Market Recap

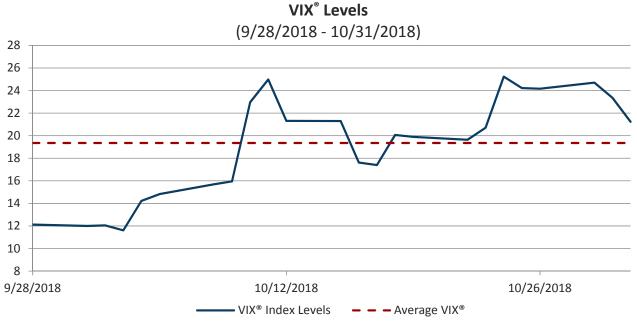
The S&P 500[®] Index returned -6.84% in October, bringing its year-to-date return to 3.01%. October's loss was the largest monthly loss since September 2011 and a continuation of a market decline that began after the S&P 500® Index reached an alltime high in late September. From September 20th through October 29th, the S&P 500® Index lost 9.76%, a slightly smaller decline than the 10.10% correction it experienced earlier this year from January 26th through February 8th. The equity market fell persistently over the course of October as investors processed a variety of concerns including the continuation of the U.S. trade war with China, a destructive Gulf of Mexico hurricane, political transitions in Italy and Germany and geopolitical tensions in the Middle East and Central America. Although the decline was a steady grind, October 10th and October 24th stand out as days in which a majority of the market's loss was incurred as the S&P 500® Index declined over 3% each day. Losses in technology stocks were a key driver of the market's downside as the tech-heavy Nasdag Composite Index lost over 9% for the month and declined more than 4% on each of the two October days in which the S&P 500[®] Index lost more than 3%. The market staged a rally and partial recovery over the last two days of the month with the S&P 500® Index returning 2.68% from its closing value on October 29th through October 31st.

Despite the steep market decline, data released over the course of the month suggested that the fundamental market backdrop of a strong economy and robust corporate earnings growth remained intact. The September employment report released on October 5th showed slightly lower than expected growth in non-farm payrolls, while unemployment ticked down to a 49-year low of 3.7%. The September Consumer Price Index released on October 11th reported a 2.3% increase in core inflation, year-over-year, slightly lower than consensus expectations. At the end of the month, Q3 GDP growth was reported at an annualized rate of 3.5%, towards the higher-end of estimates that ranged from 2.6% - 3.8%, driven in part by a strong showing from consumer spending. With nearly half of S&P 500® Index companies reporting results as of October 26th, aggregate quarterly operating earnings are on track to grow 6.6% during Q3 and 26.2% year-over-year. Of those companies that have reported, over 84% have either met or beat expectations. Companies with strong quarterly earnings reports were not rewarded with higher share prices. In fact, many companies with better than expected earnings experienced sharp sell-offs around the time of their earnings announcements.



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Implied volatility, as measured by the Cboe® Volatility Index (the VIX®), averaged 19.35 for the month of October. In a deviation from the typical relationship, realized volatility exceeded implied volatility in October as the S&P 500® Index's annualized standard deviation of daily returns was 22.38% for the month. The VIX® trended up, beginning the month at 12.12 and reaching an intra-day high of 28.84 on October 11th and a closing high of 25.23 on October 24th. Compared to past periods of similar market declines, the implied volatility response was relatively muted. Nearly 90% of past monthly periods that included a peak-to-trough market decline between 7.5% and 10% featured an intra-day VIX® higher than October's.



Datasource: Bloomberg, L.P.

The Cboe® S&P 500 BuyWriteSM Index (the BXMSM) had a return of -5.46% for October, outperforming the S&P 500® Index by 138 basis points (bps) and bringing its year-to-date return to 0.95%. The BXM'sSM outperformance relative to the S&P 500® Index for the month was primarily due to the downside protection from premiums collected from writing index call options on the third Fridays of September and October. The relatively small premium collected in the low volatility conditions of September provided only 43 bps of downside protection over the first two-and-a-half weeks of the month as the BXMSM declined 4.47% and the S&P 500® Index declined 4.90%. The higher level of implied volatility in mid-October resulted in a higher premium collected when the BXMSM wrote a new index call option with a November expiration on October 19th.

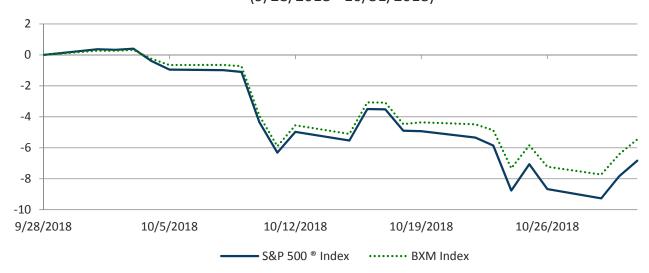
¹The BXMSM is a passive total return index designed to track the performance of a hypothetical buy-write strategy on the S&P 500® Index. The construction methodology of the BXMSM includes buying an equity portfolio replicating the holdings of the S&P 500® Index and selling a single one-month S&P 500® Index call option with a strike price approximately atthe-money each month on the Friday of the standard index option expiration cycle and holding that position until the next.



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As a result, the BXMSM delivered 100 bps of downside protection with a return of - 1.04% from its closing value on October 18^{th} through month end while the S&P $500^{\$}$ Index declined 2.04% over the same period.

Cumulative Performance (%) (9/28/2018 - 10/31/2018)



Datasource: Bloomberg, L.P. Performance data shown represents past performance and is no guarantee of, and not necessarily indicative of, future results.

The bond market did not provide a safe haven for investors in October as the Bloomberg Barclays U.S. Aggregate Bond Index (the Aggregate) returned -0.79% for the month, bringing its year-to-date return to -2.38%. The yield on the 10-year U.S. Treasury rose slightly over the course of the month, beginning at 3.06%, reaching a high of 3.23% on October 5th, and ending the month at 3.14%.