Small and Mid-cap Low Volatility

Invesco S&P SmallCap and MidCap Low Volatility ETFs

XSLV **Invesco S&P SmallCap Low Volatility ETF**

Index	S&P SmallCap 600® Low Volatility Index
Inception	Feb. 15, 2013
AUM (As of January 31, 2020)	$2.4 billion
Total expense ratio	0.25%

XMLV **Invesco S&P MidCap Low Volatility ETF**

Index	S&P MidCap 400® Low VolatilityIndex
Inception	Feb. 15, 2013
AUM (As of January 31, 2020)	$3.8 billion
Total expense ratio	0.25%

S&P SmallCap 600 / S&P MidCap 400

↓

Identify the least volatile quintile of stocks over past the 12 months

↓

Inverse volatility weighted
(least volatile stocks receive the highest weights)

↓

S&P SmallCap 600 Low Volatility Index / S&P MidCap 400 Low Volatility Index

For illustrative purposes only.

- The low volatility anomaly[1] is prevalent in the mid and small-cap spaces, providing the opportunity to improve portfolio return and risk
- The low volatility anomaly is illustrated when blending XSLV and XMLV with their market cap-weighted benchmarks

Low Volatility in Small and Mid-cap

The low volatility anomaly states that lower risk stocks outperform higher risk stocks. The anomaly is nothing new and was discussed in the 1970's, but remains relevant and a useful investment solution. In their research paper, "Risk and the Rate of Return of Financial Assets: Some Old Wine in New Bottles" (December 1975), Robert Haugen and James Heins debunked the idea of a linear relationship between risk and return and noted that over longer periods stock portfolios with lesser variance in monthly return experienced greater average returns than their risker counter parts. The low volatility anomaly turns financial theory and the capital asset pricing model on their heads by suggesting investors are potentially better off owning lower risk stocks, while indicating there is no compensation for taking added risk.

Time has not adversely impacted the anomaly which is seen by examining performance and an efficient frontier of blends between the S&P 600 Index and the S&P Small Cap Low Volatility ETF (XSLV) and the S&P 400 Index and the S&P 400 Mid Cap Low Volatility ETF (XMLV).

XSLV

Between February 2013 (inception month for XSLV) and January 2020, XSLV returned 12.75% with a standard deviation of 12.66%. In contrast, the S&P 600 Index returned 11.41% with a standard deviation of 15.33%. Although the past does not represent the future, XSLV produced 11.7% more return with 17.4% less risk than the S&P 600 Index under scoring the persistence of the anomaly.

Given the historical performance of XSLV, a rational investor would explore just owning XSLV over a S&P 600 Index benchmark. However, it may be commercially difficult to own just one fund. Historically, XSLV has had an up capture of 87% and a down capture of 72% with a tracking error of 5.79% to the S&P 600 Index. XSLV's up capture of 87% indicates it is likely to lag the S&P 600 Index during bull market conditions, while its tracking error of 5.79% indicates XSLV can vary noticeably from the S&P 600 benchmark[3].

XMLV

There is a similar story with XMLV. Between February 2013 (XMLV's inception month) and January 2020, XMLV returned of 13.71% with a standard deviation of 10.24%. In contrast, the S&P 400 Index returned 10.78% with a standard deviation of 13.22%. Although the past does not represent the future, XMLV produced 27.2% more return with 22.5% less risk than the S&P 400 Index.

Given the historical performance of XMLV, a rational investor would explore just owning XMLV over a S&P 400 Index benchmark. However, it may be commercially difficult to own just one fund. Historically, XMLV has had an up capture of 85%% and down capture of 54% with a tracking error of 7.09% to the S&P 400 Index. XMLV's up capture of 85% indicates it is likely to lag the S&P 400 Index during bull market conditions, while its tracking error of 7.09% indicates XMLV can vary materially from the S&P 400 benchmark[3].

1 A common assumption in finance is that increasing a portfolio's risk exposure should generate a higher return. In contrast, the low volatility anomaly refers to the observation that, historically, portfolios of lower-volatility stocks produced higher risk-adjusted returns than portfolios with high-volatility stocks.
2 Sharpe ratio is a risk-adjusted measure calculated using standard deviation and excess return to determine reward per unit or risk. A higher Sharpe ratio indicates better risk-adjusted performance.
3 Source: Morningstar Direct, February 2013 - January 2020. Past performance does not represent future results

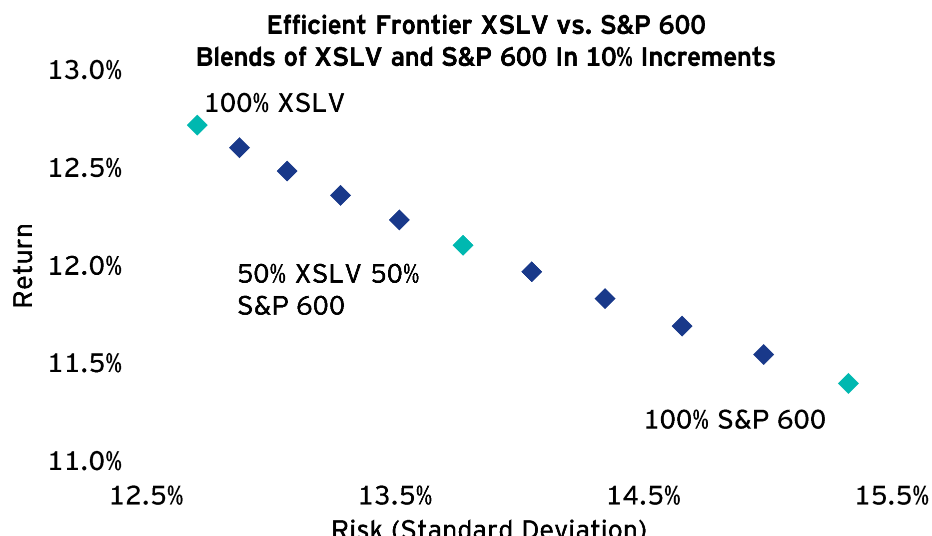
	Return (%)	Volatility	Sharpe Ratio[2]	Up Capture	Down Capture
XSLV	12.75	12.66	0.95	87%	72%
S&P 600 SmallCap Index	11.41	15.33	0.73	100%	100%
XMLV	13.71	10.24	1.23	85%	54%
S&P 400 MidCap Index	10.78	13.22	0.78	100%	100%

Source: Morningstar Direct, February 2013 – January 2020. Performance is at NAV (Net Asset Value). Performance data quoted represents past performance and does not guarantee future results; current performance may be higher or lower than performance quoted. Investment returns and principal value will fluctuate and shares, when redeemed, may be worth more or less than their original cost. An investment cannot be made directly into an index. See page 3 for standardized performance.

A 50-50% blend of XSLV and the S&P Mid-cap 400 led to a 8.41% reduction of volatility.

Implementing Small and Mid-cap Low Volatility

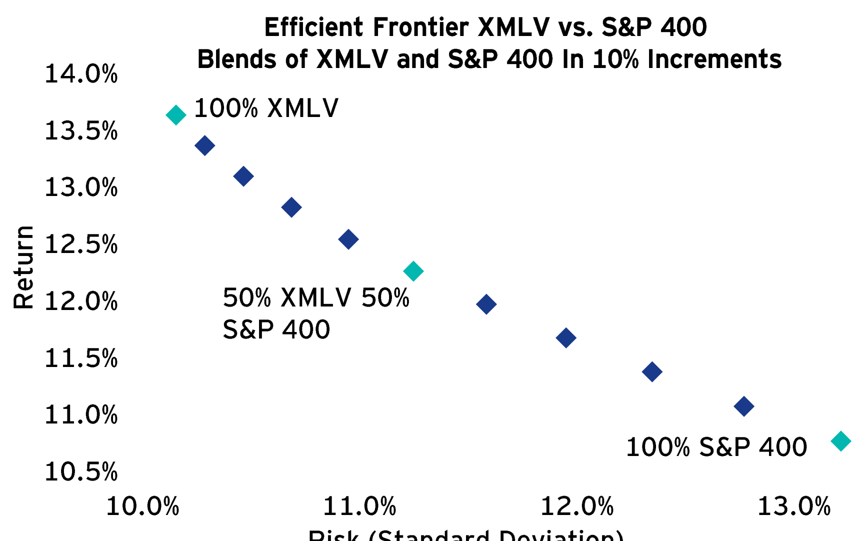
The efficient frontier demonstrates that blending XSLV with the S&P 600 Index potentially increases return while lowering risk. A 50-50% blend of XSLV and the S&P 600 led to a 108 bp reduction in standard deviation or 8.41% decrease in risk. At the same time, the 50-50% blend generated 71 bps or 6.20% more return.



See disclosure in margin.

A 50-50% blend of XMLV and the S&P Small-cap 600 led to a 19.41% reduction of volatility.

The efficient frontier demonstrates that blending XMLV with a S&P 400 Index potentially increases return while lowering risk. A 50-50% blend of XMLV and the S&P 400 led to a 197 bp reduction in standard deviation or 19.41%. At the same time, the 50-50% blend generated 149 bps or 16.25% more return.



See disclosure in margin.

Source Bloomberg LP, February 2013 – January 2020. The efficient frontier was calculated using a monthly rebalancing period. Performance quoted is past performance and cannot guarantee of comparable future results; current performance may be higher or lower. Investment returns and principal value will vary; you may have a gain or loss when you sell shares. Fund performance is at NAV and reflects fee waivers, absent which, performance data quoted would have been lower. The information illustrated in the scenarios are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. These scenarios are for illustrative purposes only and should be used as a guide to helping evaluate a factor allocation. Standard deviation measures a fund's range of total returns and identifies the spread of a fund's short–term fluctuations. An investor cannot invest directly in an index. The results assume that no cash was added to or assets withdrawn from the Index. Index returns do not represent Fund returns. The Index does not charge management fees or brokerage expenses, nor does the Index lend securities, and no revenues from securities lending were added to the performance shown. See page 3 for standardized performance.

Conclusion

In summary, XSLV and XMLV provide access to the low volatility anomaly, which has persisted since being discovered in the 1970's. The low volatility strategies potentially outperform by not losing as much in down markets, seeking to provide risk mitigation and defense. The low volatility anomaly is likely to persist due to the structural and behavior dynamics at work in the investment community. Institutional and retail investors are cautious about taking the tracking error necessary to arbitrage away the anomaly. Low volatility stocks tend to cluster in sectors and the clustering can change over time with market conditions. Likewise, the inability to use leverage and the desire to hit a home run with big stock returns are likely to keep investors interested and mispricing higher risk stocks relative to lower risk stocks.

Standardized performance as of January 31, 2020 (%)

	1 year	3 year	5 year	10 year	Since fund inception
XSLV NAV *inception date 02/15/2013*	9.90	7.76	10.95	-	12.70
XSLV market price	9.77	7.72	10.90	-	12.67
S&P SmallCap 600 Low Volatility Index	10.23	8.03	11.23	-	13.01
S&P SmallCap 600 Index	6.57	7.05	9.45	13.28	11.17
XMLV NAV *inception date 02/15/2013*	15.09	11.53	12.14	-	13.65
XMLV market price	15.03	11.50	12.14	-	13.65
S&P MidCap 400 Low Volatility Index	15.42	11.83	12.45	-	13.97
S&P MidCap 400 Index	11.27	7.70	8.70	12.79	10.54

XSLV and XMLV's total expense ratios are 0.25% and 0.25%, respectively**. Performance data quoted represents past performance and does not guarantee future results; current performance may be higher or lower than performance quoted. Investment returns and principal value will fluctuate and shares, when redeemed, may be worth more or less than their original cost**. See invesco.com to find the most recent month-end performance numbers. Market returns are based on the midpoint of the bid/ask spread at 4 p.m. ET and do not represent the returns an investor would receive if shares were traded at other times. Fund performance reflects fee waivers, absent which performance data quoted would have been lower. An investment cannot be made directly into an index. Index returns do not represent fund returns. Returns less than one year are cumulative.

XSLV and XMLV are offered by Invesco, an ETF industry innovator and smart beta pioneer. We offer a suite of low volatility ETFs to give investors access to the low volatility factor on a global level. Contact us to learn more:

Financial Advisors	**800.983.0903**
Registered Investment Advisors and Institutions	**866.406.5693**

Index information

Neither the underlying index nor the benchmark indexes charge management fees or brokerage expenses, and no such fees or expenses were deducted from the performance shown; nor do any of the indexes lend securities, and no revenues from securities lending were added to the performance shown. In addition, the results actual investors might have achieved would have differed from those shown because of differences in the timing, amounts of their investments, and fees and expenses associated.

The S&P SmallCap 600 Index is an unmanaged index considered representative of small-sized US companies.

The S&P SmallCap 600 Low Volatility Index measures the performance of the 120 least-volatile stocks in the S&P SmallCap 600 Index.

The S&P Midcap 400 Index is an unmanaged index considered representative of mid-sized US companies.

The S&P MidCap 400 Low Volatility Index measures the performance of the 80 least-volatile stocks in the S&P MidCap 400 Index.

Definitions

Down(side) capture measures how much performance loss a fund captures relative to a benchmark index in down markets.

Low volatility describes using volatility rankings while seeking to minimize the effects of market fluctuations.

Up(side) capture measures how much performance gain a fund captures relative to a benchmark index in up markets. **Volatility** measures the standard deviation from a mean of historical prices of a security or portfolio over time. Of course, low volatility cannot be guaranteed.

Beta is a measure of risk representing how a security is expected to respond to general market movements.

Smart Beta represents an alternative and selection index based methodology that seeks to outperform a benchmark or reduce portfolio risk, or both in active or passive vehicles. Smart beta funds may underperform cap-weighted benchmarks and increase portfolio risk.

Risk information

There are risks involved with investing in ETFs, including possible loss of money. Shares are not actively managed and are subject to risks similar to those of stocks, including those regarding short selling and margin maintenance requirements. Ordinary brokerage commissions apply. The fund's return may not match the return of the underlying index. The fund is subject to certain other risks. Please see the current prospectus for more information regarding the risk associated with an investment in the fund.

Investments focused in a particular industry orsector are subject to greater risk, and are moregreatly impacted by market volatility, than more diversified investments.

Stocks of small- and medium-capitalization companies tend to be more vulnerable to adverse developments, may be more volatile, and may be illiquid or restricted as to resale than large companies.

There is no assurance that the ETFs will provide low volatility.

Shares are not individually redeemable and owners of the shares may acquire those shares from the fund and tender those shares for redemption to the fund in creation unit aggregations only, typically consisting of 10,000, 50,000, 75,000, 80,000, 100,000, 150,000 or 200,000 shares.

Note: Not all products available through all firms.

This does not constitute a recommendation of any investment strategy or product for a particular investor. Investors should consult a financial advisor/financial consultant before making any investment decisions.

Before investing, investors should carefully read the prospectus/summary prospectus and carefully consider the investment objectives, risks, charges and expenses. For this and more complete information about the fund, investors should ask their advisor(s) for a prospectus or download one at invesco.com