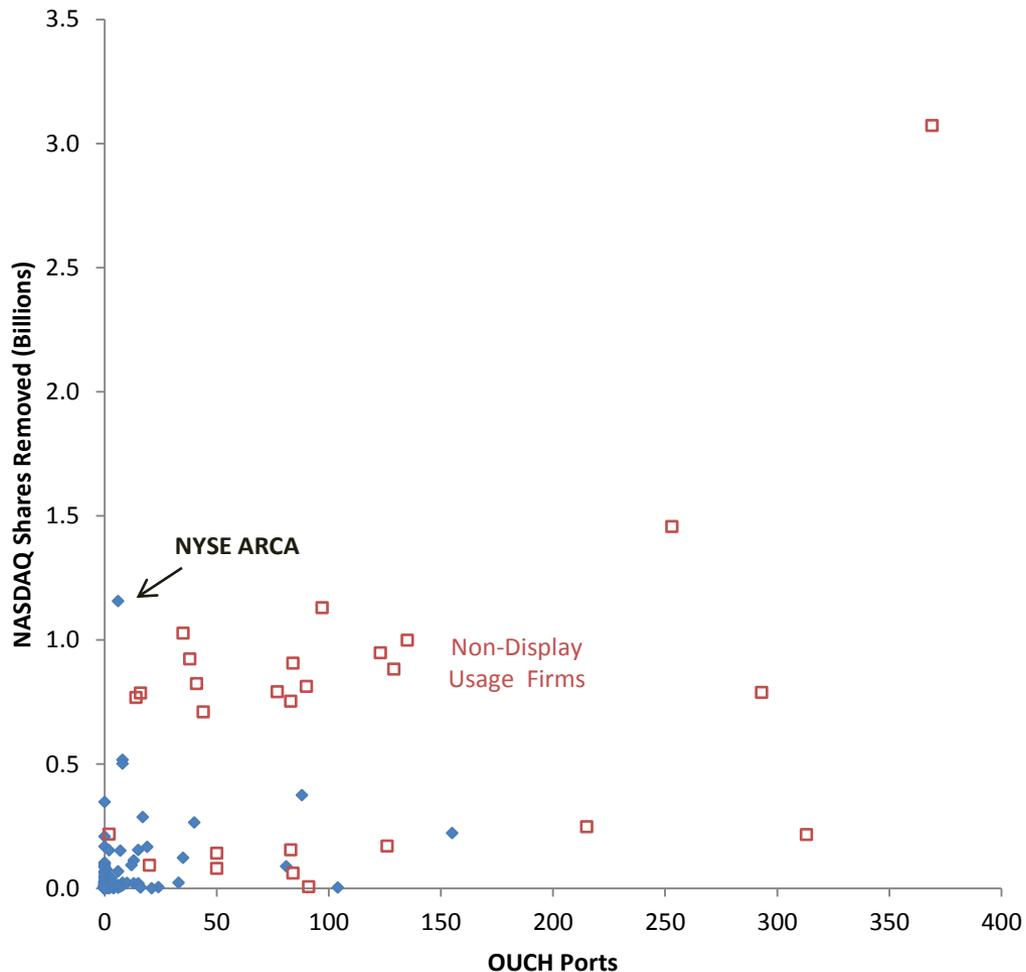


NASDAQ Liquidity Removal

This graph plots NASDAQ shares removed by taking liquidity versus OUCH ports by firm for January 2012. Likely Non-Display Usage firms are highlighted in red. Firms removing more than 100,000 shares over the time period were included in this graph, for a total of 272. Likely Non-Display Usage firms are highlighted in red, 27 in total.

Higher numbers of OUCH ports allow a firm to send more messages per second to NASDAQ without experiencing queuing of these messages. Of the top 18 firms removing liquidity from NASDAQ 18 are Likely Non-Display Usage firms, with the remaining one being another exchange.

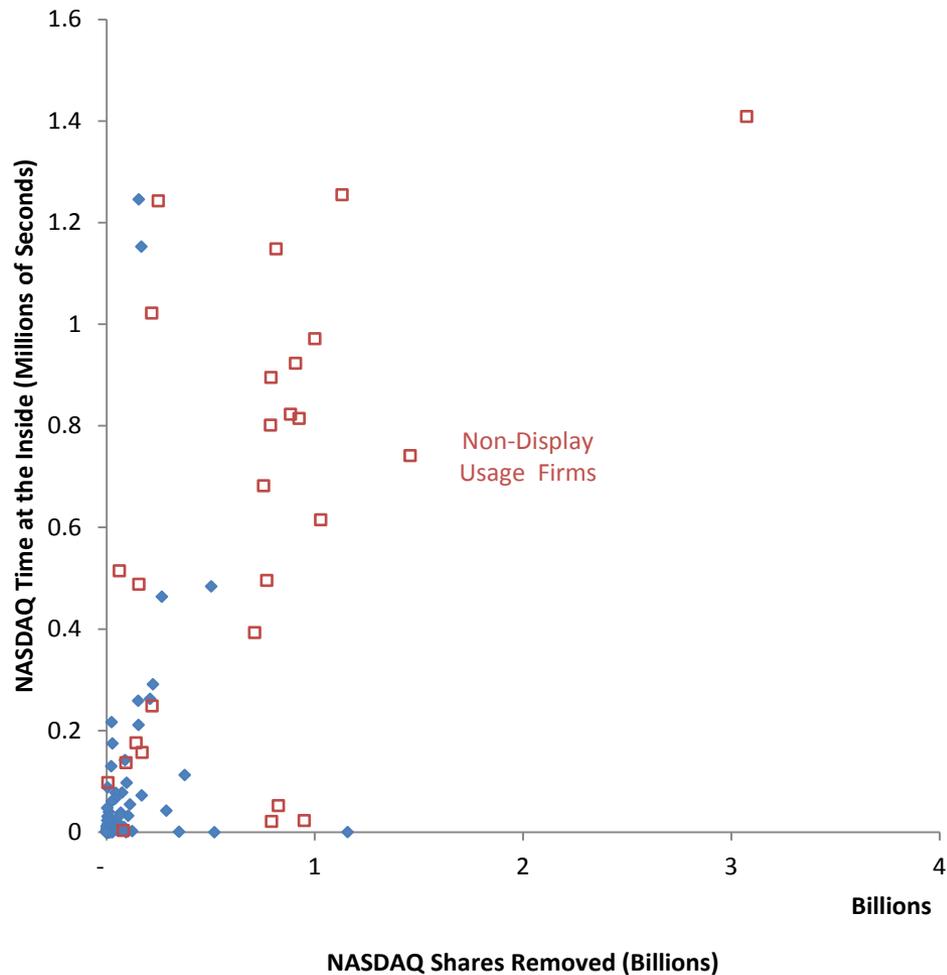
NASDAQ Taking



Time at the Inside Quote

This graph plots NASDAQ time at the inside quote versus NASDAQ shares removed through liquidity taking for January 2012. There are 351 firms represented here with 27 Likely Non-Display Usage firms highlighted in red. Firms must constantly update their quotes to stay at the inside bid and offer, resulting in higher data traffic for those firms that spend the most time at the inside. Time at the inside is an effective measure for passive order volumes, and in contrast, liquidity removal is a good measure of active order volumes.

Time at the Inside



Co-Location Services

Co-Location Connections

This graph buckets firms co-located in NASDAQs data center split out by connection used. The categories are 10 GB, 1 GB, and not co-located. These are then broken down into Likely Non-Display Usage firms and non-target firms. The data measured is overall message traffic for January 2012.

Co-located Likely Non-Display Usage firms, of which there are 23, account for 70% of message traffic. Other firms, of which there are 359, account for 26% in total.

