

Follow-Up Response to The NASDAQ Stock Market LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Provide a Process for an Expedited Suspension Proceeding and Adopt a Rule to Prohibit Disruptive Quoting and Trading Activity, File Number SR-NASDAQ-2016-074

This is a follow-up to our previous response regarding the proposal from the NASDAQ for new rules to allow it to prohibit disruptive trading (specifically layering and spoofing type activity), with an expedited suspension of its member(s).¹

As previously stated, this NASDAQ proposal acknowledges that Self-Regulatory Organizations (“SROs”) can and do detect/observe and follow illegal behavior in the U.S. markets in real-time, or near real-time, but take years to resolve the issues as they continue to monitor the same participants actively engaging in continuing illegal activity during the SRO enforcement processes.

We are concerned with the NASDAQ’s, FINRA’s and other SRO’s congressionally mandated effective enforcement of securities law violations:

- 1) SROs may be observing such a large amount and variety of order, trade and settlement data for several types of securities and products, that they are not able to concentrate on the relevant issues that affect most investors and the underlying quality and integrity of the markets (i.e. they are monitoring the leaves on the trees, but are missing what is happening in the forest), and
- 2) SROs are aware of and are following all of these transactions in real-time, or near real-time, but believe they are limited or unable to respond to these issues due to regulatory constraints or there are conflicts of interest that stop them from acting to protect the markets, investors and other market participants from illegal behavior.

An Example Security

In this response, we use the NASDAQ listed security, the PowerShares NASDAQ 100 ETF (Symbol: QQQ) as an example of just one security that has shown a pattern of excessive short selling and other problematic activity for years. The QQQ is comprised of the top 100 technology stocks listed on the NASDAQ market and is one of the largest exchange traded funds (“ETFs”) in the U.S.

As a sample time period, from January 2, 2015 through June 3, 2016 (353 trading days), the QQQ shares outstanding averaged 362 million.² Consolidated tape trade volume totaled **11.5 billion shares**, which turned over the average shares outstanding nearly 32 times, or every 11 days.

¹ *Response to the NASDAQ Proposed Rule Change File No SR-NASDAQ-2016-074*, dated June 1, 2016 <https://www.sec.gov/comments/sr-nasdaq-2016-074/nasdaq2016074-1.pdf>

² Shares outstanding data from NASDAQ Trader. August 24 – August 28, 2015 (5 trading days) has been removed from this data set due to missing information from NASDAQ.

Short selling on reporting markets/SROs averaged **63%**, or nearly 2 of every 3 QQQ shares sold.³ Using the reporting markets percent as a proxy equates this to approximately 7.3 billion shares sold short, which turned over the average number of shares outstanding every 17 days.⁴

Despite the high turnover of all available QQQ shares and excessive short selling, reported short interest began the period at 45 million shares and ended at 51 million shares. NSCC fails remained relatively stable during the period, beginning at 15 thousand shares and ending at 2.2 million shares.⁵

Using the daily closing price of the QQQ, trade volume in this 353-day period averaged \$3.5 billion each day, totaling \$1.2 trillion worth of QQQ shares. The value of short sales averaged \$2.2 billion shares each day, totaling \$774 billion for the whole period.

This could be the result of washed/matched type trading of extremely high numbers of short sales by high frequency/algorithmic computerized trading. Market observers would contend that long shares should be available to cover the short sales for traders to be flat at the end of the day, but there are not enough long sales present in the data produced by the SROs (for this extended period NASDAQ's own data shows almost 60% short selling for the QQQ on its markets).

The data raises the following red flags: 1) while the average number of shares outstanding was 362 million, they began the 353-day period at 393 million and ended at 338 million shares. In essence, there were no net new shares created despite billions of dollars in short sales executed at a rate of approximately 2 of every 3 shares sold, 2) there was little net share lending/borrowing that occurred to support this high amount of short selling, 3) locates of shares to borrow were continuously available from some sources, but shares were not borrowed to complete legitimate settlement of short sales, and 4) the national clearance and settlement system appears to have been circumvented on a large scale to conceal significant amounts of washed/matched type trading and/or avoid reporting of fails to deliver to regulators and the public.

Because NASDAQ is the QQQ's listing exchange and reports the daily number of shares outstanding and short selling on its exchanges, the NASDAQ has the necessary data sets to perform these types of comparison examinations. Moreover, the rest of the information that raises these red flags is produced by other SROs including exchanges, FINRA and the DTCC.

We can only conclude that if the NASDAQ was comparing and examining these metrics, red flags would be raised within its' enforcement division that the outcome of this trading may be producing abnormal results which should be effectively investigated and a determination be

³ Produced in Short Sale Data reports by: NASDAQ OMX BX, National Stock Exchange, Alternative Display Facility, Direct Edge A, Direct Edge X, NYSE/FINRA TRF, NYSE ARCA, NASDAQ/FINRA TRF, NASDAQ OMX PHLX, BATS Y and BATS Z. Excluded data has not been produced in part by the NYSE, NYSE Amex, alternative trading systems/dark pools and possibly other sources.

⁴ We are reasonably confident the reporting markets percent of short selling is a representation of short selling on the non-reporting markets. Therefore, throughout this document we also use the percentage of short selling on reporting markets as a proxy for short selling on the consolidated tape.

⁵ NSCC Fails data only available through settlement date May 31, 2016.

made as to: a) how this much short selling can go unchecked without shares of the underlying ETF being created, b) how all of these shares are being located for short sale borrowing, c) why the borrowing is not adjusting to the amount of short sales, and/or d) how much of the trade volume consists of washed/matched/hot potato type trading resulting in little or no change in beneficial ownership of securities?

If the NASDAQ compared its own Equity Trade Journal to the NSCC's Continuous Net Settlement System data it could determine if all or most trades are being reported to the national clearance and settlement system or if there are a large number of shares bypassing the system (posted for reporting purposes in the NASDAQ Equity Trade Journal, but not sent to NSCC for clearance and settlement), which ultimately can cause significant undisclosed liabilities at some clearing firms that may produce a systemic risk for other market participants and possibly the markets themselves.

Recent Two Month Period

Using a smaller 42-trading day period of April – May 2016, the QQQ averaged 340 million shares outstanding. During the 42-days, trade volume totaled more than 1 billion shares, turning over the average shares outstanding 3 times or every 13 days.

Short selling on reporting markets/SROs averaged 61%, which equates to approximately 664 million shares sold short on the consolidated tape. Thus according to the SROs' data, about 2/3rds of the turnover was derived from short sales (shares not owned by the sellers).

Reported short interest declined during the period from 57 million to 51 million shares. At the beginning of April, NSCC fails totaled 3,502 QQQ shares and showed no significant increase through the available data for the period.

Trade volume averaged \$2.7 billion each day during this 42-day period, totaling \$116 billion worth of QQQ shares. The value of short sales averaged \$1.7 billion shares each day, totaling \$72 billion for the period.

Importantly, QQQ shares outstanding actually decreased from 357 to 335 million shares. This recent period shows the excessive short selling and high trade volumes have continued to result in a lack of: a) share creation, b) reported short interest/shares borrowed, and c) delivery failures at NSCC. This should cause a red flag to be raised at NASDAQ and its SRO enforcement partner, FINRA.

Data for the 42-day period is shown in Tables 1 and 2.

Table 1 – QQQ Shares Outstanding, Trade Volume, Short Selling, NSCC Fails and Reported Short Interest April 1 – May 31, 2016

Date	Shares Outstanding	Consolidated Tape Volume	Percent of Short Selling on Reporting Markets/SROs	Short Sale Volume on All Markets Based on SRO Reporting Markets Percent	Shares Failed to Deliver at NSCC	Reported Short Interest
3/31/2016	356,900,000	21,398,800	73%	15,531,249	3,502	56,684,300
4/1/2016	356,900,000	25,792,500	58%	15,086,033	203	
4/4/2016	355,050,000	17,111,900	57%	9,767,473	51	
4/5/2016	355,050,000	19,443,200	56%	10,884,303	1,630	
4/6/2016	354,600,000	24,662,900	52%	12,839,506	15,953	
4/7/2016	355,650,000	28,389,300	51%	14,506,932	0	
4/8/2016	355,650,000	22,745,400	65%	14,691,254	151,000	
4/11/2016	349,200,000	24,727,100	69%	16,972,681	183	
4/12/2016	348,350,000	28,432,500	75%	21,349,964	4,477	
4/13/2016	354,550,000	25,170,800	75%	18,837,827	3,313	
4/14/2016	354,000,000	17,172,200	81%	13,827,055	8,924	
4/15/2016	354,000,000	21,144,200	71%	15,092,730	17,279	51,773,500
4/18/2016	349,550,000	16,618,800	75%	12,417,567	246	
4/19/2016	350,000,000	42,159,000	69%	29,081,278	304,104	
4/20/2016	348,750,000	17,989,600	64%	11,511,545	130,933	
4/21/2016	343,300,000	19,579,500	72%	14,183,390	745	
4/22/2016	343,300,000	39,008,700	57%	22,195,950	2,000	
4/25/2016	351,350,000	14,315,900	63%	9,039,059	46,607	
4/26/2016	349,250,000	15,921,900	64%	10,111,999	12,231	
4/27/2016	349,650,000	32,631,300	55%	18,005,951	128,904	
4/28/2016	348,400,000	29,586,500	59%	17,500,415	505,630	
4/29/2016	348,400,000	67,456,900	46%	31,353,967	7,377,555	51,370,900
5/2/2016	329,250,000	24,791,000	60%	14,780,394	5,497,186	
5/3/2016	330,850,000	36,351,400	76%	27,590,713	3,875,587	
5/4/2016	326,150,000	26,689,000	73%	19,370,876	2,931,966	
5/5/2016	325,250,000	20,724,800	70%	14,521,867	3,441,452	
5/6/2016	325,250,000	29,731,500	57%	17,089,666	3,525,506	
5/9/2016	324,800,000	18,852,100	71%	13,328,435	1,500,275	
5/10/2016	325,800,000	21,013,500	59%	12,385,357	1,446,963	
5/11/2016	330,300,000	20,883,000	62%	12,866,016	0	
5/12/2016	333,950,000	29,120,600	59%	17,294,724	354,902	
5/13/2016	333,950,000	21,036,800	65%	13,697,060	21,289	50,924,600
5/16/2016	329,650,000	18,281,600	63%	11,601,503	4,912	
5/17/2016	331,900,000	28,566,100	58%	16,671,176	59,054	
5/18/2016	328,250,000	27,524,400	66%	18,111,055	1,479,469	
5/19/2016	328,000,000	27,192,200	40%	10,955,737	1,082,055	
5/20/2016	328,000,000	28,573,200	53%	15,092,364	334,776	
5/23/2016	325,450,000	13,588,800	58%	7,933,141	304,495	
5/24/2016	325,850,000	27,768,700	63%	17,558,149	93	
5/25/2016	331,250,000	37,951,700	53%	20,133,377	2,186,184	
5/26/2016	328,600,000	21,826,400	77%	16,817,241	N/A	
5/27/2016	332,650,000	19,794,400	59%	11,593,580	N/A	
5/31/2016	334,750,000	23,979,900	65%	15,555,761	N/A	51,370,900
Average Total	340,115,476	25,578,600 1,074,301,200	61%	15,814,407 664,205,076		

Table 2 – QQQ Value of Trade Volume and Short Selling April 1 – May 31, 2016

Date	Closing Price	Consolidated Tape Volume	Short Sale Volume on All	Value of Consolidated Tape Volume	Value of Short Sale
			Markets Based on SRO Reporting Markets		Volume on All Markets Based on SRO Reporting
			Percent		Markets Percent
3/31/2016	\$109.20	21,398,800	15,531,249	\$2,336,748,896	\$1,696,012,349
4/1/2016	\$110.36	25,792,500	15,086,033	\$2,846,460,326	\$1,664,894,645
4/4/2016	\$109.94	17,111,900	9,767,473	\$1,881,282,320	\$1,073,835,948
4/5/2016	\$108.88	19,443,200	10,884,303	\$2,116,975,558	\$1,185,082,917
4/6/2016	\$110.67	24,662,900	12,839,506	\$2,729,443,094	\$1,420,948,075
4/7/2016	\$109.08	28,389,300	14,506,932	\$3,096,704,901	\$1,582,416,204
4/8/2016	\$109.00	22,745,400	14,691,254	\$2,479,248,600	\$1,601,346,671
4/11/2016	\$108.60	24,727,100	16,972,681	\$2,685,363,011	\$1,843,233,170
4/12/2016	\$109.51	28,432,500	21,349,964	\$3,113,643,132	\$2,338,034,628
4/13/2016	\$110.91	25,170,800	18,837,827	\$2,791,693,529	\$2,089,303,437
4/14/2016	\$110.92	17,172,200	13,827,055	\$1,904,740,390	\$1,533,696,962
4/15/2016	\$110.64	21,144,200	15,092,730	\$2,339,394,267	\$1,669,859,628
4/18/2016	\$111.23	16,618,800	12,417,567	\$1,848,509,174	\$1,381,206,055
4/19/2016	\$110.55	42,159,000	29,081,278	\$4,660,677,576	\$3,214,935,392
4/20/2016	\$110.64	17,989,600	11,511,545	\$1,990,369,326	\$1,273,637,332
4/21/2016	\$110.65	19,579,500	14,183,390	\$2,166,471,714	\$1,569,392,110
4/22/2016	\$108.98	39,008,700	22,195,950	\$4,251,168,243	\$2,418,914,730
4/25/2016	\$108.98	14,315,900	9,039,059	\$1,560,146,825	\$985,076,705
4/26/2016	\$108.45	15,921,900	10,111,999	\$1,726,730,007	\$1,096,646,228
4/27/2016	\$107.58	32,631,300	18,005,951	\$3,510,475,319	\$1,937,080,281
4/28/2016	\$106.28	29,586,500	17,500,415	\$3,144,453,190	\$1,859,944,062
4/29/2016	\$105.72	67,456,900	31,353,967	\$7,131,543,535	\$3,314,741,435
5/2/2016	\$106.72	24,791,000	14,780,394	\$2,645,695,545	\$1,577,363,684
5/3/2016	\$105.73	36,351,400	27,590,713	\$3,843,433,631	\$2,917,166,126
5/4/2016	\$105.05	26,689,000	19,370,876	\$2,803,679,530	\$2,034,910,603
5/5/2016	\$105.02	20,724,800	14,521,867	\$2,176,518,434	\$1,525,086,467
5/6/2016	\$105.58	29,731,500	17,089,666	\$3,139,051,829	\$1,804,326,992
5/9/2016	\$105.88	18,852,100	13,328,435	\$1,996,060,291	\$1,411,214,626
5/10/2016	\$107.33	21,013,500	12,385,357	\$2,255,378,997	\$1,329,320,381
5/11/2016	\$106.36	20,883,000	12,866,016	\$2,221,115,901	\$1,368,429,507
5/12/2016	\$105.89	29,120,600	17,294,724	\$3,083,580,305	\$1,831,338,343
5/13/2016	\$105.50	21,036,800	13,697,060	\$2,219,382,400	\$1,445,039,881
5/16/2016	\$106.82	18,281,600	11,601,503	\$1,952,840,512	\$1,239,272,589
5/17/2016	\$105.48	28,566,100	16,671,176	\$3,013,152,314	\$1,758,475,690
5/18/2016	\$105.86	27,524,400	18,111,055	\$2,913,733,012	\$1,917,236,322
5/19/2016	\$105.31	27,192,200	10,955,737	\$2,863,610,528	\$1,153,748,682
5/20/2016	\$106.47	28,573,200	15,092,364	\$3,042,188,633	\$1,606,884,036
5/23/2016	\$106.33	13,588,800	7,933,141	\$1,444,897,131	\$843,530,945
5/24/2016	\$108.46	27,768,700	17,558,149	\$3,011,793,174	\$1,904,356,824
5/25/2016	\$109.24	37,951,700	20,133,377	\$4,145,843,632	\$2,199,370,047
5/26/2016	\$109.56	21,826,400	16,817,241	\$2,391,300,340	\$1,842,496,912
5/27/2016	\$110.13	19,794,400	11,593,580	\$2,179,957,213	\$1,276,800,939
5/31/2016	\$110.34	23,979,900	15,555,761	\$2,645,942,070	\$1,716,422,621
Average		25,578,600	15,814,407	\$2,761,063,082	\$1,708,500,448
Total		1,074,301,200	664,205,076	\$115,964,649,458	\$71,757,018,829

This 42-day period is relevant because it is the end of the 353-day period discussed above. In other words, this period shows the beat goes on, day after day an endless supply of shares are always available to locate for short sales, but few of the locates are resulting in net actual borrowed securities.

In general, short selling of the QQQ has been 2 of every 3 shares, but on many days short selling reached 3 of every 4 shares sold or greater. For the above 42 days, there are 11 examples shown in Table 3 where short selling was above 70% of the daily volume. If this does not red flag an SRO securities enforcement division, what would?

This leads back to our concerns that NASDAQ, FINRA and other SROs are not effectively monitoring the massive amount of data they collect each day. Moreover, they are not doing proper analysis to compare the data sets to find, explain or take action against anomalies that may be very significant for the capital markets.

Table 3 – QQQ Example Days of Short Selling Above 70%

Date	Shares Outstanding	Consolidated Tape Volume	Percent of Short Selling on Reporting Markets/SROs	Short Sale Volume on All Markets Based on SRO Reporting Markets Percent	Shares Failed to Deliver at NSCC
4/14/2016	354,000,000	17,172,200	81%	13,827,055	8,924
5/26/2016	328,600,000	21,826,400	77%	16,817,241	N/A
5/3/2016	330,850,000	36,351,400	76%	27,590,713	3,875,587
4/12/2016	348,350,000	28,432,500	75%	21,349,964	4,477
4/13/2016	354,550,000	25,170,800	75%	18,837,827	3,313
4/18/2016	349,550,000	16,618,800	75%	12,417,567	246
5/4/2016	326,150,000	26,689,000	73%	19,370,876	2,931,966
4/21/2016	343,300,000	19,579,500	72%	14,183,390	745
5/9/2016	324,800,000	18,852,100	71%	13,328,435	1,500,275
4/15/2016	354,000,000	21,144,200	71%	15,092,730	17,279
5/5/2016	325,250,000	20,724,800	70%	14,521,867	3,441,452

If the enforcement divisions of NASDAQ, FINRA and the other SROs were looking at the proper data for the QQQ, then they would know how and why an endless supply of short sale locates are constantly available in ETFs that in essence do not create shares to support the massive short selling. An endless supply of shares to short is not possible in a legitimate fair and orderly supply and demand market.

Simply put, a supply and demand market has built in natural market force constraints on the supply side. These forces are central to the functioning of the U.S. capital markets as they are intended to operate. It is a fact that U.S. markets are held out to be based on supply and demand.

If the SROs are not calculating, monitoring and taking action on these metrics then they risk another market disruption from products being sold that are not backed by reasonable collateral, such as the mortgage-backed securities crisis.

Frankly, ETFs appear to have the characteristics that may have been and are being taken advantage of as a product to replace mortgage-backed security investment schemes. However, as we have previously stated, the problem with ETFs is that they have been sold through extensive

advertising to all investors, which puts a much larger portion of the markets at risk from undisclosed liabilities behind these securities.

The exponentially growing number of ETF products has rightfully been the subject of a variety of informational requests from the Financial Stability Oversight Council and the SEC over the last 18 months. Numerous inquiries regarding ETFs have been made that in our view should have been addressed at the SRO level of enforcement.

The data produced by the SROs and the questions raised about the products should have prompted early oversight of their members dealing in ETFs (through the SROs' congressional mandate to be the first line of defense for the marketplace, the SROs should not have allowed the growth of these risks/problems that appear to have been developing since the last financial crisis).

Another Example ETF – the SPDR S&P Retail ETF (Symbol: XRT)

The SPDR S&P Retail ETF (Symbol: XRT) has been a subject in many of our comment letters with extensive data discussed therein.⁶ The XRT is the standard ETF for U.S. blue chip S&P 500 retail companies. It is a 'bread and butter' fund in the ETF world, containing underlying retailers such as Walgreens, Office Depot and Amazon.

The XRT is one example ETF with multiple owners per share (at times, up to 7 just based on SEC 13-F reporting institutions⁷) on a continuous basis for years without significant corresponding NSCC settlement fails; resulting in undisclosed delivery/receivable liabilities.

Examining the XRT metrics, i.e. 70% short selling, no real net-creation of shares and no fails at the NSCC clearly suggests that the Authorized Participants of the XRT are internalizing/ex-clearing much of the trading that is occurring for the XRT. This should raise a significant red flag for SROs that along with the institutional ownership far exceeding the number of shares outstanding, there may be a large number of additional short shares (not owned by the sellers) internalized at clearing firms that could be required to be redeemed and potentially weigh heavily on the stability of the fund.

Imbalances in XRT ownership versus shares issued has continued to be found from 2011 through December 31, 2015 (constituting 1,261 trading days, or 5 years). Despite continuous daily short selling averaging almost **70% of trade volume**, or nearly 3 of every 4 shares sold on the reporting markets, there has been ***no sustained increase in shares outstanding, reported***

⁶ Response to SEC Questions Regarding ETPs File S7-11-15, dated August 17, 2015

<http://www.sec.gov/comments/s7-11-15/s71115-19.pdf>

Response to SEC Questions Regarding Open-End Fund Liquidity Risk Management Programs File S7-16-15, dated January 13, 2016 <https://www.sec.gov/comments/s7-16-15/s71615-60.pdf>

Response to SEC Questions Regarding the Use of Derivatives by Registered Investment Companies and Business Development Companies File Number S7-24-15, dated March 28, 2016

<https://www.sec.gov/comments/s7-24-15/s72415-111.pdf>

Follow-up Response to SEC Questions Regarding the Use of Derivatives by Registered Investment Companies File Number S7-24-15, dated April 11, 2016 <https://www.sec.gov/comments/s7-24-15/s72415-192.pdf>

Second Follow-up Response to SEC Questions Regarding the Use of Derivatives by Registered Investment Companies File Number S7-24-15, dated April 28, 2016 <https://www.sec.gov/comments/s7-24-15/s72415-200.pdf>

⁷ Institutional money managers with over \$100 million in assets are required to report holdings on quarterly 13-F reports.

short interest nor NSCC fails. This is in complete contradiction to the expected natural results that should be found in a properly functioning supply and demand marketplace.

As an example, on **March 31, 2014**, just reporting institutions owned more than **5 shares for every share of the XRT outstanding**. However, NSCC delivery fails were just 7,728 shares. Obviously, shares were not fully delivered/received for the 5 ownership claims (42 million shares), yet these unfulfilled securities contracts are not reflected in NSCC data. This is a ‘financial system’ red flag; the national clearance and settlement system is not capturing and disclosing these excess ownership contractual settlement deficiencies.

While the NASDAQ is not the listing exchange for the XRT, 1/3rd of all XRT volume on the reporting markets was executed on the NASDAQ markets during the 5 year period. Of the XRT shares sold on NASDAQ markets, 67% were the product of a short sale. Over 5 years, why have these metrics not produced red flags and a response from the NASDAQ as an SRO with congressionally mandated responsibilities to enforce securities laws and its own rules?

Should an SRO consider 5 ownership claims for the same security to be problematic? As a first line of defense for the public markets, should an SRO red flag the fact that for years, excess ownership of the shares outstanding continued without net ETF share creation expanding to reconcile with the shares owned by investors?

The March 31, 2014 data is shown in Table 4.

Table 4 – XRT Data March 31, 2014

	Shares
Shares Claimed to be Owned by Institutions (13F Filers)	42,808,001
Shares Outstanding	8,550,113
Shares Owned by Institutions Above Shares Outstanding	34,257,888
NSCC Fails	7,728
Reported Short Interest	24,461,700
Shares Outstanding	8,550,113
Shares Outstanding Plus Short Interest	33,011,813
Ownership Claims by 13F Filers Above Shares Outstanding Plus Short Interest	9,796,188

The XRT data raises significant questions and red flags regarding what is being sold in the marketplace as XRT shares. How has the XRT’s management been able to currently and historically account for valuation risk and liquidity requirements under the Investment Company Act of 1940, justified compliance with the securities laws and the 1940 Act and reported this accounting to the SEC and investors, when many shares exist beyond what the fund issued? Are these not issues SROs should be concerned with?

Here, there are 9.8 million more shares claimed to be owned above shares outstanding plus reported short interest. These securities positions were not owned by the sellers so they were short sales, but they did not get reported as short interest. These shares that are not registered long nor reported short should provide an audit trail to be followed in an independent investigation to find out the nature of these securities.

The excess ownership positions consist of a significant amount of securities in the status of fail to receive that are not reported to the NSCC, representing undisclosed delivery liabilities at clearing firms, which could cause problems with settlement liquidity if it is not readily available in a crisis market.⁸

Again, we assume if NASDAQ's and FINRA's enforcement divisions were effectively monitoring the XRT, the metrics of excessive ownership, shares outstanding, the amount of short interest, number of NSCC fails, the trading volume and high short selling would accumulate to a bright red flag that the trading in the XRT is not adhering to a supply and demand, fair and orderly market environment.

Indications of Spoofing/Layering and Other Pre-Execution Activity

While the publicly reported MIDAS data is capturing a limited amount of the consolidated tape volume, it is illustrative of a very high number of orders placed then cancelled for liquid ETFs, including the QQQ.⁹ Spoofing etc., is the subject of the NASDAQ proposed rule change, which is found in the pre-execution trade data discussed here.

The amount of trade cancellations in the data for ETFs is disturbing, but the volume/value of shares cancelled shows an even greater gap between executions and cancels. The NASDAQ can find the data it reports to the MIDAS system in its Price Movement Reports, which are extensively large data sets (if this data was analyzed over time, it would show the significant changes in the number of shares, trades and values cancelled on the NASDAQ markets).

For the 1st Quarter 2016, the rate of orders versus executions in the MIDAS data equates to 141 thousand QQQ shares ordered/cancelled for each 1,000 shares executed, resulting in 140 thousand QQQ shares cancelled. The MIDAS data shows during the entire 61-day period examined there were **238.8 billion** QQQ shares ordered with **over 237 billion** shares cancelled and only **1.7 billion** shares executed. Each day, 3.9 billion shares were cancelled and only 28 million were executed, i.e. 99% of the orders were cancelled.

Based on the QQQ's daily closing price during just the first 61 days of 2016, the trade volume in the MIDAS data equated to approximately **\$173 billion** compared to the order volume/cancellations of **\$24 trillion**.

Each day, there were \$400 billion in QQQ shares cancelled from just the data reflected in the MIDAS system (which is recognized by the SEC to be missing between 30 - 40% of the trade volume within their reported statistics). When all trading in the marketplace is taken into consideration (the consolidated tape), there may be more than ½ of a trillion dollars in orders and cancellations each day for just the QQQ.

⁸ See *Section 2 – Exchange Traded Products Liquidity and Assets* of the SEC Request for Comment on Exchange-Traded Products, *Response to SEC Questions Regarding Exchange Traded Products*, File Number S7-11-15 <http://www.sec.gov/comments/s7-11-15/s71115-19.pdf>

⁹ The MIDAS data is missing a significant portion of the volume executed in the marketplace. Certain data has been removed from MIDAS for the SEC's study purposes (see MIDAS Market Activity Report Methodology). Here we use the raw data set provided by the SEC's MIDAS system.

In the past, and what one would expect in a fair and orderly supply and demand marketplace, an order is an expression of interest at a specific price and volume which drives price discovery and demand. Here, we have a distortion from a truly phenomenal level of cancellations that clearly can impact price discovery, the appearance of actual interest and the true and accurate liquidity of a security.

A cancellation is not designed to eliminate the expression of interest for trillions of dollars worth of securities, yes that's ***trillions***; it is to deal with operational issues (i.e. cancel a mistaken order due to human error or changing orders to adjust to market conditions).

Gregory Scopino, Special Counsel in the CFTC's Division of Swap Dealer & Intermediary Oversight, authored a legal article, stating:¹⁰

“The better approach is not to view high-speed pinging as a form of front running or insider trading, but as analogous to ***disruptive, manipulative, or deceptive trading practices***, such as banging the close (submitting a high number of trades in the closing period to influence the price of a contract), spoofing (submitting an order for a trade with the intent to immediately cancel it), or wash trading (self-dealing, or taking both sides of a trade), all of which are illegal.”

The amount of orders placed then cancelled in the data are distorting true price discovery and demand. When this massive amount of orders and cancels are placed, **it is disseminating false information into the marketplace and creating a fictitious sense of supply and demand for securities.**

Additional Order Cancellation Ratio Examples

Disruptive order cancellations are also occurring in other securities being heavily traded on the NASDAQ market. For example, for the 1st Quarter of 2016, the largest traded security in the world, the S&P 500 ETF (Symbol: SPY) had 35% of its volume that was executed on SRO reporting markets traded on the NASDAQ. The volume on the NASDAQ markets showed 59% of the SPY shares were sold short.

The Financial Select Sector SPDR ETF (Symbol: XLF) is the second highest traded ETF based on U.S. securities. In the 1st Quarter of 2016, 30% of the XLF SRO/reporting markets volume was sold on NASDAQ, with 65% of the shares sold short.

The SRO data, including the NASDAQ, shows false liquidity appears to be occurring in ETFs across indexes and sectors.

The SPY, which is based on the S&P 500 blue chip securities, had ***almost \$1 trillion*** in shares ordered/cancelled on average each day from just the data reflected in the MIDAS system.

The XLF, which is based on the financial companies in the S&P 500 Index, had ***\$116 billion*** in shares ordered/cancelled on average each day from the data reflected in the MIDAS system.

¹⁰ *The (Questionable) Legality of High-Speed “Pinging” and “Front Running” in the Futures Markets*, Gregory Scopino, Connecticut Law Review February 2015, Volume 47 <http://connecticutlawreview.org/files/2015/01/7-Scopino.pdf>

The QQQ had **\$400 billion** in shares ordered/cancelled on average each day from the data reflected in the MIDAS system.

In the limited MIDAS data, there were **over \$1.5 trillion in cancelled orders** for just these three ETFs (the QQQ, SPY and XLF) based on important U.S. securities on average **every day**.

This is over \$380 trillion (or 21 times the U.S. 2015 gross domestic product) in pre-execution orders cancelled in one year for just these three securities. The outcome of this pre-execution activity appears to be providing a significant false sense of liquidity, some of which may be spoofing/layering activity of interest in this proposal.

With this extent of orders reported as being placed and cancelled in just the MIDAS data, there is little doubt the cancellations are having an influence on the appearance of supply/demand and liquidity. This pre-execution liquidity generated by high frequency trading is skewing the amount of actual market liquidity and some of this activity may be designed to flood the markets with fictitious liquidity.

Where is the money coming from to support the \$92 trillion in shares ordered/cancelled for just these 3 securities in the 1st Quarter 2016? While these are ETFs, there are similar characteristics of concern for equity trading in the current U.S. markets.

What is causing the high ratio of order cancellations does not matter; the outcome clearly suggests something is not functioning properly in the pre-market of U.S. securities. There appears to be an abundance of liquidity that may not actually exist. The data shows an unprecedented magnitude of activity that could result in very disruptive market events in just a few securities from apparent false liquidity.

The data suggests real liquidity from real buyers/sellers has been in decline for years while high frequency trading activity has continued to flood the pre-execution market with what appears to be fictitious liquidity. True price discovery appears to be interrupted by excessive orders/cancellations for liquid U.S. securities. Real buyers and sellers that own the supply of shares are becoming a proportionally smaller part of the bidding and offering of securities.

Based on the laws of supply and demand, the cancelled orders indicate there is an infinite supply of shares. If the supply is infinite, the liquidity of the security is misrepresented, which results in a misrepresentation of the price. Are shares actually being located and are available for long/short sales for the \$92 trillion cancelled in the 1st Quarter of 2016 for only these three ETFs?

The MIDAS data for the 1st Quarter 2016 is not an unusual/new result. Moreover, the level of short selling has gone on for years where basically 2 of every 3 shares is a product of a short sale that was actually executed. The reality suggests that the trillions of dollars of orders placed and cancelled were also short, where the offers simply were not placed by people/participants that actually owned the shares. In the case of the three ETFs (QQQ, SPY and XLF), the MIDAS data orders suggest there are more than **\$56 trillion** worth of shares not owned that were offered for a short sale in just the 1st Quarter of 2016 (61 trading days).

This misrepresentation becomes clear when the apparent infinite supply disappears. Our concern is how the market performs equitably when the false liquidity rapidly leaves, which has previously dried up instantly across the markets (i.e. the 2010 Flash Crash, August 2015 and Black Monday in 1987).

The basic common sense of the QQQ for the last two months is an ideal examination of what should be at the forefront of the SRO's concerns for the quality of the marketplace: a) declining short interest, b) declining shares outstanding (no net creation regardless of short selling), and c) short selling at 61% turning over the entire shares outstanding every 17 days without creation, additional short interest (shares borrowed) and no reflection within the national clearance and settlement system of these abnormal numbers and relationships to securities contracts that may/should be failing to deliver.

The orders/cancellations, ongoing short selling, a lack of locates or ongoing false locates, lack of short interest/shares borrowed, no net creations and a lack of fails at NSCC are very disturbing, which should be raising red flags at the SROs and be of great concern to all serious observers, regulators and especially enforcement personnel.

Conclusion

All of the above discussed data is available to or produced by the SROs in the congressionally mandated system, which are in essence the first responders to abusive behavior in the marketplace. Through our comment letters these data metrics have been provided on numerous different securities. The comparison of these metrics appears to be missing from the analysis of the data by the SROs.

It is essential that the SROs are observing, investigating and acting upon the issues that are most important to investors and the marketplace. This is how Congress originally intended and constructed the laws in the 1930s after the securities industry argued they were best positioned to be the first line of defense. The relationship of the SROs to their mandate has not changed.

Without this fundamental leg of securities law enforcement, the core functioning of the U.S. markets becomes critically different than how they are designed. If this is a misinterpretation of the importance of the SRO structure that exists today, disclosure of these facts are vital to the interest of investors and the U.S. markets themselves.