MODERN MARKETS INITIATIVE

September 24, 2015

U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549
Attention: Brent J. Fields, Secretary

To the Commission:

Thank you for your leadership and availability in meeting with the Modern Markets Initiative (MMI). As you know, MMI is the industry association dedicated to education and advocacy about the benefits of high frequency trading (HFT) and market structure, whose membership includes four of the most respected HFT firms in the world. We are writing to suggest measures to protect investors and help professional intermediaries maintain orderly markets in times of severe market volatility, like that experienced on August 24, 2015.

As our nations' equity and futures markets opened that morning, severe downturns in foreign markets led to tremendous selling pressure in the United States. During this opening period, HFT firms provided liquidity in thousands of stocks as well as Exchange Traded Funds (ETFs) and other instruments. Our role in the markets gave us unique insight into the problems that investors encountered when buying and selling ETFs that day, as well as ideas for practical solutions that we discuss below.

Concurrent with the massive drop in the overall market due to external forces, market participants observed that certain ETFs traded at substantial differences from the net asset value (NAV) of their underlying constituent stocks. There are many reasons why these differences may occur, including a lack of liquidity in the ETF constituents and a lack of liquidity in the ETFs themselves, so we will offer ways to increase liquidity. What is most important is that retail investors must be assured that there will always be a professional HFT intermediary prepared to purchase their ETFs whenever they want to sell.

## The Absence of Timely Stock Opens

Much has been written about the New York Stock Exchange's invocation of its Rule 48 in an effort to facilitate the primary market opening of many stocks. We expect there will be a spirited debate about the benefits of attracting moderating order flow before opening a stock, so we will not address that practice at this time. But whatever the outcome of that discussion, the fact is that many ETF market makers and arbitrageurs rely on the primary market pricing of the constituents, especially for stocks that normally trade a significant amount of their average daily volume on that exchange. Thus, until most or all of the ETF constituents are trading, investors should expect to see wider spreads quoted in the derivative instruments, as we did on the morning of August 24th.

To illustrate, Figure 1 shows the discount to NAV compared to the number of constituents that had opened that morning on the primary exchanges for the Vanguard Consumer Staples ETF. As can be seen, once all constituents had opened (by 9:58:48), the discount dropped to about 4% by 10:03:00 and to a *de minimus* level once the ETF resumed trading after the final pause by 10:09:03. (We believe this last drop would have occurred sooner had the ETF not been in a limit down condition until that time.)

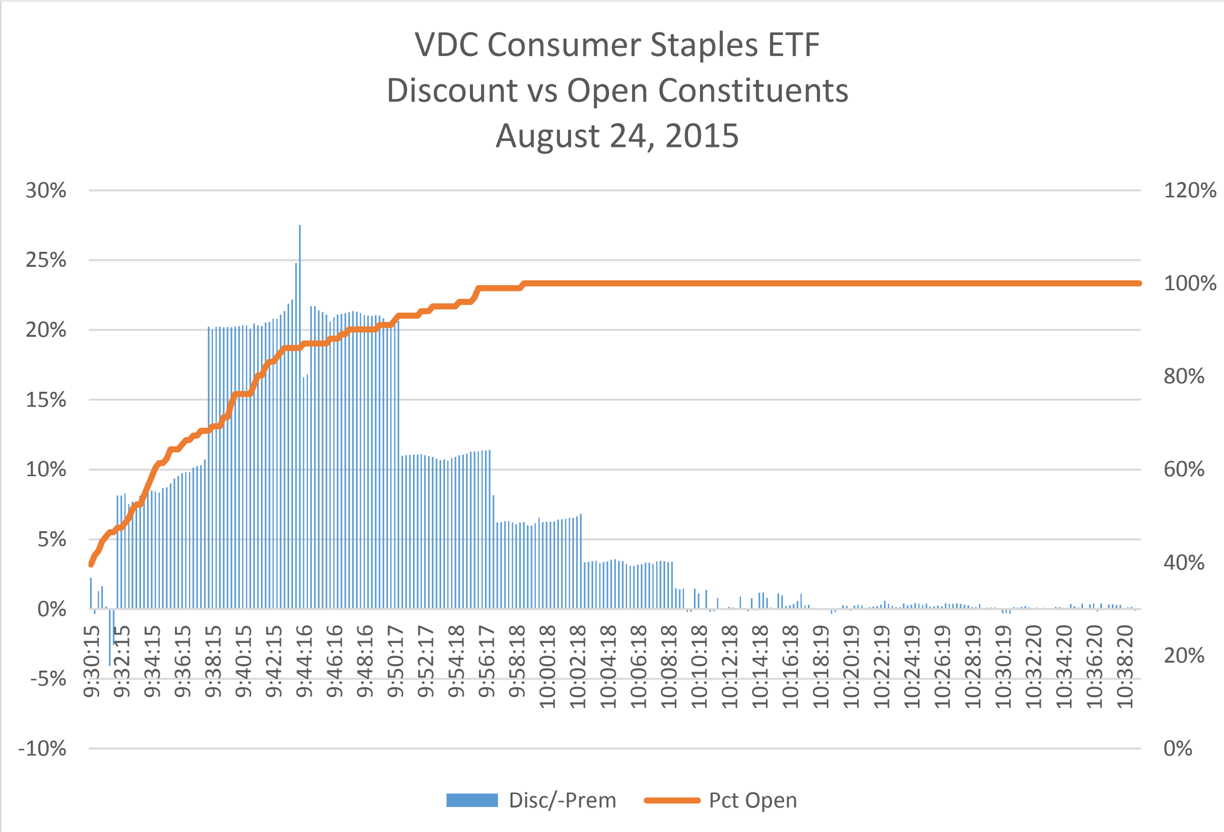


*Figure 1. Vanguard Consumer Staples ETF Discount vs Open Constituents. NAV pricing from NYSE Arca. Data provided by Activ Financial.*

In addition, once the constituents have opened, LULD pauses may cause ETF market makers to widen their spreads. We urge the Commission to analyze the interactions between LULD and ETF spreads.

## The Need to Clarify Exchange Policies

As much as the opening process contributed to wide ETF spreads, another factor was also quite important, although it has received scant attention. We believe that some professional participants elected not to trade or widened their quoted spreads, due to uncertainty concerning the Exchanges' policies about when they might "break" a trade. HFT market makers and arbitrageurs were concerned that some ETF trades might eventually be rescinded due to wide disparities from NAV, potentially leaving them with unhedged positions in the constituent stocks. This uncertainty may have caused them to pause their trading in order to maintain responsible risk profiles.

ETF arbitrage is an extremely low-margin trade, and being able to hedge these trades is part of HFT firms' regulatory responsibilities and capital requirements. For this reason, professional HFT intermediaries maintain real-time risk management systems that are an integral part of their trading strategies. The prospect of an exchange nullifying certain trades long after their completion is not merely a P&L issue for them, but also a risk issue.

Since its founding, MMI has advocated for transparent markets. One way to mitigate this risk while increasing transparency is to require Exchanges to explicitly state what conditions will cause a trade to be rescinded. We recognize that exchanges have published "Clearly Erroneous" rules but such rules include items that may (or may not) be considered, such as, "volume and volatility for the security," "trading in the security was recently halted/resumed," and "general volatility of market conditions."[1] Because these items do not include specific values for their metrics they result in investor uncertainty that can lead to wider spreads for ETFs and their constituents.

In particular, exchanges should clearly state that they will not break ETF trades solely because of wide spreads from NAV.

**Enhancing Hedging Ability**

Another Commission action that could facilitate additional liquidity would be to ease the restrictions on short sales of ETF constituents for bona fide ETF arbitrage activity. It is important to maintain the relationship between ETFs and their underlying constituents at all times, but especially during times of market duress so market participants can trade at a price reasonably related to fair value.

We believe that when an investor is long an ETF, exempting an equivalent amount of that ETFs constituents (or derivatives representing an equivalent amount of constituents) from the Regulation SHO short sale price test restriction would promote more accurate market pricing of these instruments, and more importantly, provide a more liquid market for investors who want to sell their ETFs.

We understand that the Commission examined this issue during the Regulation SHO rulemaking process but given the increase in the use of ETFs as a retail investment since then, we think the time is right for a re-evaluation.

**Protecting Retail Investors**

Some commentators have expressed belief that investors unwittingly sold ETFs at values significantly below their NAVs. At this time, we are unaware of any evidence that shows this to be true, but until actual trading data is available for such analysis, we believe this is a good time for brokers to engage in a meaningful discussion with their clients about "best execution" principles. Different brokers handle client orders in different ways and in the case of ETFs, a re-examination of best practices should be undertaken.

Investors have come to expect that ETFs will trade in close proximity to their NAVs, however, (especially as described in Figure 1) it is an expectation that may not always be realistic, especially when a large number of constituents are paused due to market regulatory strictures or have not opened for trading on their primary exchange. Brokers should educate their clients as to how and when these events may occur, and explore new ways to insulate clients from their effects. In particular, we believe innovative uses of technology could help brokers fulfill their order handling requirements.

[1] For example, Nasdaq Rule 11890 and NYSE Arca Rule 7.10 contain similar language.

For example, we envision brokers offering their clients an optional service – a “retail circuit breaker” – whereby, they would automatically suspend execution of ETF orders while the trading price differed from NAV by an agreed-upon maximum amount, say 5%. We believe the technology to accomplish this is well within the capabilities of many brokerage firms and third-party service providers.[2]

**A Data-Driven Study**

We cannot stress enough the harm that comes to market structure when commentators react to events without the ability to review the supporting data. We trust the Commission will take a data-driven approach in assessing the events of August 24th, 2015 and examine the activity of all market participants, including automated and non-automated, retail and institutional (through the actions of their brokers), HFT and non-HFT investors. In addition, we recommend that any data from the SEC and CFTC include the same periodicity and participant categorizations to allow for meaningful comparison, and that all such data be widely published. We believe this approach is critical in helping understand what motivated the trading decisions that were made and, more importantly, what could have been done differently to facilitate additional liquidity in the market.

Such a study would set out the data – the facts – and allow knowledgeable participants to draw informed conclusions. We understand that different people will have different perspectives on the causes and lessons learned, but we should seek to prevent conclusions based on conjecture. As the late, great U.S. Senator Daniel Patrick Moynihan once said, “Everyone is entitled to his own opinion, but not his own facts.” Please give us the ability to perform in-depth analyses of the facts.

In closing, we look forward to continuing dialogue with the Commission on market structure improvements and offer our assistance in examining these complex issues.

Very truly yours,

William R. Harts
Chief Executive Officer

Cc: The Honorable Mary Jo White, Chair
The Honorable Luis A. Aguilar, Commissioner
The Honorable Daniel M. Gallagher, Commissioner
The Honorable Kara M. Stein, Commissioner
The Honorable Michael S. Piwowar, Commissioner
Mr. Stephen Luparello, Director, Division of Trading and Markets
Mr. David Grim, Director, Division of Investment Management
Mr. Mark J. Flannery, Chief Economist and Director of Economic and Risk Analysis Division
Ms. Josephine Tao, Assistant Director, Division of Trading and Markets
Ms. Valerie Dahiya, Special Counsel

[2] We note that ETF listing exchanges currently transmit “indicative NAV” values every 15 seconds to the consolidated SIP feed, information that could be used for comparison with the trading price. That said, we understand that these values may be considered stale if the ETF constituents are not trading.