HAMLIN
CAPITAL MANAGEMENT, LLC

Looking Under The Hood Of Passive Investment Vehicles – Exchange Traded Funds

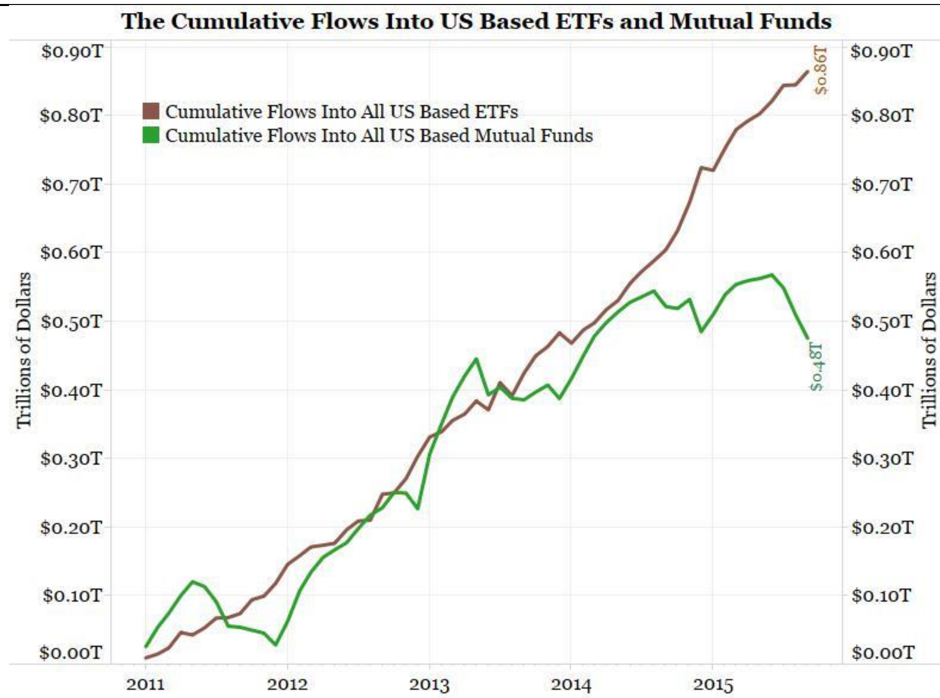
November 2015

It is not often I write about something that we do not use. I write because the expanded usage of Exchange Traded Funds (ETF) has introduced a layer of complexity into the market place that should be duly noted. The world saw some of the flaws during the morning of August 24th, 2015 when many of the largest ETF prices fell far greater than the stocks they owned. Investors who use ETFs as liquid alternatives to owning individual stocks ought to assess whether they grasp the underlying risks. Investors in the market place may also want to know how ETF trading has increased overall volatility, especially when the market is under stress. Preservation of capital requires that we know and understand what we own. There is no substitute for doing one's homework.

ETF Growth

Exchange Traded Funds are comprised of baskets of stocks and other assets packaged into securities that can be traded easily throughout the day. ETFs are supposed to track the value of the stocks and bonds they own with little tracking error and they have very low fees. Many investors have increasingly embraced the "passive" investing route as a low cost alternative to "active" investment advice and/or an expedient way to play market trends. After all, it is very convenient to use one ticker to own all S&P 500 stocks instead of individually executing 500 trades to get the same market exposure. Since the concept spawned in the early 1990's, U.S. assets in ETFs have swelled to $2.1 trillion according to Morningstar, with the greatest percentage concentrated in large cap domestic equity ETFs at 28% of total. There are now over 1,400 ETFs listed on the national exchanges. Inflows to all ETFs continue to grow while actively managed mutual funds inflows peaked in mid-2015.

Figure 1: US Fund Flows



Source: Bianco Research.

A Preferred Trading Vehicle

Over the years, equity markets have become increasingly fragmented with smaller and decimalized trades. Only 0.7% of the total outstanding stock of S&P 500 companies traded on an average 2014 day and the average trade size in number of shares is down roughly 75% from the early 2000s. Stock trading in big blocks has become more difficult. ETFs have become a greater percentage of all trading volume on the US exchanges and in many instances are far more liquid than their underlying securities. Equity ETFs have become a preferred trading vehicle for some institutional and retail investors along with short-horizon investors such as hedge funds and high frequency traders.

Unlike mutual funds, ETFs trade throughout the day on listed exchanges. ETF authorized participants trade the holdings and manage the daily price discrepancies through arbitrage between the ETF price and their underlying securities. Under normal market conditions there is very little tracking error. Investors should be aware that, during times of market stress, wide gaps between the net asset values and ETF prices can occur.

What Went Wrong

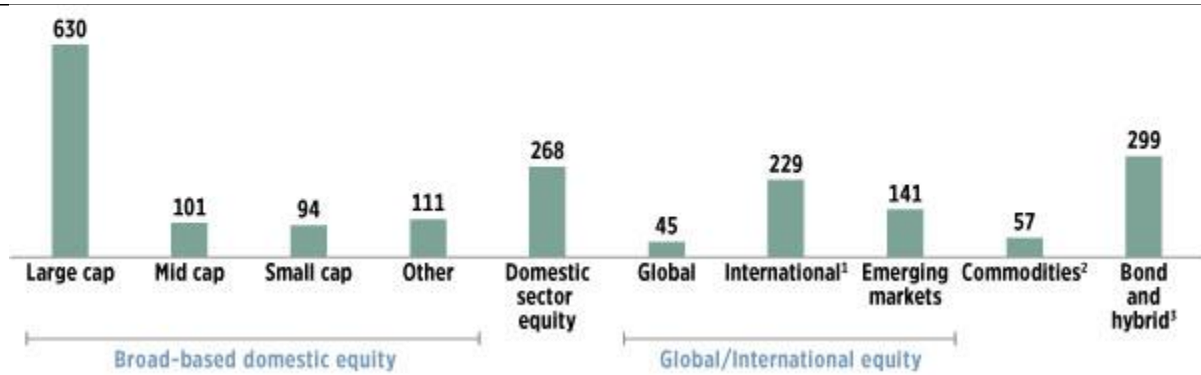
August 24th, 2015 was one such incident. The steep sell-off overseas prompted depressed US stock-index futures ahead of the market open. In the early minutes upon the open, the S&P 500 was down 5% while the iShares Core S&P500 ETF (ticker: IVV) fell 26% at one point. Other popular ETFs such as the Vanguard Dividend Appreciation ETF (VIG) and the SPDR S&P Dividend (SDY) also fell far below their net asset values, with each plunging 38% until they were halted.[1] Trading was halted nearly 1,300 times for various securities, the majority of which were ETFs. According to Credit Suisse, 42% of every dollar traded on the US exchanges was in ETFs. Market participants have cited trading circuit breaker regulations implemented after the 2010 flash crash as a major reason behind the debacle. Trading halts in either the securities or the ETF can exacerbate the mispricing, as authorized participants in the ETF cannot properly hedge their arbitrage trades without better pricing information. On August 24th, trading halts were not properly synchronized. The market stress created supply/demand imbalances which led to more confusion fueling a further selloff. This is a perfect of example of unintended consequences of regulations.

Challenges Ahead

These systemic imbalances during times of stress pose challenges and risks to investors who are using ETFs as liquid reflections of their underlying securities. Some advisors who relied on ETF liquidity placed standing stop loss sell limit orders to mitigate steep declines and saw their ETF orders executed at prices far below the underlying securities. Some trades were executed as much as -30% when they were targeting a 14% stop loss.[2] One may also imagine algorithm-driven derivatives wrapped ETF strategies going haywire. Furthermore, many investors are very concerned about bond ETFs that own more illiquid securities (such as bank loans and junk bonds) if interest rates back up suddenly.

Another concern in ETF proliferation relates to the growing volatility of the underlying stocks. A study conducted by Ohio State University shows that stocks' intraday volatility increases with ETF ownership.[3] The study estimates that, within the S&P 500 universe, the impact of ETF ownership on stock volatility is at least three times as large as for other mutual funds. Because of increased trading in ETFs, securities with high ETF ownership, such as large cap stocks, are disproportionately affected.

Figure 2: Total Net Assets of ETFs, $Billions December 2014



Source: Investment Company Institute.

[1] Barron's, September 7, 2015, The Great ETF Debacle Explained.
[2] WSJ, August 26, 2015, Stock-Market Tumult Exposes Flaws in Modern Markets.
[3] Ben-David, I., Franzoni, F., Moussawi, R., Revised October 2014, Do ETFs Increase Volatility?, Fisher College of Business Working Paper Series 2011-03020.

All of these developments have caught the attention of the Securities and Exchange Commission. There is currently a request for public comment about issues related to ETFs and their role in the marketplace. Meanwhile as market sentiment shifted back to risk-on in October 2015, US equity ETFs took in $10 billion that month, more than the previous nine months of $6 billion in inflows. Until these issues of market structure and the growing importance of ETFs are addressed, be forewarned: this is not your father's stock market. ETFs have added a new layer of demand/supply shocks to the market, thus increasing the volatility of underlying securities and potentially the fragility of the market as a whole.

Vivian Pan, PhD, CFA
November 6, 2015