

ETFs: marketing vs. reality

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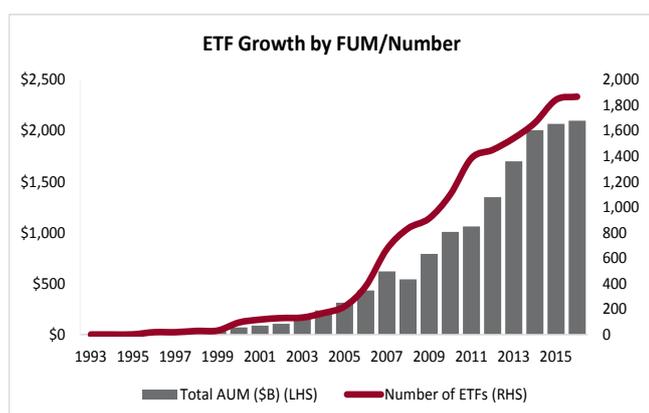
Within this article we address the Exchange Traded Fund (ETF) market, with a focus on how these products are increasingly moving away from providing a passive exposure to the broad financial market, and toward “active management”. We also look at two examples, amongst a list of many possibilities, where investor expectations could be misplaced when investing in the ETF market:

1. low volatility ETFs, that may ultimately prove to be negatively correlated with rising interest rates
2. leveraged & inverse ETFs, where daily returns and long term returns can diverge meaningfully from each other

Lastly, we briefly address the case for passive and active funds management, and how taking a concentrated yet risk adverse approach may help investors enhance investment returns.

Are ETFs the new active management?

An ETF is a type of fund which owns assets such as equities, bonds, oil futures, gold bars, foreign currency and other tradable assets, and divides ownership of those assets into shares. Unlike passive mutual funds which trade off market, ETFs trade on exchange intraday. The first ETF was launched by the Toronto Stock Exchange in 1990 and these products have grown to represent between 5-7% of the total global share market capitalisation. However it appears that rather than providing a low cost way of tracking an index as was first intended, increasingly these funds are employed as vehicles to speculate, hedge and tactically tilt portfolio holdings. During 2015, the annual trading turnover amongst ETFs in the US was 880% as compared to 12% for an average stock, and in 2016 ETFs accounted for one half of the trading volume in US stocks.¹ Clearly these are not buy and hold strategies, and given this short-termism implied in the trading data, we are not convinced investors are taking the time to truly understand the risks inherent in the ETF market.



Source: FactSet Research Systems

Do low volatility funds protect against volatility in a rising rate environment?

“Low vol” ETFs attempt to deliver close to market returns with lower levels of overall performance volatility. Fund inflows into these products more than doubled during 2016 to a run rate of \$16bn as the popularity of such funds has grown in response to the promise of downside protection during stressed trading periods. The largest low vol ETF, the iShares Edge MSCI Min Vol USA ETF (USMV) is composed of securities that in aggregate have historically delivered lower volatility relative to the broader U.S. equity market. The ETF has generated performance in line with the S&P500 with volatility as measured by standard deviation below that of the market since its inception in November 2011. However, we believe this low volatility may be partially a result of inverse interest rate correlation.

The cyclical bull market in bonds began in 1982 and has arguably reached bubble like conditions. In their book, A History of Interest Rates, authors Homer and Sylla found no period in the past 5000 years outside the present, when interest rates were below the zero bound.² Negative rates were first introduced by Denmark in 2012, and there is now globally ~\$12tn in bonds yielding negative rates. Partially as a result of this financial repression, yield starved investors have bid up the asset price (yield contraction) on bond like alternatives in the market. Namely, utilities, real estate and consumer staples. USMV has clearly been an outsized beneficiary of this trend with its weighting to utilities, real estate and consumer staples double that of the S&P 500. As such, we posit that USMV is as much a bet on low rates as it is low volatility, at a time where interest rates appear to be showing signs of rising from benign levels. The 10yr Treasury rate bottomed below 1.3% in July 2016 and as employment and inflation has firmed, this rate has risen to 2.5% currently.

Index Weights – S&P500 vs USMV

Sector	S&P 500	USMV
Info Tech	21%	16%
Financials	15%	11%
Health Care	14%	18%
Consumer Disc.	12%	8%
Industrials	11%	8%
Consumer Staples	9%	14%
Energy	8%	2%
Utilities	3%	8%
Materials	3%	2%
Real Estate	3%	8%
Balance	3%	4%
Interest rate sensitives	15%	30%

Source: USMV factsheet, November 2016

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A reminder of the damage increasing yields can do to interest rate sensitive securities is demonstrated in the table below. This is the simple scenario where the dividend yield on a listed business widens by a mere 200bps as compensation for forgoing the risk free yield on treasury bonds (i.e. equity risk premium increases whilst holding the payout ratio constant), or likewise if treasury bond yields rise by 200bps and the risk spread remains constant (i.e. market interest rates rise whilst the equity risk premium remains constant). Applying this principle to an individual security where the cash dividend is held flat, the yield compression results in an underling capital loss of 40%. Great damage can be inflicted on “long duration” portfolios with an overweight to such securities in a rising interest rate environment.

Yield Compression Example

Dividend	\$3	\$3
Yield	3%	5%
Capital	\$100	\$60
Capital Loss		-40%

Source: EAP

Indeed, we may be beginning to see the risk of rising rates within the USMV portfolio, as revealed in the 3Q16 note to investors: “USMV underperformed during this risk-on market, finishing down 1.18%. Although there was little equity volatility throughout the quarter, there was elevated interest rate volatility leading up to the September Fed Meeting. Defensive securities, such as Utilities and REITs, tend to have higher interest rate sensitivity, which USMV is not immune to.”³

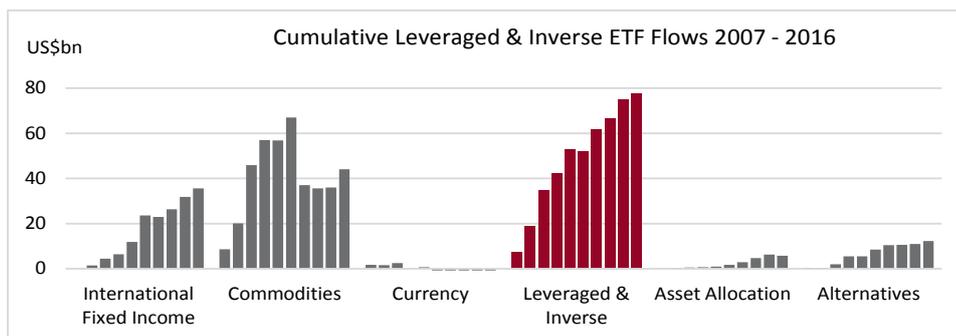
Are leveraged and inverse ETFs designed for investing or day trading?

Leveraged ETFs seek to deliver multiples of the performance of the index or benchmark they track. Inverse ETFs seek to deliver the opposite of the performance of the index or benchmark they track. Leveraged and Inverse ETFs have seen material inflows as compared to other “non-traditional” ETFs (strategies not linked to US equity, international equity or fixed income), below.

However, investors may be disappointed if they employ these products as long term strategies. Leveraged and inverse ETFs are constructed using swap and futures contracts to deliver the desired outcome *from the close of daily trading from day one, to the close of daily trading day two*. In other words, the derivative contracts re-set *daily*. Problems arise for long term holders as performance of these products can diverge meaningfully from the underlying index over a weekly, monthly or yearly basis. Here are a couple of examples of return mismatch during the Great Recession period, courtesy of the US Securities and Exchange Commission:

*Between December 1, 2008, and April 30, 2009, a particular index gained 2 percent. However, a leveraged ETF seeking to deliver twice that index’s daily return fell by 6 percent—and an inverse ETF seeking to deliver twice the inverse of the index’s daily return fell by 25 percent. During that same period, an ETF seeking to deliver three times the daily return of a different index fell 53 percent, whilst the underlying index actually gained around 8 percent. An ETF seeking to deliver three times the inverse of the index’s daily return declined by 90 percent over the same period.*⁴

Why was there such a divergence between the index return and the ETFs? Here’s a hypothetical example: let’s say that on Day 1, an index starts with a value of 1000 and a leveraged ETF that seeks to double the return of the index starts at \$1000. If the index drops by 20 points on Day 1, it has a 20 percent loss and a resulting value of \$800. Assuming it achieved its stated objective, the leveraged ETF would therefore drop 40 percent on that day and have an ending value of \$600. On Day 2, if the index rises 20 percent, the index value increases to 960. For the ETF, its value for Day 2 would rise by 40 percent, which means the ETF would have a value of \$840. On both days, the leveraged ETF did exactly what it was supposed to do – it produced daily returns that were two times the daily index returns. But let’s look at the results over the 2 day period: the index lost 4 percent (it fell from 1000 to 960) whilst the 2x leveraged ETF lost 16 percent (it fell from \$1000 to \$840). That means that over the two day period, the ETF’s negative returns were 4 times as much as the two-day return of the index instead of 2 times the return.



Source: FactSet Research Systems

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Leveraged ETF Example

	Start of Trading	Day 1	Day 2
Index	1000	800	960
Fund	1000	600	840
Return			
Index		-20%	20%
Fund		-40%	40%
Loss over two days - index			-4%
Loss over two days - ETF			-16%

Source: EAP

Additional ETF risks to consider

This letter has addressed two examples of risks that investors should be wary of when approaching the ETF market, however there are a litany of ways that ETFs may be dangerous to individual investors. We are especially wary of “synthetic unfunded ETFs” where potentially inappropriate security is offered as asset backing for ETFs; junk bond ETFs where the buyer is relying on the debt analysts of the ETF sponsor to price extraordinarily illiquid junk bonds; and counter party risk or default risk.

ETFs are also capable of providing systemic risk within the broader market. Some areas of concern include the proliferation of “ETFs of ETFs” which are reminiscent of the CDO-squared⁵ securities of pre-2007 in their liquidity characteristics; and the general lack of liquidity for the ETF markets during periods of market dislocation; and the lending out of ETF holders shares to short sellers, amongst others.⁶

What impact is passive mutual funds & ETF investing having on the market?

The marginal price of an asset is set by the marginal buyer, and with ETFs & passive mutual funds linked to the S&P500 representing 12% of total market capitalisation, these investors are becoming a more influential marginal buyer.

⁷ Thus, we suggest there is a self-reinforcing cycle here.

Whilst fundamental investors remain in the majority, and set

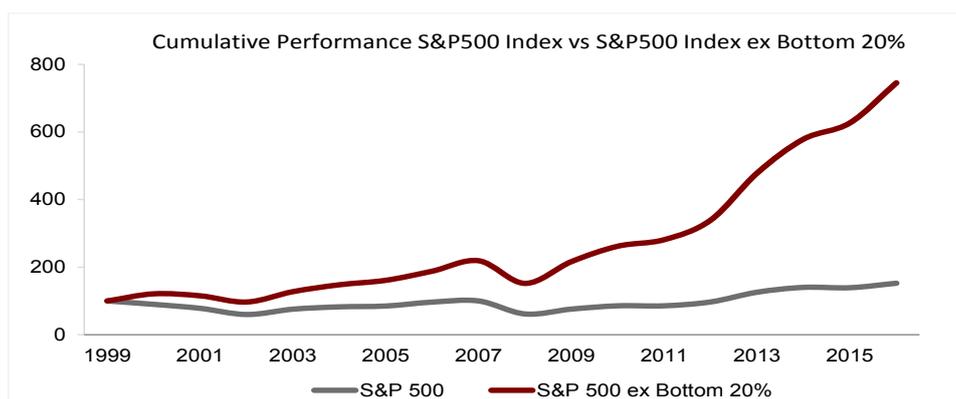
the direction of stock prices, there is a large and growing component of the market that is blindly following the active lead, as the ETF and passive mutual fund buy decision is rules based, not fundamentals based. Arguably, this may exacerbate momentum in stocks, and also drive more violent downside volatility.⁸ ETFs have not resulted in a systemic breakdown in financial markets yet, however if their relative size continues to grow in line with the 30% pa growth rate of the last decade, the ETF liquidity freezes of 2010 & 2015 may be a precursor of events to come.⁹

Should investors take an active or passive approach?

The innovation of funds that passively track a market such as the S&P500, has in aggregate been a good experience for investors. After fees an investor can expect to outperform the median manager, which is a great outcome for those unwilling or unable to invest the time in selecting a capable manager. Passive funds also perform an important role in exposing “closet index” funds which effectively mirror the index while charging active fees.

Indeed, S&P noted that over the year to June 2016, 85% of U.S. active funds underperformed the S&P 500 index. This in itself is not surprising, investors as a group cannot beat the market because in aggregate they are the market; net of fees and transaction costs the majority of funds will mathematically underperform. Such statistics are often used as an argument against active management, however it should be noted that effectively 100% of passive ETFs replicating the performance of the S&P500 underperformed the index net of fees over the past year also.

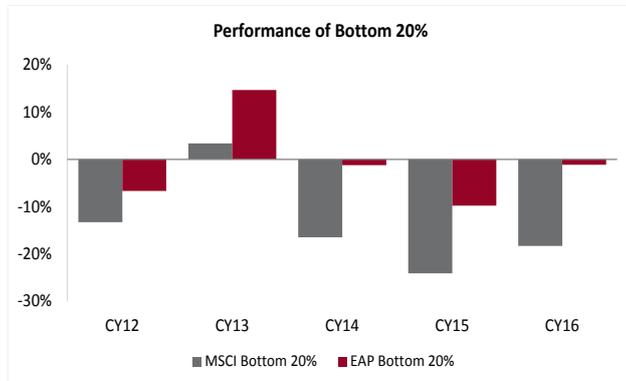
Whilst good managers are difficult to find, skilled consultants can make the task more manageable. Moreover the rewards for doing so are attractive; if one had invested \$10,000 with George Soros in 1970, by 2000 that investment would have returned ~\$26 million as compared to the same figure invested in the S&P500 of ~\$148,000. However, finding the super-star investor is not necessary for achieving investment returns above the index. If an investor had done no better than stay out of the bottom 20% from the years 1999 to 2016 she would have generated a return of 650% over this period as compared to 52% for the S&P500, below:



Source: FactSet, EAP analysis

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As such, staying out of the bottom 20% of the market is our core objective at the start of every year, and it is this conservative approach that we have employed since inception:



Source: Bloomberg

Concentration is part of the solution

We agree with the independent consultancy Zenith Investment Partners that a concentrated investment approach is part of the answer when attempting to outperform the market, especially when trying to avoid the bottom 20% of the index. In its most recent review, Zenith noted that 70% of funds within its Approved Product List (APL) that adopted a concentrated approach (those funds holding fewer than 75 positions) outperformed the index to the year ended November 2016. This compares to 55% for the more diversified funds on its APL. Zenith believes the out-performance by concentrated investors is attributed to a greater weighting to a manager's best ideas;

"Zenith believes the key attraction of concentrated funds is that they should in theory contain only a manager's best ideas. Typically, portfolio construction will be without regard for the benchmark and therefore these funds will not hold benchmark linked positions purely for risk management purposes".¹⁰

CONCLUSION

The ETF market is increasingly moving away from a passive role to an active one. The inherent risks in some ETFs are not entirely obvious and investors should seek advice regarding the underlying strategies employed by these products, especially where derivatives are used.

Passive funds have performed a useful function for those investors content with market returns, however the rewards for active investing remain attractive. A strategy of concentration coupled with risk aversion can add value to investor returns, in our view.

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9. On May 6th 2010 the Dow Jones index plunged 600 points within minutes, some stocks in the index lost half their value resulting in several thousand trades being cancelled that day. Data show that ETFs were most affected during that incident; nearly 68% of all cancelled trades involved ETFs. Despite reforms implemented in response to the above "Flash Crash", on August 24th 2015 ~20% of US listed ETFs were halted from trading at some point during the day. (International Monetary Funds, Global Financial Stability Report 2011 & Blackrock, US Equity market Structure: Lessons from August 24 2015).
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