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

Over the previous year, we have supplied four extensive public comments on Exchange Traded Products ("ETPs")[1] to the Financial Stability Oversight Council ("FSOC") and the SEC.[2] These comment letters included industry data and discussed risks in operating processes, concerns regarding the mounting number of derivative products concentrated on blue chip securities, various liquidity requirements of ETPs and their underlying securities including settlement and securities lending liquidity, the illiquidity and difficulty in valuating certain underlying assets and fatal flaws in the product designs.

Some ETPs have morphed into trading vehicles that are completely different than their generally understood investment objectives/goals and what the public and regulators believe are their operational practices (such as, daily net investment through trading leads to purchases of fund assets, similar to how mutual funds purchase assets as investments increase). With ETPs, there are no requirements for fund operators or Authorized Participants to create ETP assets. This is a fatal flaw in these products. Simply put, this flaw incentivizes short sales without Authorized Participants creating new underlying portfolio assets.

J.P. Morgan explained in 2013 specifically that ETF share-lending is operating under an "***expectation*** that Authorized Participants will step in by creating more shares," at sometime in the future for short sellers to borrow.[3]

The data suggests there is a very serious leverage issue existing for major ETPs that should not be dismissed. According to the data, ETP leverage has grown to systemic importance that could dwarf the mortgage-backed securities debacle prior to the last financial crisis. In 2007/2008 the flawed products were owned by a relatively small number of sophisticated financial firms. Today, the most significant ETPs are based on U.S. blue chip and other fundamental key securities, which are owned by a large variety of public investors.

To be clear, there should be a distinction between the derivative and other risks associated with mutual funds versus ETPs. There are risks to mutual funds, which were recently exemplified by the Third Avenue fund, but the primary risks are in the exploding ETP markets that are not functioning properly. Here our comments are directed primarily at Exchange Traded Products.

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[1] Including both Exchange Traded Funds ("ETFs") and Exchange Traded Notes ("ETNs"). As previously stated, ETNs are a subsector of the exchange traded products business that are not registered under the 1940 Investment Company Act and should be further separated from ETFs in order to mitigate systemic market risk.

[2] Notice Seeking Comment on Asset Management Products and Activities, FSOC-2014-0001-0001, ID FSOC-2014-0001-0015 http://www.regulations.gov/#!documentDetail;D=FSOC-2014-0001-0015
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
Follow up to the above SEC Request for Comment on Exchange-Traded Products, *The ETF Stress Test of August 24, 2015*, File Number S7-11-15 http://www.sec.gov/comments/s7-11-15/s71115-38.pdf
SEC Request for Comment on Open-End Fund Liquidity Risk Management Programs, *Response to SEC Questions Regarding Open-End Fund Liquidity Risk Management Programs*, File Number S7-16-15 https://www.sec.gov/comments/s7-16-15/s71615-60.pdf

[3] J.P. Morgan, Global Asset Allocations, Flows & Liquidity: Are ETFs Dangerous? July 5, 2013

Regulating Mutual Funds vs. ETPs

The SEC has stated a previous belief of how physical-based ETFs operate: "ETFs offer investors an undivided interest in a pool of securities and other assets." "Apart from the fact that ETFs trade intraday, most **ETFs are similar to *mutual funds*** in that they ***both translate investor purchases and sales in the fund*** (and **changes in investor sentiment**) ***into purchases and sales of underlying holdings***."[4]

If the above was true, rules for mutual funds and ETPs could be a similar fit. However, with the way ETPs are operating today, the two products are like regulating under the proverbial apples and oranges scenario. Mutual fund assets increase and decrease via purchases and sales, as the SEC notes. However, the data shows many important ETP assets are not linked to the marketplace trading/investments (today, they do not "*both translate investor purchases and sales in the fund* (and changes in investor sentiment) *into purchases and sales of underlying holdings"*). As a consequence, important ETPs are not providing investors an 'undivided interest in a pool of assets'. To date, this ETP discovery has not been disputed by the industry.

For example, the largest traded security in the world, the SPDR S&P 500 ETF (Symbol: SPY), had **824.2** million shares outstanding on **December 13, 2012** and on **August 7, 2014** (*414 trading days later*), there were **825.6** million shares outstanding; an increase of just 1.4 million shares or a change of only one tenth of 1%; essentially no net change. Between these dates, marketplace volume for the SPY totaled **48 billion shares, worth *$8.2 trillion*.**

Reporting markets/SROs showed ***65%*** of all sales of the SPY were the product of a short sale.[5] Using the reporting markets percentage as a proxy, there were approximately ***31 billion shares sold short*** valued at ***over $5.3 trillion*** during the period.[6] Investor sentiment was positive, with the S&P 500 Index increasing in price by 34%. In other words, there was $8 trillion worth of SPY shares sold with $5 trillion sold short (not owned by the sellers), **while there was virtually no net creation of shares outstanding to support the trading or create a larger 'pool' of assets.**

The SPY shows that ETPs have morphed from their expected product mission in the financial marketplace. They are no longer operating similar to mutual funds as regulators anticipated. Many ETFs simply do not comply with the 1940 Investment Company Act ("1940

[4] In testimony before the Senate Subcommittee on Securities, Insurance and Investment in October 2011, Eileen Rominger, the director of the SEC's Division of Investment Management explained the SEC's understanding of physical ETFs; "ETFs offer investors an undivided interest in a pool of securities and other assets." "Apart from the fact that ETFs trade intraday, most **ETFs are similar to *mutual funds*** in that they ***both translate investor purchases and sales in the fund*** (and **changes in investor sentiment**) ***into purchases and sales of underlying holdings***." Eileen Rominger, Director, Division of Investment Management, *Testimony on Market Micro-Structure: An Examination of ETFs*, October 19, 2011 http://www.sec.gov/news/testimony/2011/ts101911er.htm

[5] 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.

[6] 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 of the consolidated tape volume.

Act") they are registered under. This fact makes it difficult to regulate such varied products under the same rules as mutual funds. As SEC Commissioner Kara Stein recently stated:[7]

> "It is ***increasingly apparent that ETFs behave very differently than mutual funds*** in our capital markets. The events of August 24 demonstrate that ETFs may act quite unusually in stressed market conditions and, frankly, break down in ways that we do not completely understand."
>
> "**Now is the time to be asking the hard questions about ETFs**. Broadly, we should be **considering whether we need new rules to address these innovative funds**. At a granular level, we should be examining the roles that all of the individual players in this ecosystem play (*such as authorized participants*). Systemically, I am particularly focused on **how ETFs trade, as compared to mutual funds**, and whether the way algorithmic traders utilize ETFs poses ***concerns to investors placing their retirement savings in these products***."

We commend FSOC and the SEC for taking this very serious regulatory approach to understand how ETPs are operating.

Results of No Requirements to Create

A basic flaw of ETPs is that there is ***no*** requirement to create assets in the portfolio. Without the requirement to purchase shares/assets from open market investments, an ETP is ideal for a short exposure trade (i.e. a naked sale where shares should be created/borrowed, but are not). The expectation of creation that J.P. Morgan says is occurring in ETFs by its very nature produces naked short positions because the shares are not being created to borrow.

On March 21, 2016, Thomas Gira, FINRA Executive Vice President and Head of Market Regulation, stated:[8]

> "Timely delivery of securities is a critical component of sales activity in the markets, particularly in ETFs that rely on the creation and redemption process. Naked trading strategies that result in a pattern of systemic and recurring fails flout such principle and do not comply with Regulation SHO. Authorized Participants and their broker-dealer clients need to have adequate supervisory procedures and controls in place to ensure that they are properly redeeming and creating shares of ETFs."

The non-requirement to create is a contractual arrangement between the ETP and its Authorized Participants. However, there are many regulations that this activity can violate, including the anti-fraud provisions of the federal securities laws.

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[7] Commissioner Kara Stein, *Surfing the Wave: Technology, Innovation, and Competition – Remarks at Harvard Law School's Fidelity Guest Lecture Series*, November 9, 2015 https://www.sec.gov/news/speech/stein-2015-remarks-harvard-law-school.html

[8] *FINRA and Nasdaq Fine Wedbush Securities Inc. $675,000 For Supervisory Violations Relating to Chronic Fails to Deliver by a Client in Multiple Exchange-Traded Funds*, March 21, 2016 http://www.finra.org/newsroom/2016/finra-and-nasdaq-fine-wedbush-securities-inc-675000-supervisory-violations-relating

When an ETP has not purchased underlying assets in accordance with marketplace activity, under stressed market conditions it may not be able to fulfill its redemption obligations.

The SPDR S&P Retail ETF (Symbol: XRT) is one example ETF with multiple owners per share (at times, up to 7 just based on SEC 13-F reporting institutions[9]) on a continuous basis for years without significant corresponding NSCC settlement fails; resulting in undisclosed delivery liabilities, which likely will require settlement liquidity that is not readily available in a crisis market. Even under these oversold conditions, the ETF continues to trade significant volumes and has been sold short at an average of 69% for the last 5 ½ years.

We previously examined a period of November 2010 through March 2014 for the XRT. On November 1, 2010, there were 10.5 million XRT shares outstanding and on March 31, 2014 (858 trading days), there were 8.6 million shares outstanding, despite 70% short selling on reporting markets between the two dates and multiple ownership claims for the shares outstanding.

Between these dates total marketplace volume for the XRT was **5.6 billion shares**, with approximately ***4 billion sold short*** based on the reporting markets short sale percentage.

During the period, there were on average only ***12.4 million*** shares outstanding. Marketplace volume averaged ***6.6 million*** shares traded per day, turning over the average shares outstanding every ***1.9 days***.

Moreover, short shares averaged ***4.6 million*** shares each day, or a turnover of the average number of shares outstanding by **just short sales *every 2.7 days***. Essentially, twice per week, **all** existing XRT shares were not only sold, but were the product of a short sale. This is truly an incredible turnover ratio for any security, especially on a continuous basis for such extended periods of time.

We believe this is unprecedented in the history of the modern U.S. markets. This is an extreme rate of turnover for shares outstanding, considering all XRT shares have been and are claimed to be owned by multiple institutional investors for the entire period.

Using the daily closing price during this 858-day period, the trade value equaled to **$326 billion worth of XRT shares sold** with **$225 billion sold short (not owned by the sellers), while there was no net creation of shares outstanding to support this trading.**

Despite these metrics, there has been no sustained increase in reported short interest/shares borrowed or NSCC fails. This is in complete contradiction to the expected natural results that should be found in a properly functioning supply and demand marketplace and is a red flag that the national clearance and settlement system is not capturing and disclosing these contractual settlement fail to receive/deliver deficiencies.

The XRT, along with most important U.S. securities, show characteristics of significant misreporting of securities positions to the NSCC. Misreporting is due largely to internalized and

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

ex-cleared fails to deliver/receive, including offshore re-hypothecated synthetic positions in the books of clearing firms and custodians, which are not reflected in data produced by the NSCC.

For ETFs, the amount of ex-clearing appears to be extreme, which can cause substantial settlement liquidity risks under crisis market conditions. The DTCC/NSCC admits that it cannot quantify the risks that exist from ex-cleared/internalized clearing firm positions, as 'obviously they do not go through the NSCC'.[10]

Undisclosed Leverage

Portfolio holding, institutional ownership, short selling, short interest, FSOC and broker-dealer/clearing firm FOCUS data suggests the major ETFs are in a state where short positions were taken without underlying asset creations, nor were there net share borrowings for the short sales.

With many important U.S. ETFs being consistently sold short at 60 – 80% for years, there is an obvious building of leverage in the ETFs themselves. The data suggests the building leverage in these products is creating a systemic risk through not only ETFs, but the underlying blue chip companies which are the heart of the U.S. economy.

In essence, liabilities residing at Authorized Participants/clearing firms from uncovered/un-borrowed short positions (referred to as 'naked' by the SEC) are undisclosed derivatives of the ETF. These positions could have a great impact on all of management's accounting aspects for an ETF, including liquidity, portfolio valuations, redemption stress models and the true number of shares the ETF believes it has outstanding and trading in the marketplace.

As an example, Table 1 shows the short selling in 2016 for top U.S. ETFs on all exchanges/SROs that report short sale data.

Table 1 – Short Selling in Sample Top ETFs from January through March 21, 2016 (54 Trading Days)

Symbol	Fund Name	Percent of Short Sales on All Reporting Markets/SROs
GLD	SPDR Gold Shares ETF	66%
IWM	iShares Russell 2000 ETF	64%
QQQ	PowerShares QQQ ETF	60%
SPY	SPDR S&P 500 ETF	60%
XLF	Financial Select SPDR ETF	68%

Table 2 shows sample ETFs based on the S&P 500 Index components and other securities at the core of the U.S. markets.

[10] DTCC Bylined Articles, *Transforming The Processing of Fails And Other Open Obligations*, Susan Cosgrove, DTCC Managing Director, Clearance and Settlement/Equities, October 1, 2009, http://www.dtcc.com/en/news/2009/october/01/transforming-the-processing-of-fails-and-other-open-obligations.aspx

Table 2 – Short Selling in Sample U.S. Equity Based ETFs from January through March 21, 2016 (54 Trading Days)

Symbol	Fund Name	Percent of Short Sales on All Reporting Markets/SROs
IVV	iShares Core S&P 500 ETF	56%
IWB	iShares Russell 1000 ETF	59%
MDY	SPDR S&P MidCap 400 ETF	69%
VOO	Vanguard S&P 500 ETF	61%
VTI	Vanguard Total Stock Market ETF	60%
VTV	Vanguard Value ETF	64%

Excessive trading without changes in beneficial ownership has been banned by exchanges for at least 100 years. There appears to be a significant amount of washed/matched/'hot-potato' type trading that is currently not causing actual changes in beneficial ownership of securities.

The Quality of Shares in an ETP Portfolio

With 6 or more out of 10 shares being sold from a short sale (and on many individual days, the short selling is as high as 8 out of 10 shares), investors in these products are at risk of not receiving valid settlements. This raises questions about short selling of the ETFs' underlying holdings and what it actually may be purchasing.

As an example, the Technology Select Sector SPDR ETF (Symbol: XLK) is based on the blue chip technology stocks of the S&P 500 Index. The XLK has been sold short at 65% (440 million shares) in 2016 on reporting markets/SROs. For 2016, there has been no net creation of XLK shares.

Almost 70% of the underlying XLK companies have been sold short at 50% or higher, with 18% of the companies being sold short at greater than 60%. This brings into question, when this ETF does purchase its' underlying company shares, what is it purchasing? What percentage of its' holdings are derived from shorted shares? Are there borrowed shares to back up the holdings of the ETF? What are these settlement risks under crisis market conditions?

Non-Physical, Derivative Based ETPs

Underlying assets for ETFs referred to as 'physical' ETFs (consisting of cash, commodities and securities ownership) are far different from a portfolio for synthetic inverse/leveraged ETFs, which are largely based on derivative swaps and futures contracts. Inverse and leveraged products are not truly traditional exchange traded funds based on owning physical securities of an index, but are still classified as ETFs and share similar names with large, important physical ETFs and indexes, such as the S&P 500.

As previously discussed in our comment letters, the synthetic ETFs' fundamentally flawed structures create the mechanics for them to collapse in crisis market conditions.[11] The derivatives could be highly vulnerable to disruption in the markets when liquidity is reduced, such as during the May 2010 Flash Crash.

During the Flash Crash, some important inverse/short-biased ETFs experienced a ***decrease in price*** with increased volume while **market prices were declining**. ***As market prices declined, inverse ETFs should have risen in price.***

These ETFs became unhinged from their stated investment objectives and plummeted in price when market maker/high frequency trading liquidity withdrew from the market. A decrease in equity market buying support and prices should have caused a spike in the prices of inverse ETFs during the Flash Crash, i.e. they should have **reacted in the opposite price direction**.[12]

These products ***should not*** be classed as exchange traded funds; they are more like an option on synthetic swaps and futures derivative instruments with daily reset bets on price direction. They fail under stress, even intraday stress like the Flash Crash. If properly classified and advertised with full disclosure, there would likely be little if any market for these products. Natural market forces would probably cause these ETFs to become obsolete.

This SEC proposal takes direct aim at these types of risky derivative based ETFs. We support the reclassification of these products that we believe, without this banner of legitimacy of being ETFs registered under the 1940 Act, they would likely not exist or be too obscure for most investors' participation.

Potential Dangers from Derivatives

In this proposal, the SEC has outlined several risks for funds holding derivatives and building high amounts of leverage, stating:

> "A fund's use of derivatives may involve counterparty, liquidity, leverage, market, and operational risks, as noted above. As we observed in the Concept Release, "[a] fund's use of derivatives presents challenges for its investment adviser and board of directors to ensure that the derivatives are employed in a manner consistent with the fund's investment objectives, policies, and restrictions, its risk profile, and relevant regulatory requirements, including those under federal securities laws." In light of these considerations and those we discuss in section III.D below, we believe that funds that make significant use of derivatives, or that use certain complex derivatives, should have

[11] In August 2009, the SEC issued an investor alert regarding leveraged and inverse ETFs advising investors that: "Most leveraged and inverse ETFs "reset" daily, meaning that they are designed to achieve their stated objectives on a daily basis. Their performance over longer periods of time -- over weeks or months or years -- can differ significantly from the performance (or inverse of the performance) of their underlying index or benchmark during the same period of time. This effect can be **magnified in volatile markets**." "…**engaging in short sales and using swaps, futures contracts, and other derivatives** can **expose the *ETF*—and by extension *ETF investors*—to a *host of risks***." *Leveraged and Inverse ETFs: Specialized Products with Extra Risks for Buy-and-Hold Investors*, http://www.sec.gov/investor/pubs/leveragedetfs-alert.htm

[12] For example, "ProShares Short S&P500 seeks daily investment results, before fees and expenses, that correspond to the inverse (-1x) of the daily performance of the S&P 500." http://www.proshares.com/funds/sh.html

formalized risk management programs to manage the risks that derivatives may pose and to help address the challenges and investor protection concerns presented by their use."

Part of the SEC's new rule is summarized:

"A fund that relies on the proposed rule in order to enter into derivatives transactions would be required to: comply with one of two alternative portfolio limitations designed to impose a limit on the amount of leverage the fund may obtain through derivatives transactions and other senior securities transactions; manage the risks associated with the fund's derivatives transactions by maintaining an amount of certain assets, defined in the proposed rule as "qualifying coverage assets," designed to enable the fund to meet its obligations under its derivatives transactions; and, depending on the extent of its derivatives usage, establish a formalized derivatives risk management program."

"The fourth risk the fund would be required to have policies and procedures reasonably designed to evaluate is liquidity risk. Under this program element, a fund should assess the potential liquidity of the fund's derivatives positions, an evaluation which might include both normal and stressed scenarios. Assessing liquidity risk could involve understanding the secondary market liquidity of the fund's derivatives holdings; whether the fund has the right to terminate a particular derivative or the ability to enter into offsetting transactions; the relationship between a particular derivative and other portfolio positions of the fund, including whether the derivative is intended to hedge risks relating to other positions; and the potential effect of market stress events on the liquidity of the fund's derivatives transactions."

ETP operators would have a hard time valuating certain types of derivative instruments under stressed market conditions. In many cases, they will not know the quality of the collateral in the chain of transactions the ETP enters into with a counterparty.

While the ETP transaction may appear on the surface to be straightforward, the counterparty could have a complex transactional structure on its' side of the contract. In fact, in today's transactional world, it would not be surprising to find a counterparty to the ETP's derivative has in some way hedged or re-leveraged its' position with another counterparty who then hedges with another counter party and so on. A question arises as to how well the ETP management can judge the counterparty risks from derivatives it enters into. Chains of derivatives only need one weak link in the counterparties to disrupt the transactions of other counterparties.

The risks to ETPs described by the SEC are from holding these derivatives and leverage in their own portfolio. If the derivatives present risks for a fund's portfolio, they impart the same risks for Authorized Participants/clearing firms that are associated with the ETP and there may be additional risks to the Authorized Participants if they are developing their own derivative positions. The secondary market activity by Authorized Participants/clearing firms far exceeds the activity in the primary market between the Authorized Participants and the ETP. So both the quality and liquidity of the derivative products are very important.

ETPs, Important Underlying Securities and Related Derivative Products

With the increasing use of derivative products to build leverage, the SEC is correct to be concerned with the makeup of portfolio derivatives. However, we believe ETP management should also be aware of and concerned by the systemic risks caused by the growing number of derivatives in the marketplace that are attached to equity securities, ETPs and other derivatives.

Derivatives add additional risks to the financial system that today, predominantly surround a small group of S&P 500 companies. As discussed in previous comment letters[13], the **relatively new interconnection** between top U.S. companies and ***hundreds of derivative products*** (ETPs, options, futures etc.), has caused an unprecedented and apparent unhealthy relationship between traditional investments and systemically risky products that puts the majority of U.S. institutional and retail investors' and potentially taxpayers' money at risk in a stressed or crisis market environment.

Many of these products have been developed or became heavily traded after the market downturn of 2008 and the first quarter of 2009, but they have not been tested under crisis market conditions.

Without being disclosed, S&P 500 companies and their investors have now been systemically attached to the world of derivatives and the associated risks. This does not appear to be an outcome that investors understand.

The more interconnected derivative products there are to the same securities, the more concentrated systemic risk becomes around a smaller and smaller group of underlying assets that are key components of the U.S. and global economy. These significant U.S. traded companies, which include systemically important financial firms, can alter the valuation of stock markets and economies globally. As the SEC/CFTC found during the May 2010 Flash Crash, ETFs, E-Mini futures and options can significantly affect the underlying stocks and initiate/intensify market stress events.

Most of the value traded in stocks and derivatives is heavily concentrated around; a) S&P 500 Index securities, b) sectors of S&P 500 Index securities including Dow component stocks, and c) the largest ETF by value traded, the SPDR S&P 500 ETF (Symbol: SPY), based on the S&P 500 Index.

There are now hundreds of ETPs with the same large cap U.S. equities as components. For example, for just the 30 Dow stocks there are now **between 80 and 100 ETPs**. Other important weighted S&P 500 non-Dow stocks are generally underlying securities in over **80 ETPs**. This is true for the most important S&P 500 companies with numerous side bets additionally available on the same securities, such as options and futures products.

Large blue chip stocks are not only components in ETPs based on S&P 500 underlying securities, large capitalization companies and dividend funds, but also there are a number of

[13] See *Section 7 – Systemic Risk from High Ownership and Derivative Trading Concentration on S&P 500 Companies* 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

ETPs based on specific sub sections of the S&P 500 stocks such as the Dow components, retail, technology and other sectors that have been sold excessively short.

Moreover, there is a number of other derivative products based on the same securities, including index futures, E-Mini futures, single stock futures, index options, equity options, leap options, flex options and swaps. Some derivative-structured U.S. and foreign ETFs are based on large U.S. ETFs. Foreign options on U.S. indexes, ETFs and the underlying securities are not transparent to regulators and could produce additional stress under crisis market conditions.

ETPs based on S&P 500 companies also have a number of linked derivative products using the ETPs as the underlying component, like the SPY.

In addition to the S&P 500 E-Mini, there are E-Mini futures on the Dow, the NASDAQ 100 and each of the 9 Select Sectors of the S&P 500 Index.[14] There are also single stock futures for individual securities that, according to the OneChicago Exchange, "act as a synthetic stock-lending vehicle replacing the process of locating stock when selling short."[15]

There are several different types of 'options' contracts on the E-Mini futures, indexes, ETPs and on the individual blue chip companies, potentially increasing the speed/intensity to obtain or liquidate the same S&P 500 securities in a crisis market.

The ETP managements' considerations of risks from leverage through the use of derivatives should not be limited to the underlying assets in the portfolio of an ETF, but also the derivatives on the ETF itself and the other derivative products on the underlying assets, which are the base for many other ETFs and derivatives.

A holistic evaluation of the concentration of derivative products on the small number of liquid securities raises significant concerns regarding the interaction and proper functioning of these products under severely stressed market conditions.

In a negatively affected market, there may not be sufficient securities available or created to meet all long/short and derivative delivery obligations. Various products and investors could be competing against each other for scarce liquidity. The natural likely result of these settlement inefficiencies is a liquidity freeze that could affect the financial system as a whole.

Liquidity of the Underlying: Complying with The 1940 Act

The true liquidity of the underlying derivatives in the ETF portfolio is important (not only the "price and execution speed", but also the "post-execution" liquidity[16]). When the underlying

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[14] The largest NASDAQ listed companies make up the NASDAQ 100 Index; ¾ of the NASDAQ 100 stocks are also components of the S&P 500 (77 out of 100 companies).

[15] OneChicago, Benefits of SSF's, http://www.onechicago.com/?page_id=74

[16] Real securities market liquidity is much broader in scope and includes, liquidity to; a) settle transactions, b) borrow securities for short sales, c) return borrowed assets to lenders, d) provide good collateral and margin loans consistent with federal regulations, e) have properly segregated shares/capital for fully paid for securities[16], f) create/redeem shares of ETFs, and g) exit positions in stressed market environments. These components of liquidity are critical to market health, quality and integrity. History suggests a degradation of these liquidity elements can/will end badly for the financial system as a whole.
See 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

assets are illiquid, a fund could be unable to accurately determine its leverage in stressed market conditions.

This SEC proposal discussed a DERA report on derivative use. DERA found:

> "Some managed futures funds and currency funds, for example, pursue their strategies almost exclusively through derivatives transactions, with the funds' assets generally consisting of cash and cash equivalents. For example, four funds in DERA's sample had exposures in excess of 500% of net assets, and three of them were managed futures funds, with exposures ranging up to approximately 950% of net assets."

Do these funds meet the requirements of the 1940 Act? Under the 1940 Act the SEC has designated that an open-end fund (most ETFs today) is to invest no more than ***15% of its' assets*** in illiquid securities stating:[17]

> "The term "illiquid security" generally includes any security which cannot be disposed of promptly and in the ordinary course of business without taking a reduced price. A security is considered illiquid if a fund cannot receive the amount at which it values the instrument within seven-days."

The SEC cautioned that the guidelines would not:[18]

> "…relieve a fund from the requirements concerning valuation and the **general responsibility to maintain a level of portfolio liquidity that is appropriate** under the circumstances. If no market quotations for an illiquid security are available, the board of directors of the fund will be required to determine the fair value of the security. In addition, the **Commission expects funds to *monitor portfolio liquidity on an ongoing basis*** to determine whether, in light of current circumstances, an ***adequate level of liquidity is being maintained***."

Like many other assets held by some ETFs, derivatives may be hard to liquidate or value in a stressed market environment and the funds will not be able to comply with the SEC's expectation of "funds to *monitor portfolio liquidity on an ongoing basis* to determine whether, in light of current circumstances, an *adequate level of liquidity is being maintained".*

The Growing Number of Illiquid ETPs

ETPs have grown swiftly in number and there are currently 1,866 U.S. ETPs. Many of these simply should not be classified as a product that acts like a mutual fund or given regulatory legitimacy because they are registered under the 1940 Act.

Some of these products may have been designed to take what were originally illiquid assets from the books of operators, bundle them into an ETP to make them appear liquid and sell them off to unsuspecting investors.

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[17] *Acquisition and Valuation of Certain Portfolio Instruments by Registered Investment Companies*, SEC Release No. IC-14983, March 17, 1986 http://www.sec.gov/rules/final/1986/ic-14983.pdf

[18] *Revisions of Guidelines to Form N-1A*, SEC Release No. 33-6927, March 20, 1992 http://www.sec.gov/rules/other/1992/33-6927.pdf

As we have detailed, many of these products would by virtually all metrics be considered illiquid.[19] When we examined ETPs in December 2014, over 70% had an average daily volume of less than 100 thousand shares and 779 ETPs or 47% of those existing at the time had trade volumes less than 20,000 shares per day. For many of these products, there are days without any shares trading. At the same time, there were **720 ETPs** or **43%** of those trading in the U.S., **below a 'commonly recognized asset level of sustainability'** of $50 million, which suggests that even a limited amount of stress could cause ETPs under these conditions to fail.[20]

One might ask, what is the problem here? Wall Street does sometimes develop products that fail to establish sustained markets. The trouble with illiquid ETFs is their registration under the 1940 Act gives them an implied liquidity and viability, which does not exist.

As discussed above, under the 1940 Act a security is illiquid if it cannot be liquidated within 7 days, without disturbing the market prices. These illiquid, potentially 'unsustainable' products are being sold to investors as if they are safe, liquid securities that are complying with federal securities regulations.

A Barron's author interviewed Gershon Distenfeld, a Senior Vice President and director of high-yield at AllianceBernstein, a global asset management firm with $485 billion in assets under management, summarizing:[21]

> "'Investors associate ETFs with being **cheap, passive and liquid**,' says Distenfeld. '**The reality is that all three are not the case.**'"

Non-Disclosure of Risks to Investors

The general and expanding risks from derivatives and increasing leverage are known to the operators of ETPs, auditors, Authorized Participants and other gatekeepers, but they have not been clearly and thoroughly disclosed to investors. ETP operators have an inherent responsibility and duty under the securities laws to disclose all risks accurately and fully to potential investors.

This may be similar to the mortgage-backed securities crisis of 2007/2008 with soaring leverage on risky investments that was not disclosed to the public or investors. Because the risks were not disclosed, regulators including the Federal Reserve did not identify or understand the danger in the products until after the crisis was underway.

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[19] See *Section 1– Overview of Exchange Traded Products* 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

[20] ETF Operator State Street Corporation - SPDR University: An Active ETF Due Diligence Checklist, January 2014 "Significant assets illustrate investor interest and, although products' break-even points vary, a ***commonly recognized asset level*** **at which an ETF becomes** ***sustainable*** **is** ***$50 million*****, a level not matched by almost half of today's ETFs**. Greater assets under management can help enhance a fund's liquidity." http://spdr-etfs.com/data/uploads/2014/01/An-Active-ETF-Due-Diligence-Check-List.pdf

[21] Barron's blog, *Icahn and Fink May Both Be Wrong About High-Yield ETFs*, Amey Stone, July 20, 2015 http://blogs.barrons.com/incomeinvesting/2015/07/20/icahn-and-fink-may-both-be-wrong-about-high-yield-etfs/?mod=BOL_hp_blog_ii

When firms that were highly leveraged became stressed and began to collapse, many investors were caught off guard, unaware of the true risks and were badly harmed. As discussed, while most investors in mortgage-backed securities were institutions; ETPs are being heavily marketed to and increasingly purchased by pension and mutual funds, retail investors and registered investment advisors are recommending ETPs to their clients. As BlackRock has advertised:[22]

> *"ETFs are investment products that can help individuals **build a nest egg**, prepare for **retirement**, or save for their **children's education**. They also help institutions such as large pension plans, foundations and endowments **meet their financial obligations**."*

Disclosure and transparency of investments is a vital part of the federal securities laws and the proper functioning of the U.S. markets. The lack of disclosure creates operational and systemic risk for large and small investors, which is why investment transparency and full disclosure is so very important.

Clearly, there is a lack of disclosure in the exploding ETP business. Any new financial products that expand at these rates should be carefully scrutinized, as the SEC is now doing.

Some of the data that we discuss herein and throughout our previous submissions to the U.S. government includes information that comes directly from ETP operators. The trustees or boards, the advisors and sub-advisors, along with the auditors that are responsible for overseeing important ETFs should be well aware that for extended periods of time, Authorized Participants are not causing the creation of net new investments (this finding is not from obscure data; it is from the ETF operators' own data).

To simplify, if you were the trustee or auditor of an ETF like the XRT, should you be concerned and disclose:

- that there are multiple owners for the same issued security?
- the secondary market activity may not be resulting in legal settlement of the ETF?
- when you know that short selling is exceeding 60 and 70% in your ETF, that there may be a marketplace problem that is affecting supply and demand for your ETF?
- or, that these types of issues could result in a disruption to your ETF that may ripple into other related ETFs, other derivative products and eventually/or swiftly throughout the underlying equity securities?

[22] Canadian ETF Watch, *ETFs: A Need for Greater Transparency and Regulation*, Mary Anne Wiley, Managing Director, Head of iShares Distribution at BlackRock Asset Management Canada, September 2011 http://www.canadianetfwatch.com/reports/CanadianETFWatch-Volume2Issue5.pdf

The Authorized Participants are classified by regulators as gatekeepers for a well-functioning marketplace and the legal requirements of a securities trade. As John Zecca, Senior Vice President of Market Regulation for Nasdaq's U.S. Markets stated on March 21, 2016 (7 days prior to this submission):[23]

> "Authorized Participants, as gatekeepers and conduits to the primary ETF markets, play vital roles in ensuring they carry out their obligations consistent with applicable securities laws and do not become a vehicle for misconduct."

If there was full disclosure and a mutual fund or pension fund with fiduciary duty to its' clients was told by its' broker that; "we will sell the XRT to you at **full price**, but we need to disclose that there are **multiple owners for the same share**", would the public fund with ***fiduciary duty*** purchase the security (for example, the broker discloses there are 10 million shares outstanding and 50 million shares owned by just institutional investors)?

Conclusion

Given the data discussed above and in our previous comment letters, there appears to be significant systemic risk building in the marketplace from flaws within the ETP operating processes. Massive advertising money has been spent by ETP operators through TV, print and the internet promoting sales of ETPs to public investors.

The data we have shown comes from the securities industry and has not been disputed by the industry or ETP media. There has been ample opportunity during 4 comment periods (spanning one year) to address the data, for which we provided sources. Therefore, it appears the data is correct and there are some core problems within the ETP industry.

If the data produced by the industry is correct, then the ETP operators should have clearly disclosed the additional risks from ETPs suggested by the data. Simply put, clear disclosure would have either; a) forced the ETP operators to devise a method of creation which is linked to the marketplace trading activity, or b) it would have alerted investors to the real underlying risks with ETPs and allowed them to judge for themselves whether these products are in fact: "investment products that can help individuals **build a nest egg**, prepare for **retirement**, or save for their **children's education**" and "institutions such as large pension plans, foundations and endowments **meet their financial obligations**."[24] (BlackRock, September 2011)

Again, we commend FSOC and the SEC for their serious approach of requesting data-driven analysis and comments in order to root out the complex issues surrounding ETPs, including this proposed derivative rule. Out of the 4 previous government requests for comments supported by data, there has been little data provided by the industry who have the records and are required to understand the information in order to perform their responsibilities as ETP

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[23] *FINRA and Nasdaq Fine Wedbush Securities Inc. $675,000 For Supervisory Violations Relating to Chronic Fails to Deliver by a Client in Multiple Exchange-Traded Funds*, March 21, 2016 http://www.finra.org/newsroom/2016/finra-and-nasdaq-fine-wedbush-securities-inc-675000-supervisory-violations-relating

[24] Canadian ETF Watch, *ETFs: A Need for Greater Transparency and Regulation*, Mary Anne Wiley, Managing Director, Head of iShares Distribution at BlackRock Asset Management Canada, September 2011 http://www.canadianetfwatch.com/reports/CanadianETFWatch-Volume2Issue5.pdf

operators and gatekeepers under the existing legal requirements of federal law and specifically the 1940 Act.

The notion of market participants being able to place an investment that can be traded on an exchange for an interest in a pool of securities/assets such as the SPDR S&P 500 ETF (Symbol: SPY) is a worthy concept. If in fact these products were creating/redeeming assets like a mutual fund is designed to operate, ETPs could retain a substantial role in the marketplace.

The morphing of these products into their current state is not understood by investors, nor was it anticipated by regulators to occur under the 1940 Act.

The data indicates significant (possibly cascading) risks from ETPs exist across a variety of investment markets, (i.e. equities, options, futures, securities lending, etc.) and the settlement of securities transactions may be unsustainable under crisis market conditions. This could result in risks to all investor classes, possibly taxpayers and damage to the integrity of the markets for a sustained period.