Gateway Index/RA Composite Commentary

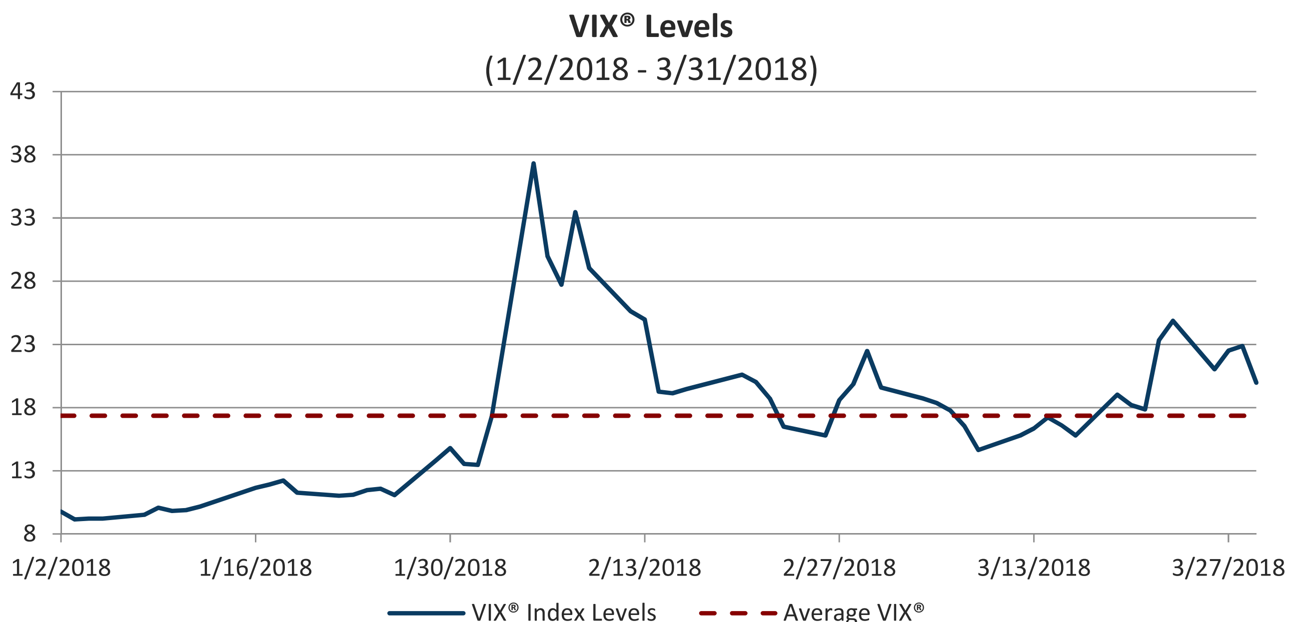
Q1 2018

MARKET RECAP

The S&P 500® Index declined 0.76% for the first quarter. The slight loss for the quarter masked significant equity market volatility. The S&P 500® Index returned 5.73%, -3.69% and -2.54% for January, February and March, respectively, and the equity market had its first back-to-back losing months since January and February of 2016.

The precise path of equity market advances and declines over the course of the quarter was more severe than the monthly returns. The strong, low volatility advance of the equity market in Q4 2017 continued over the first three weeks of 2018 as the S&P 500® Index returned 7.55% through January 26th. Economic data releases and corporate earnings reports were positive and optimism about the impact of tax cuts also helped drive the market higher. But inflationary fears crept into the market and its momentum quickly changed direction. From its all-time closing high on January 26th through February 8th, the S&P 500® Index lost 10.10%. A significant portion of the decline occurred on Monday, February 5th when the S&P 500® Index lost 4.10% and volatility measures spiked to levels not seen since August of 2015. From its closing value on February 8th through March 9th, the equity market staged a partial recovery with the S&P 500® Index returning 8.21%. But the recovery stalled out as fears of a trade war grew while technology stocks slumped. Several leading technology companies came under pressure in mid-March, including Facebook, Inc. which acknowledged mishandling user profile data, specifically in connection with political consultant Cambridge Analytica's use of data on over 50 million users to target voters in the 2016 election. As the Facebook scandal built, the Trump administration enacted tariffs on steel and aluminum imported from multiple countries and threatened additional trade restrictions on China, ostensibly in retaliation for years of trade and intellectual property violations. The S&P 500® Index declined 7.06% from March 9th through March 23rd, putting the market back near correction territory. A 2.05% advance for the S&P 500® Index over the shortened final week of March was not enough to avoid a negative return for the quarter.

Implied volatility, as measured by the Cboe® Volatility Index (the VIX®), averaged 17.35 for the quarter, while S&P 500® Index realized volatility (as measured by its annualized standard deviation of daily returns) was 20.17%. It was the first time since the third quarter of 2015 that realized volatility exceeded average implied volatility for a quarter. The VIX® had a closing high of 37.32 on February 5th and an intra-day high of 50.30 on February 6th, the highest VIX® reading since August 2015. The closing low for the VIX® was 9.15 on January 3rd.



Datasource: Bloomberg, L.P.

EQUITY MARKETS

Despite equity market losses and a significant uptick in volatility, data releases suggested the market backdrop of an expanding economy and robust earnings growth remained intact, while inflationary pressures showed unexpected signs of life. The January Consumer Price Index (CPI) release on February 14th reported a 0.5% increase in prices for the month and a year-over-year change of 2.1%, both data points exceeded consensus expectations. The February CPI showed a year-over-year change of 2.2%. On March 28th, the final estimate of fourth quarter GDP growth came in at 2.9%, which exceeded consensus expectations and was an upward revision of the previous estimate of 2.5%. Nearly 84% of S&P 500® Index companies reporting fourth quarter earnings results met or exceeded expectations, as aggregate operating earnings grew 5.0% during Q4 and 17.2% year-over-year.

The Bloomberg Barclays U.S. Aggregate Bond Index returned -1.46% for the first quarter. It was the first quarter since Q3 2008 that returns for both the stock and bond markets were negative. The yield on the 10-year U.S. Treasury Note rose from 2.41% on December 31st to a high for the quarter of 2.95% on February 21st, and then declined to end the quarter at 2.74%.

COMPOSITE PERFORMANCE

The Gateway Index/RA Composite (the Composite) returned -2.49%, net of fees, for the first quarter, underperforming the S&P 500® Index by 173 basis points (bps). With net returns of 0.87%, -1.75% and -1.61% for January, February and March, respectively, the Composite's downside protection delivered in February and March was not enough to overcome lagging performance at the beginning of the year. The portfolio performance contributions, annualized standard deviation and portfolio statistics quoted for the Composite in the following paragraphs are those measured by a representative account.*

From the beginning of the year through January 26th, the Composite returned 1.34%, underperforming the S&P 500® Index by 621 bps. The lagging performance relative to the S&P 500® Index was in line with expectations for a period when the equity market had a well above-average return with very low implied volatility. From the equity market's year-to-date high on January 26th through quarter-end, the Composite returned -3.83% and delivered 389 bps of downside protection relative to the S&P 500® Index.

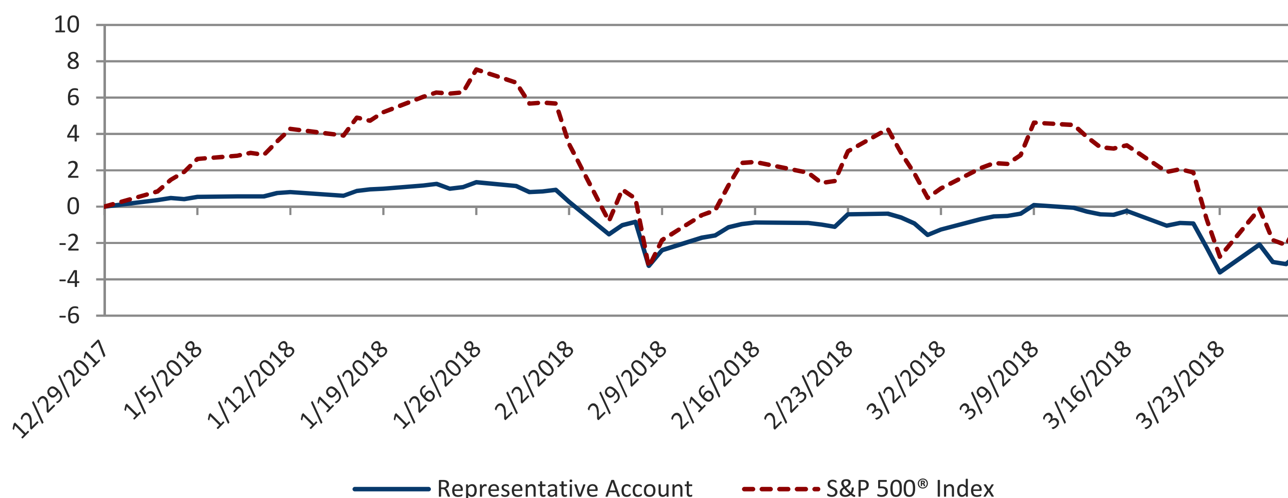
Higher implied volatility levels in February and March helped the Composite generate more cash flow from its option strategy, which resulted in improved rates of return during equity market advances relative to the market advance that began the year. From the low on February 8th through March 9th, the Composite returned 3.46% and over the final four days of March it returned 1.12%, compared to 8.21% and 2.05% for the S&P 500® Index in each respective period. Robust option premium cash flow was also beneficial during the first quarter's two periods of significant equity market decline. The Composite had a loss of 4.54% during the January-February equity market correction and a loss of 3.70% during the March 9th to March 23rd decline, thus delivering 556 bps and 336 bps of downside protection relative to the S&P 500® Index in each respective period.

For the first quarter, the underlying equity portfolio of the Composite's representative account contributed a total return of -0.94%, resulting in a performance differential of negative 51 bps relative to the S&P 500® Index. Equity performance differentials are varied for each account in the Composite. The Composite's index call option portfolio detracted from the Composite's return in January, as expected during a strong market advance, but contributed positively to the Composite's return in February and March. Similarly, index put options also detracted from the Composite's return in January but contributed positively in February and March. The Composite's annualized standard deviation of daily returns for the quarter was 9.82% as compared to 20.17% for the S&P 500® Index. The Composite exhibited a beta to the Index of 0.45 for the quarter.

In January, Gateway's index call option activity was focused on exchanging contracts well in advance of their expiration dates for ones with later expiration dates and higher strike prices to maintain a typical amount of market exposure as the market advanced. As implied volatility increased and the market declined in February and March, the investment team focused on index call option decisions that would add significant cash flow potential and maintain diversification of expiration dates while not deviating significantly from the strategy's typical risk profile.

*Represents supplemental information to the GIPS-compliant presentation. This representative account was selected as it is the largest account in the Composite.

The steep market loss and sharp rise in implied volatility in early February created opportunities to realize profits in index put contracts. In an effort to monetize suddenly inflated put prices while maintaining the strategy's historical risk profile, on February 5th select index put contracts were sold and not replaced, resulting in put coverage in the range of 60% to 85%. The investment management team was active in managing the cost of protection provided by the Composite's index put options over the remainder of the quarter. By early March, the equity market's partial recovery from February's lows had brought implied volatility levels down, resulting in more reasonably priced puts and creating the opportunity to restore full put coverage while maintaining the Composite's typical risk profile. Later in the month, as the equity market re-approached correction territory, rising implied volatility created opportunities to realize profits in index put contracts. On March 23rd, select index put contracts were again sold and not replaced, resulting in put coverage in the range of 80% to 95%.



Datasource: Bloomberg, L.P.

Performance data shown represents past performance and is no guarantee of, and not necessarily indicative of, future results.

As of March 31st, the Composite's diversified equity portfolio was over 95% hedged with index call options with the weighted-average strike price between 1.5% and 2.5% out-of-the-money, average time to expiration of 32 days and annualized premium to earn of 15% to 20%. The Composite ended the quarter hedged with index put options on between 80% and 95% of the notional value of its portfolio with the weighted-average strike price between 5% to 7.5% out-of-the-money, average time to expiration of 66 days and annualized cost of between 5% to 7.5%. Relative to the beginning of the quarter, this positioning represented similar market exposure and significantly higher net cash flow potential.

MARKET PERSPECTIVE

Option writing strategies are often positioned as suitable components of the risk management portion of a diversified investment program due to their reliable downside protection and features that benefit from elevated equity market volatility. But when both of the foremost option writing strategy benchmarks, the Cboe® S&P 500 BuyWrite℠ Index (BXM℠) and the Cboe® S&P 500 PutWrite Index (PUT), deliver a larger loss than the S&P 500® Index in a quarter that featured the first equity market correction in two years and elevated volatility levels for two months, the effectiveness of option writing strategies as risk management tools might be questioned.

A snapshot look at the outcomes for any investment strategy and its associated market over any given month, quarter or year can often mask the way risk and return were realized over the course of the time period in question. When looking at the path the equity market took in Q1 2018 (Figure 1), it is clear to see that the lower return of the option writing benchmarks relative to the S&P 500® Index was due to a low level of participation in the significant market advance that began the year, rather than a lack of downside protection after the equity market reached its year-to-date high in late January.

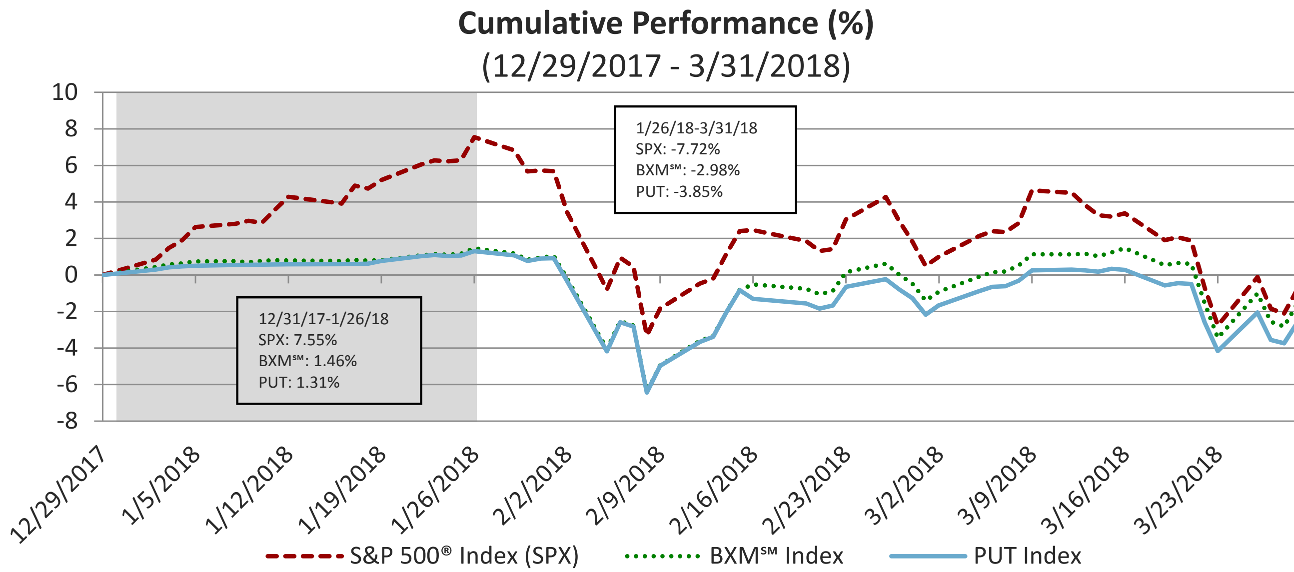


Figure 1: From the year-to-date high for the S&P 500® Index on January 26th through quarter-end, both BXM℠ and PUT experienced less than half the decline of the S&P 500® Index.
Source: Bloomberg, L.P.

What about the idea that option writing strategies benefit from elevated volatility levels? Both option writing benchmarks received higher premiums when implied volatility was elevated in February and March than they had during January when implied volatility was lower. BXM℠ collected premiums of 1.62% and 1.39% in February and March versus a premium of 0.92% in January. PUT's premiums were 0.92%, 1.35% and 1.31% for January, February and March, respectively. The longer-term relationship between VIX® levels and the premiums BXM℠ and PUT collect for writing at-the-money options can be seen in Figure 2 below.

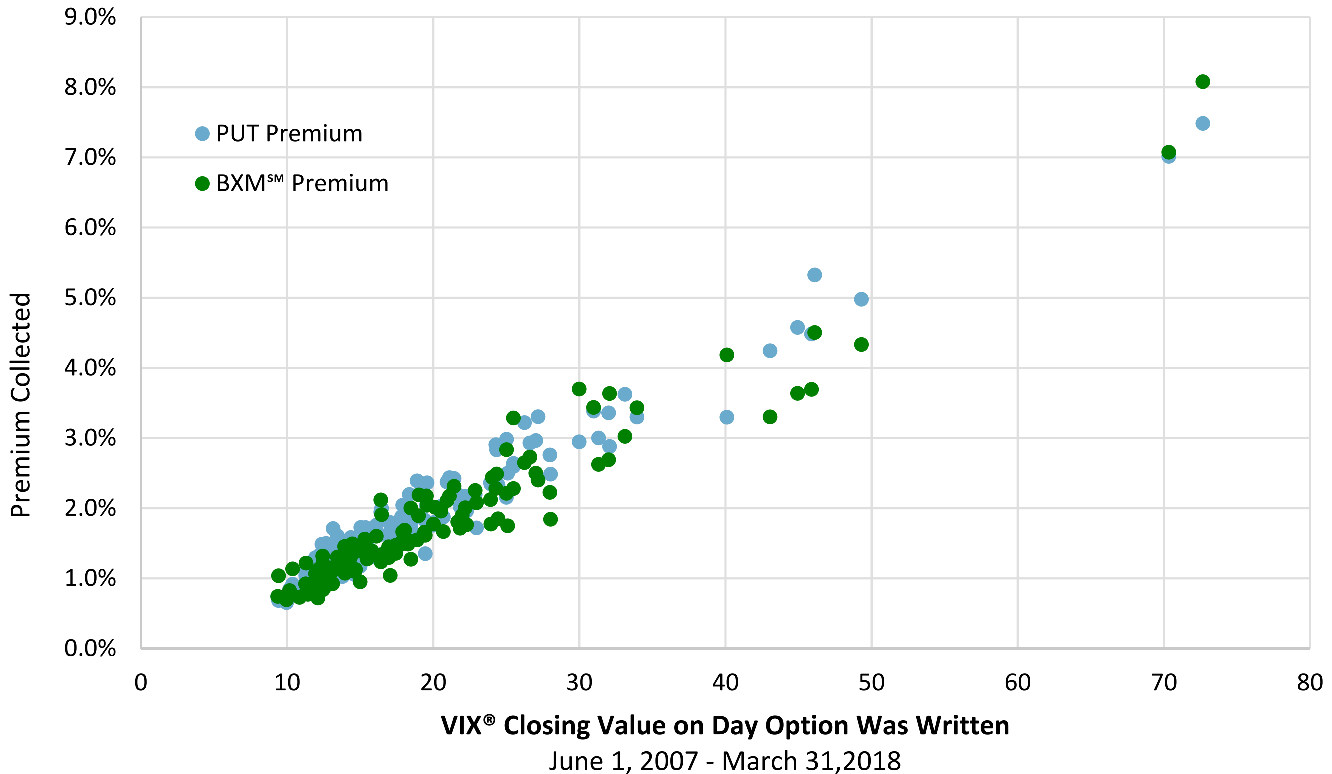


Figure 2: BXM℠ and PUT receive higher premiums at higher levels of implied volatility.
Source: Bloomberg, L.P.
BXM℠ premium is the price of the call option the BXM℠ sells divided by the set price of the S&P 500® Index. PUT Premium is the price of the put option PUT sells divided by its strike price. PUT monthly premium data not available prior to June 2007.

The total return impact of the relationship between implied volatility and option premiums can be seen in Figures 3, 4 and 5. The table in Figure 3 shows that average monthly returns for the option writing benchmarks relative to the S&P 500® Index improve as the monthly average VIX® levels increase. This improvement in relative performance happens for two reasons. The first reason is that higher volatility periods feature larger and more frequent monthly losses for the S&P 500® Index while the premiums collected by the option writing strategies tend to produce smaller and less frequent losses than the S&P 500® Index during those higher volatility periods.

		Implied Volatility Monthly Average Range (January 1988 to March 2018)					
		10 to 14	14 to 18	18 to 22	22 to 26	26 to 30	> 30
Frequency	Months	88	102	66	54	25	28
	Percentage	24%	28%	18%	15%	7%	8%
Average Monthly Return	PUT	1.0%	1.0%	0.9%	1.2%	1.0%	-1.0%
	BXM℠	1.1%	0.9%	0.8%	1.1%	0.6%	-0.9%
	SPX	1.8%	1.0%	1.4%	0.5%	-0.4%	-1.4%
Percentage of Months with Positive Returns	PUT	86%	83%	65%	74%	72%	54%
	BXM℠	85%	75%	62%	67%	68%	54%
	SPX	86%	68%	61%	52%	44%	50%

Figure 3: On average, implied volatility levels in the 22 to 26 range have historically produced the most attractive combination of absolute and relative return for the BXM℠ and PUT.
Source: Bloomberg, L.P.

The second reason for improved relative performance in higher volatility months is illustrated in Figures 4 and 5. The larger option premiums collected in higher volatility periods result in better relative returns when the market advances and improved downside protection when the market declines.

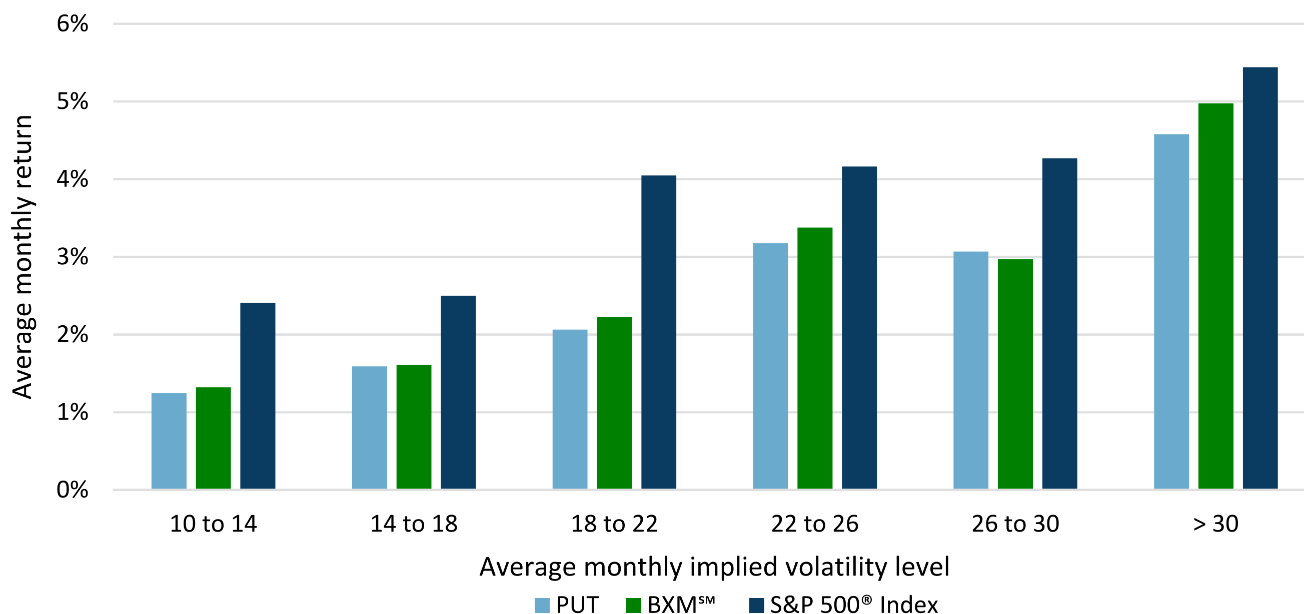


Figure 4: Historically, as implied volatility increased, higher option premiums drove higher cash flow, resulting in increased returns for BXM℠ and PUT relative to lower implied volatility levels.
Source: Bloomberg, L.P.

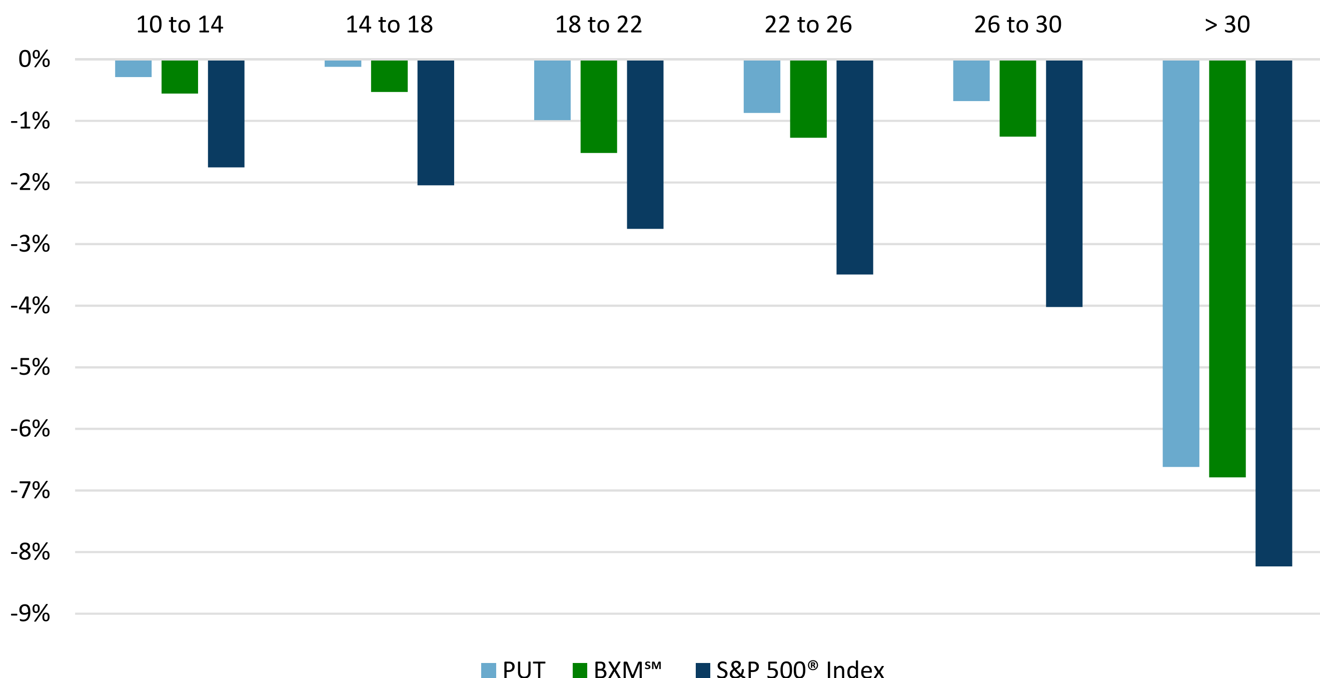


Figure 5: Historically, as implied volatility increased, higher option premiums translated into increased protection, i.e. return differential to the S&P 500® Index, for BXM℠ and PUT at all but the highest implied volatility level.
Source: Bloomberg, L.P.

Figure 5 shows that the downside protection delivered by option writing benchmarks is not as effective in extremely volatile markets, relative to markets with lower volatility levels. This phenomenon is part of the case for applying active management to option writing. The option writing benchmarks write their options once a month and hold their respective option positions until they expire the next month. This aspect of the option writing benchmarks' construction methodology makes their outcomes relative to the S&P 500® Index highly path-dependent. If there is a reversal of market direction mid-month with a large market move on one or both sides of the reversal, an option writing benchmark with a single contract can end up having much higher participation in the down leg of the reversal than the up leg. Moreover, when the reversal happens in close proximity to the day its option expires and it writes a new one, an option writing benchmark is particularly susceptible to the negative outcomes of a market reversal. Active management has the potential to soften the path dependency inherent in managing risk with one instrument that expires. This risk can potentially be reduced by writing a portfolio of options that is diversified by strike price and expiration date and also through active decision-making regarding whether or not to hold contracts to expiration.

Despite the slightly larger losses for option writing benchmarks versus the S&P 500® Index in Q1, option writing strategies remain a viable risk management approach for investors looking for reliable protection against equity market declines. If the elevated levels of implied volatility observed in February and March persist, premiums collected by option writing strategies will continue to be more attractive than premiums collected in recent years. For strategies that combine equity market exposure with option writing, the higher premiums that come with elevated volatility could help maintain positioning for improved participation in market advances relative to the participation of the market advances of recent years. Additionally, in the event the equity market falls further below January's highwater mark, these strategies are potentially well positioned to continue delivering meaningful downside protection.

Standard Performance

Average Annual Performance							
As of March 31, 2018							
	1 Year	**3 Years**	**5 Years**	**10 Years**	**20 Years**	**Return Since Inception***	**Risk** Since Inception***
Index/RA (Net)	4.34%	4.73%	4.75%	3.47%	4.56%	7.15%	6.22%
S&P 500® Index	13.99%	10.78%	13.31%	9.49%	6.46%	10.58%	14.05%
Bloomberg Barclays U.S. Aggregate Bond Index	1.20%	1.20%	1.82%	3.63%	4.83%	6.26%	3.73%

*Inception of Gateway Index/RA Composite is January 1, 1988
** Standard deviation is based on monthly performance

Periods over one year are annualized.
Datasource: Morningstar Direct[SM] and Gateway Investment Advisers, LLC
Past performance is no guarantee of future results. For important disclosures, please refer to page 6.

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312 Walnut Street, 35th Floor
Cincinnati, Ohio 45202
513.719.1100

GATEWAY
INVESTMENT ADVISERS, LLC

399 Boylston Street
Boston, Massachusetts 02116