Testimony of Eric Noll
Executive Vice President and Head of Transaction Services
NASDAQ OMX
Before the Securities Subcommittee
Of the
Senate Banking Committee
October 19, 2011

Thank you Chairman Reed and Ranking Member Crapo for the invitation to speak to you today about an important category of financial products -- Exchange Traded Products (ETPs)[1]. Nasdaq OMX lists and trades these products and partners with the Financial Industry Regulatory Authority (FINRA) to ensure quality regulation and protection of investors. We also applaud the important work by the Securities and Exchange Commission (SEC) to establish the listing and trading environment that has led to a competitive and innovative environment for these products.

As we examine these issues we should recall that these products have done a lot of good for a lot of investors since they were first developed almost 20 years ago: they have reduced the cost of investing in equities; they have reduced the risk of equity investment and broadened the tools to hedge risk; they have often been the way many Americans have begun successfully investing.

In fact, taken as a whole, ETPs are one of the greatest financial innovations of our time and offer great value to retail and institutional investment communities. ETPs offer transparency, liquidity, diversification, cost efficiency and investment flexibility to gain broad market exposure or to express a directional view as a core or satellite component to one's investment portfolio. ETPs do so while offering investment exposure to all asset classes-many of which would otherwise be inaccessible.

We at NASDAQ OMX are aware of the recent cautionary calls by some industry experts and regulatory groups about ETPs who are rightly applying a presumption of doubt and scrutiny to all financial matters that might harbor systemic risks for our post 2008 economy. Evaluation, understanding and debate about these issues is healthy and we welcome the chance to comment on systemic risks arising from ETPs, how we view their contribution to the markets/investors and some emerging international issues. At NASDAQ we aim to be the champion of ETP transparency as it relates to the underlying indices, listing and trading the products and the dissemination of ETP related data.

[1] The majority of this testimony concerns the broad and diverse group of Exchange Traded Products (ETPs), including Exchange Traded Funds (ETFs). Sections on market activity and risk narrow the discussion to ETFs because they have the best available data and make up the vast majority of equity ETPs.

A word about our listing standards: they are developed in a completely transparent manner with full public comment and SEC approval; at NASDAQ we focus on the key issues for investors, like ensuring the financial strength of the issuers and specifying the components of the products. And, of course, we have the people and tools to monitor compliance with these rules on a continuous basis.

These are volatile times in our markets. In difficult times it is natural to look for a cause that can be easily identified and even fixed. ETPs are a tempting target. But restricting or eliminating the ETP business will not solve the sovereign debt crisis in Europe, will not balance the US budget, will not restore bank balance sheets, will not add jobs, and will not repay consumer debt and get them spending again. There are very large, very real uncertainties that are driving global financial market volatility.

In fact, ETPs provide investors with very valuable diversification, hedging and risk management opportunities. For those reason ETPs have grown rapidly in popularity over recent years and it is not uncommon for trading in ETPs to increase on volatile days. What is interesting is that even for the largest ETPs, their proportion of overall trading is relatively stable in proportion to trading in the underlying stocks.

ETPs, particularly equity based ETFs, also benefit listed companies. By being included in a single, diversified security companies gain access to a greater audience of investors who may not have bought the individual stock. And, of course, this means that the markets are deeper and more liquid, benefiting not only investors but the economy as a whole.

Prices of ETFs fluctuate with changes in the value of the underlying stocks and with changes in supply and demand for the ETF itself. These two prices are kept in line by market makers who trade the ETF, the underlying stocks, and can create and redeem units of the ETFs as more or fewer are demanded by investors. All of these activities are rules based, entirely transparent, and mostly occurring on exchanges and other transparent institutions.

It is really hard to overuse the word “transparent” when talking about ETPs. That is why some investors prefer them over other similar products, like mutual funds. Mutual funds and ETPs play different roles in an investor’s portfolio, but ETPs low cost and transparency make them an important category that should remain widely available.

As I mentioned at the outset, it is important to understand that ETPs already have an established history of functioning within the markets. The first modern ETF was introduced in 1993, and NASDAQ OMX launched its transformative QQQ equity index based ETF in 1999. Our flagship ETF, the QQQ has been the home for millions of investors who want to invest in the NASDAQ 100 index – the top 100 NASDAQ

listed non-financial companies - a proprietary index of our category defining companies like Apple, Microsoft, Cisco, Staples, Dell, Qualcomm and others. The QQQ is one of the most widely recognized and traded securities in the world. I can tell you from personal experience that the companies that make up QQQ consider it a real achievement, and certainly NASDAQ is proud of the excellence QQQ represents.

Since these products were first introduced, innovations have propelled them from simple indexes on a basket of stocks, ETFs, to a host of other ETPs that approach complex financial strategies for investors. Even some of the names of these ETPs suggest diversity or even complexity– commodity ETPs, currency ETPs, leveraged ETFs and even inverse leveraged ETFs.

As of September 30, 2011, according to Blackrock's most recent ETF Landscape Report, there were over 4,000 Exchange Traded Products listed globally, of which 1,335 were listed in the United States representing assets of $1.4 trillion and $969 billion respectively. Of the 1,335 products listed in the United States 83 are listed on NASDAQ OMX; however, all domestic ETPs are actively traded to varying degrees on the suite of NASDAQ OMX domestic exchanges-including PSX and NASDAQ BX.

Moreover, NASDAQ trades almost 23% of ETF dollar volume representing an average of over 350 million shares and $21 billion per day. Additionally, our Nordic exchange list and trade 69 ETPs in Europe.

The proliferation of ETPs as an investment vehicle and growth of the assets in ETPs has happened more quickly than the needed broader education about the products and their structures to investors, regulators, academics and policy makers. This growth resulted from investors enthusiastically embracing exchange traded products for the aforementioned benefits; with a consequence that some have formed incorrect assumptions (in many cases even by those in the investment community). Among the most relevant of those assumption is that all ETPs are constructed the same and are based on and track an underlying index. This isn't the case, but that does not infer that the product category is not beneficial to the marketplace and investment community.

Innovation has allowed ETPs to adapt from ETFs tracking baskets of domestic equities to more sophisticated products, in some cases holding derivatives and/or using leverage as a tool of the product's investment objective. These new products add value in that they offer new and quite unique exposure to the markets. This, however, does not imply that all products are meant for all investors. Investor education and disciplined application of suitability standards for any prospective holder of a product will continue to be paramount as ETP numbers grow and the investment objectives continue to expand.

ETPs and market risk:

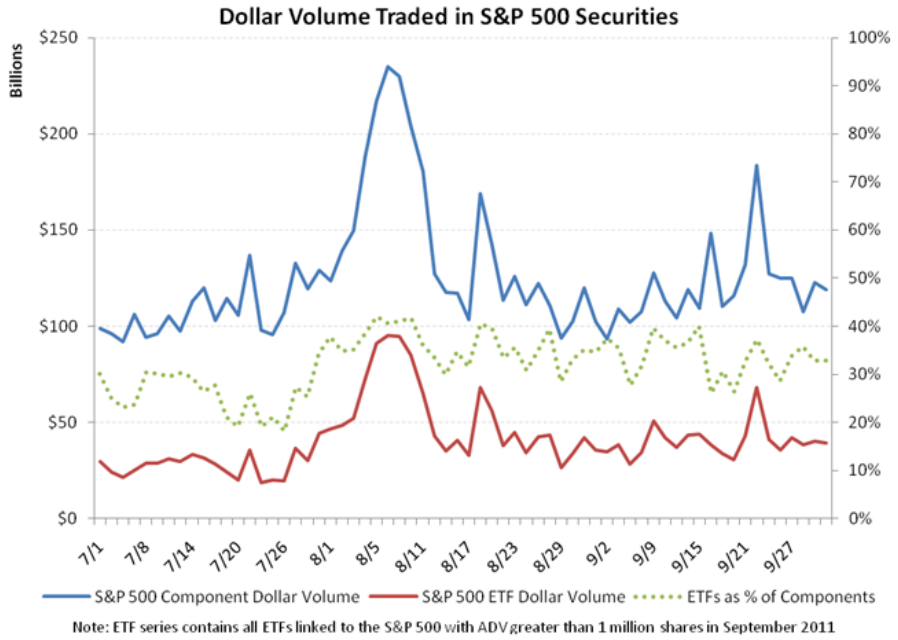
We believe that ETPs are of limited concern when evaluating them in the context of whether they are a potential culprit in future situational analysis of systemic risks to our financial system. While activity in ETPs can generate corresponding transactions in the underlying securities, ETPs pale in comparison with other financial instruments.

Further, some have tried to use the extraordinary trading environment we have experienced over the last year to connect ETP activity with some chaotic trading days. We think these analyses ignore the unparalleled uncertainty that the market must process during the fast paced news and information cycle of every trading day. From rolling flirtations with debt and sovereign failure in Europe, to potential government debt payment interruptions in the U.S., to a global demand curve for goods, services and human capital that no one can accurately determine our markets are simply trying to rationalize and apply metrics to far too many unknowns. ETPs do not cause this, they, like other asset classes are just trying to move within this turbulent atmosphere.

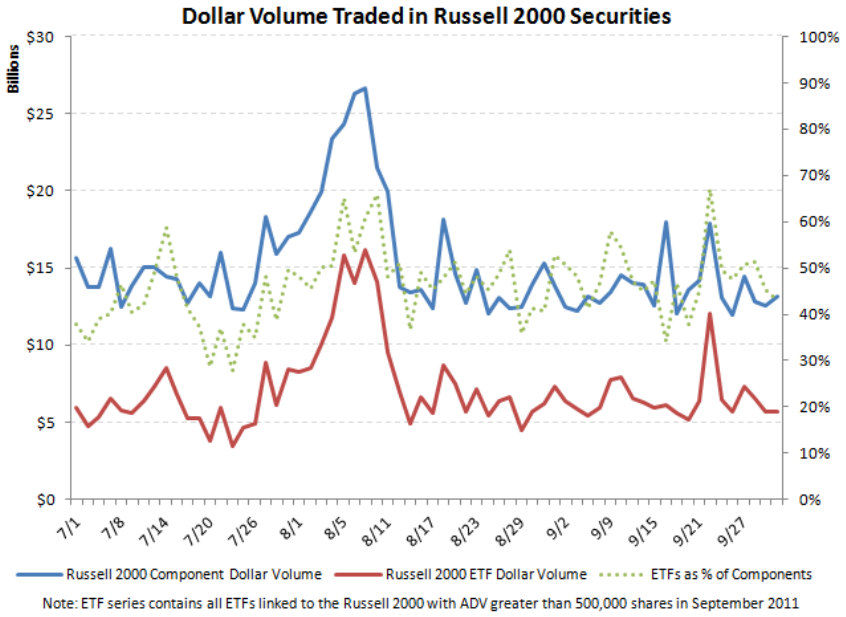
We had our economic research team look at trading in ETFs on normal and volatile days. Trading in ETFs varies roughly in proportion with overall trading in the market. When news breaks and market prices move trading volume increases in both the ETFs and the underlying stocks.

The largest ETFs track the S&P 500 index. As a group they trade about $40B worth of volume each day (July-September 2011). Though large, that is a relatively small amount of trading when compared to the $125B traded daily in the underlying 500 stocks that make up the index.

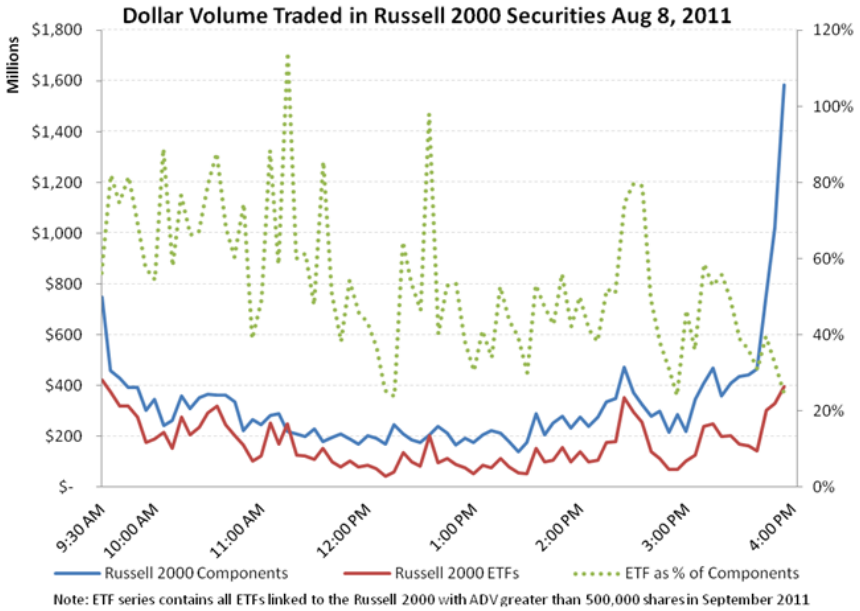
On very volatile trading days, such as those that occurred in early August of this year, trading in both the ETFs and the underlying stocks increases. Because many investors manage their market risk using the ETFs, trading in ETFs rises slightly more on a percentage basis than trading in the underlying. This is not surprising considering the convenient risk management opportunity provided by ETFs.



In a broader index, such as the Russell 2000, ETFs provide even greater benefits to investors. Buying a single security is far easier than 2000 often less liquid ones. For that reason, it is not surprising that ETFs based on the Russell 2000 trade more relative to the underlying. Average daily dollar volume for the Russell 2000 ETFs is about $7B. Average daily dollar volume in the underlying 2000 stocks is about $15B. On volatile days in August 2011 the Russell 2000 ETFs traded over twice as much as on a normal day ($16B on August 9, 2011) while the underlying stocks did not quite double in dollar volume ($27B on August 9, 2011).

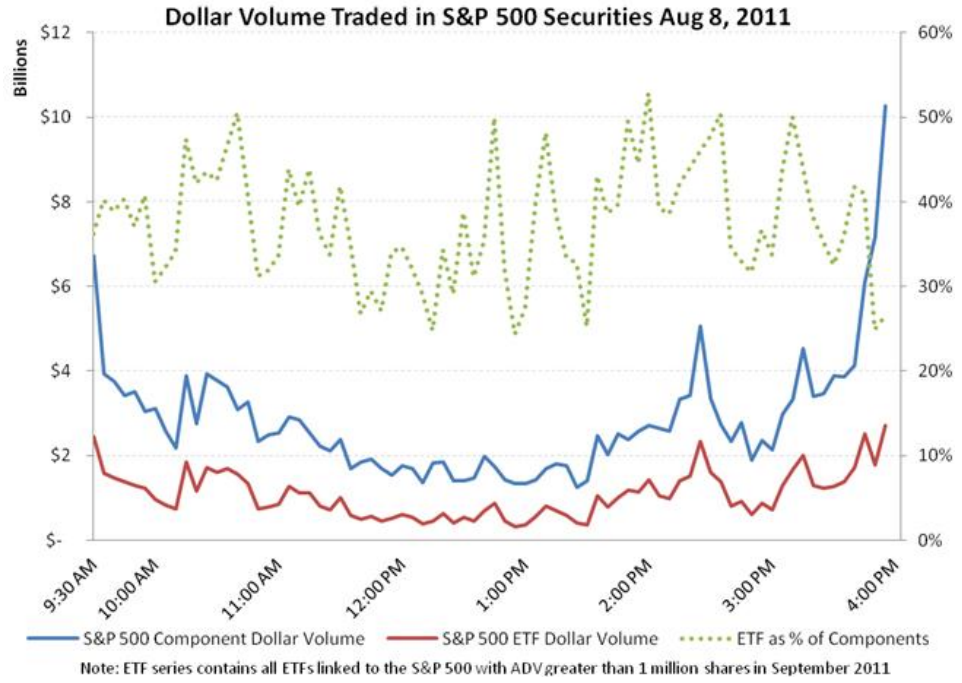


Within the day, ETF volume fluctuates along with volume of the underlying stocks. Late in the day, trading of the stocks underlying the index increases disproportionately, as many investors and traders adjust their exposure near the end of the day. Trading in the ETF is relatively less active late in the day.



Within the day, the Russell 2000 ETFs often trade in dollar volumes approaching the amount traded in the underlying 2000 stocks. Again, this is not surprising considering the benefit offered investors of being able to control their exposure to this large index of relatively small companies with a single instrument. Like the wider index, trading in the underlying components increases significantly at the end of the day, reflecting many investors and traders attempting to buy or sell the individual stocks near the official closing price. Late in the day trading in the ETF itself increases less than the component stocks.

The trading patterns we observe in ETFs are what you would expect from these very popular and useful investment vehicles. It is not surprising to see increased volume near the close and when volatility is high. The amount of the increase is consistent with the value these securities provide investors and traders in managing their exposure to the very real macroeconomic and political events that have driven markets recently.



Ensuring a quality market for ETPs:

Let me take a moment to comment on regulation. NASDAQ MarketWatch *and* regulators at FINRA *and* the SEC monitor activity in all securities traded or listed on the NASDAQ stock market, including ETPs. As I inferred earlier, we support coordinating SRO, Broker, SEC and FINRA policy to help answer the

question: How can investors better understand these products? Suitability and education should the underpinning of this regulatory dialogue.

From a listing perspective the SEC's division of Trading and Markets is deliberate and thorough in its review of new products. Aside from new products that fall within the generic listing standards, in other words "plain vanilla" index based products, sponsors are required to submit a rule filing with the SEC through the exchange (in the form of a 19b-4); the time to market is typically no shorter than 3 months and involves multiple rounds of comments between the Commission, exchange and sponsor. Listing standards have evolved with new products and will continue to do so; we are actively engaged with the SEC in developing new listing standards to deal with new product developments.

The SEC and the exchanges have also partnered to look at trading rules for all exchange traded assets including ETPs. Trading of ETPs is protected by the same volatility protection provided for normal equities. Following the 2008 and financial crisis and the May 6, 2010 "Flash Crash", NASDAQ OMX along with the other exchanges and the SEC implemented two market-wide changes that limit the impact of volatility on stock prices.

First, we have new short selling restrictions that are triggered whenever a security's price falls more than 10% on a day. At that point an order to sell short may not trade against bids, preventing them from depleting demand for the stock. Since the short sale rule was implemented in February 2011, ETFs are responsible for less than 4% of the incidents of short selling restrictions, despite making up about 14% of the listed securities in the US.

Second, all markets have adopted Single Stock Trading Pauses that occur when a security's price moves rapidly over a 5 minute period. In such a case the stock is halted for 5 minutes then re-opened with an auction. Since the SSTP rule went into effect in June 2010, ETFs have been responsible for just over 2% of all SSTP halts while making up 14% of all securities. Since the SSTP rule was expanded to cover a greater number of ETFs and other securities in August 2011, ETFs have been responsible for less than 3% of all SSTP halts.

NASDAQ along with the other exchanges and the Securities and Exchange Commission are working to upgrade from the Single Stock Trading Pauses to a market-wide limit up limit down rule. Limit up limit down rules proved effective in the futures markets during the May 6, 2010 "flash crash". The advantages of a limit up limit down rule are that it prevents trades at extreme prices before they happen and then does not immediately go into a halt, thereby allowing the continuous market to recover in many cases without the need for a complete halt.

An important consideration for the limit up limit down rule is interaction between price limits in individual stocks and limits in securities that derive their prices from those individual stocks such as ETPs. We are working with the other exchanges and the Securities and Exchange Commission to control any unintended consequences of the rule on ETPs.

ETPs in the U.S. are different from internationally similar products:

Finally, we should examine the comparisons with foreign- issued ETPs. I believe that the U.S. product design is superior. This is especially true when comparing U.S. products with comparable European products. Specifically, with derivative- based ETPs, in some cases, we see that there is a vertical integration within the structure of the products increasing the risk profile; this can be unknown to the investor. The trading and creation flow of a derivative- based ETP has a number of components: sponsor, exchange, market maker and custodian bank, to name some. In some cases, under the European UCITS (Europe's equivalent of the Investment Company Act of 1940) structure, individual firms are permitted to fulfill multiple roles within the construct of the product's trading and or creation/redemption process. In other words, the Sponsor/Issuer of an ETP could be the same entity as the market maker, distributor, intraday NAV calculation agent, custodian bank and counterparty to any underlying asset (swap or otherwise). Under the Investment Act of 1940, this is not permitted. In the U.S. construct, the Sponsor is tasked with securing independent third parties to fulfill the different, critical roles, therefore mitigating additional risks inherent in a vertical silo, European UCITS structure.

Additionally, as it relates to synthetic ETPs, the relationship between the Fund Sponsor and the underlying derivative counterparty is vastly different in the U.S. as compared to Europe. In Europe, when entering into a swap, cash is delivered to the swap counterparty (sometimes an affiliate of the sponsor) in return for collateral. However, the return collateral is often uncorrelated to the fund investment (particularly in unfunded arrangements) and in the event of a default by the counterparty the fund is left with the risk of the collateral basket and likely haircut in unwinding the collateral assets. In the U.S., this risk does not exist. Instead, the sponsor enters into a swap and delivers no cash to the counterparty; the cash is put into a third party, independent custodian account, and is invested in cash equivalents or money market instruments to collateralize the swap. The accounts are governed by a tri-party agreement. However the sponsor has authority and investment discretion over the account. Consequently, there is no collateral risk as a result of counterparty default.

Finally, there is a notable difference in transparency with respect to ETP trading in Europe and the U.S. In the U.S., our national market system mandates that all trades of 100 shares or more, both on exchange and off exchange, have to be reported to the consolidated tape – ensuring that all investors see the same

transaction data for a given security. In Europe's several jurisdictions, despite significant efforts to unify securities rules across borders, all trades are not reported to a central tape. Most ETP trades in Europe do not take place on an exchange (they trade over-the-counter) and these trades are often not reported in a timely fashion. There are obvious advantages for dynamic price discovery when all activity in any security is visible to the marketplace. As well, there are cautionary disadvantages that can lead to serious market abuses when trades can be functionally hidden from the market – and there are recent examples of the dangers inherent in such a regime.

Conclusion:

ETPs have grown in popularity because of their proven usefulness in helping investors diversify and manage risk in today's complicated markets. That popularity is reflected in daily trading activity, as it should. But they do not dominate today's market. Their proportion of trading is what you would expect when considering their usefulness. During market volatility caused by explainable economic and political events, we have seen no evidence that they increase in volume or volatility beyond what we would expect. We believe that regulatory community is well-positioned to monitor and discipline the growth and innovation within this important category of financial products.

Thank you again for the opportunity to share our experience and views about ETPs. I am happy to answer any questions you may have.