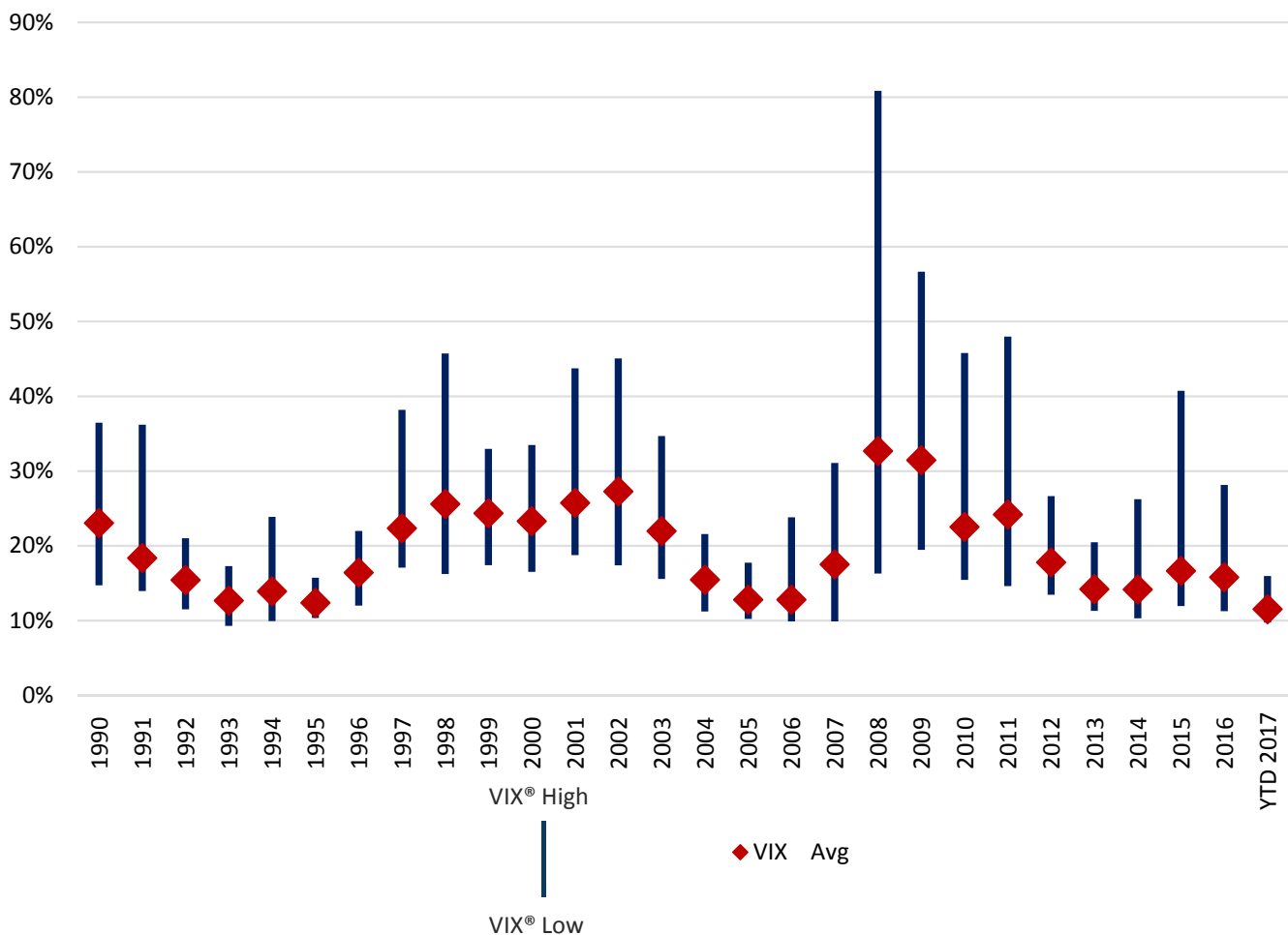


2017 may end up being one of the lowest volatility years in history. By many measures it already is. The 9.75 closing value for the VIX<sup>®</sup> on June 2<sup>nd</sup> was the fourth-lowest closing value in the twenty-seven-and-a-half-year history of the volatility index. All three of the lower marks came in December of 1993. The VIX<sup>®</sup> has also been persistently low, accumulating a year-to-date average through June 30, 2017 of just 11.56 while closing below 10 on 7 different days this year, which is nearly half of all sub-10 closing values in history.

As we have written in previous Market Perspectives, the primary driver of low VIX<sup>®</sup> is low realized volatility. The year-to-date standard deviation of daily returns for the S&P 500<sup>®</sup> Index is 7.14%. If that level persists throughout the year, it will be the lowest recorded in the last 28 years. Key elements of the market backdrop supporting a low volatility environment include global economic growth, accelerating corporate profitability and confidence in central bank policies.

**Annual VIX<sup>®</sup> High-Low Range and Average 1990 to June 2017**



## Annual VIX® Average, S&P 500® Standard Deviation and Implied-Realized Spread: 1990 to YTD 2017

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
VIX® Average	23.1%	18.4%	15.5%	12.7%	13.9%	12.4%	16.4%	22.4%	25.6%	24.4%	23.3%	25.7%	27.3%	22.0%
S&P 500® Realized Volatility	18.0%	14.5%	9.8%	8.7%	10.0%	7.9%	12.0%	18.5%	20.7%	18.3%	22.6%	21.9%	26.4%	17.3%
Spread	5.0%	3.9%	5.6%	3.9%	3.9%	4.5%	4.5%	3.9%	4.9%	6.0%	0.7%	3.8%	0.9%	4.7%

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	YTD 2017
VIX® Average	15.5%	12.8%	12.8%	17.5%	32.7%	31.5%	22.5%	24.2%	17.8%	14.2%	14.2%	16.7%	15.8%	11.6%
S&P 500® Realized Volatility	11.3%	10.4%	10.2%	16.3%	41.7%	27.7%	18.3%	23.7%	13.0%	11.2%	11.6%	15.8%	13.3%	7.1%
Spread	4.2%	2.4%	2.6%	1.3%	-9.0%	3.8%	4.2%	0.5%	4.8%	3.0%	2.6%	0.9%	2.5%	4.4%

Source: Bloomberg, L. P.

In addition to volatility-lowering fundamentals, volatility is further dampened by the market behaving like a 'market of stocks', rather than a 'stock market.' In other words, the equity market is not behaving like a single entity with constituent parts responding the same way to economic and financial variables. Instead, the price action of individual companies has been more random lately than in recent years. The equity market has been 'grinding higher' with low correlation across individual companies. The statistical correlation among the 50 largest companies in the S&P 500® Index was above its 10-year average for most of Q3 2016 and steadily declined to a 10-year low in February of this year. Correlation levels have been well below their 10-year average throughout 2017. That low correlation is evidence of a diversification effect that lowers realized volatility.

One above-average characteristic of this low volatility environment has been the spread between implied volatility levels and realized volatility. Higher implied volatility relative to realized volatility is a persistent characteristic of the markets for index options and equities. So far this year, the spread has been wider than in most years. This wider-than-usual spread may be an indication that the low volatility environment has caused increased speculation on future changes in volatility. Some speculators are betting that the current environment is likely to continue and are selling volatility at its current level in hopes that it drops further. Other speculators are betting that the historically low volatility environment is unsustainable and are betting that volatility will spike. Growth in exchange-traded products tied to volatility derivatives is more evidence of this increase in speculation. Research suggests that the balance of the speculation is tilted toward volatility buyers who hope to benefit from a spike in volatility.<sup>1</sup>

<sup>1</sup> "Are Volatility Selling Strategies Crowded?", Goldman Sachs Options Research, June 28, 2017

Gateway's use of index options to manage equity risk differs from speculating on the future direction of volatility in fundamental ways. While a pure speculator will generate an absolute gain or absolute loss depending on the change in volatility, Gateway's strategies use index options to consistently reduce the risk of equity market exposure. Higher levels of volatility can lead to higher option premiums and increased cash flow from option selling, but the gain or loss of the strategy as a whole is more dependent on the direction of the equity market than whether volatility is rising or falling. Gateway's strategies are designed to be a true hedge to the equity market—with the potential to consistently benefit from equity market advances and consistently mitigate the effect of equity market declines. This market agnostic, risk-first approach has generated a low-volatility equity profile that has served our investors well for nearly 40 years.