

Investment Insights

UBS Asset Management

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According to received market wisdom, with higher risk comes greater opportunity. *Investment Insights* explores what the potential for a higher volatility and dispersion regime may mean for active investors.

Active opportunity knocks II

Erin Browne, Dan Heron

- Broadening array of outcomes for key macroeconomic variables, gradual removal of monetary policy support suggest higher volatility regime is likely to persist across asset classes
- We see the same drivers supporting and sustaining higher return dispersion within equity markets
- Strong historical relationship between higher return dispersion and outperformance in actively managed equity mutual and equity hedge funds
- Our view is that we are at the early stages of a multi-year market regime that is likely to offer high conviction active managers the opportunity to generate significant alpha

In the May 2017 issue of *Investment Insights* we suggested that the market environment in major asset classes was likely to be well suited to active investors in the following year to eighteen months. We forecast low stock correlation, high stock return dispersion, a broadening macroeconomic narrative and a moderate increase in equity market volatility from very low levels.

In truth, it is only since early February that rising bond yields and concerns about the potential for a more sustained step-change in inflation and policy interest rates have impacted equity market volatility in any meaningful way. And while stock correlations within the S&P 500 did indeed stay low for the remainder of 2017, they have risen more recently.

Nonetheless, we have an even higher level of conviction now than we did then that the market environment going forward is likely to be opportunity-rich for high conviction active managers.

It is important to note that neither the analysis nor commentary is meant to infer that we side structurally with either active or passive in what is now a well-worn debate. In our view, it has never been nor never should be a simplistic case of 'either or'. But it is our strongly held belief that some market environments simply offer a stronger opportunity set to active managers than others. This paper therefore is intended to highlight that the scope for outperformance for an active manager is variable and dependent, all else equal, on specific market characteristics.

In equity markets those characteristics include pairwise stock correlation—the degree with which securities move directionally together—and dispersion—the scale of difference in average returns. Changes in these characteristics can be both short-lived and long-lasting. It is our view that we are in the early stages of a

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multi-year higher volatility and higher return dispersion regime that is likely to offer high conviction active managers the opportunity to generate significant alpha.

Macro backdrop suggests higher volatility regime

Our view is that the global economy is in good health. Yes, the rate of growth acceleration appears to be tempering from very strong levels, but we believe that the residual rate of growth remains strong and well supported. Monetary policy conditions in aggregate are still accommodative and due to the breadth of drivers, we believe global recession risks are low. With corporate profits growth strong and likely to remain so, there are clearly still meaningful potential supports to global equities.

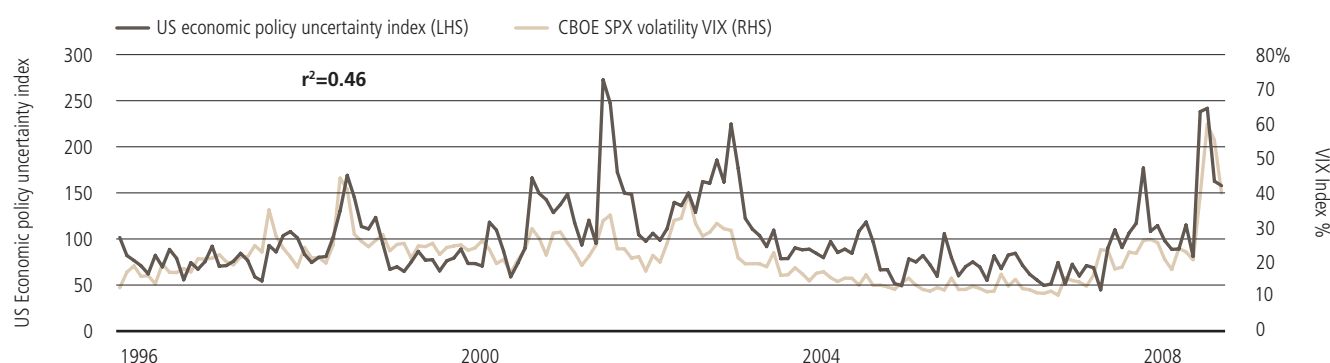
But while the overall backdrop remains supportive to corporate earnings growth, there are some important shifts taking place within markets that warrant close attention. At the heart of these changes is the shifting narrative on inflation and interest rates in the developed world.

Moderate rises in inflation and interest rates have not prevented equity markets from rising in the past. But as investors weigh the potential impact of sometimes opposing structural and cyclical forces, the range of potential growth, inflation and interest rate outcomes in the developed world is broadening from the very narrow range of the 'lower for longer' narrative. More specifically the uncertainty is focused on issues including the outlook for China as the pace of

deleveraging policies accelerates, the interaction between unemployment and inflation as jobless rates in the developed world continue to fall, the potential for increased fiscal stimulus in a number of major developed economies, the 'neutral' rate in the US and how quickly and to what level the Federal Reserve will raise rates. All else equal, this increase in uncertainty is likely to lead to higher risk premia and volatility across asset classes.

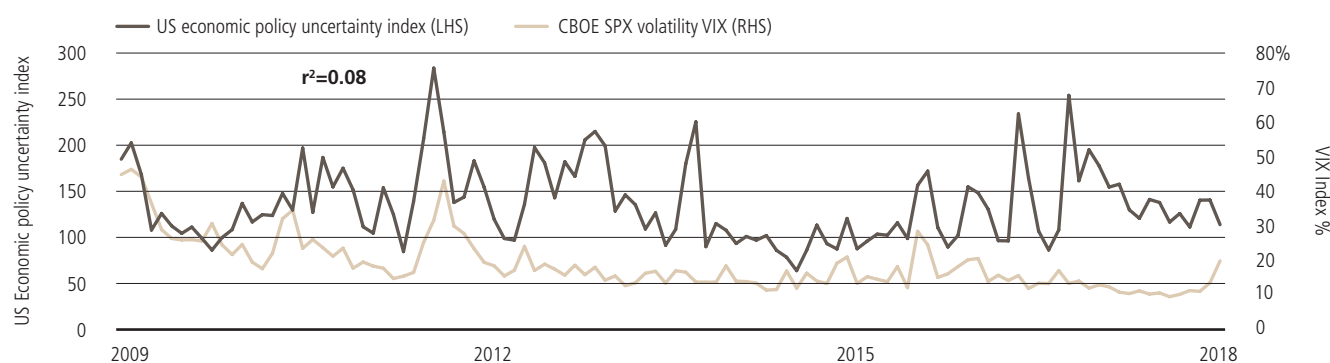
Nor do we believe that this is just a short-term change in macroeconomic and market dynamics. The liquidity provided by central banks under quantitative easing programs has been a key factor in suppressing risk premia (exhibit 1) and in doing so, keeping price volatility low across asset classes.

Exhibit 1a: US Economic policy uncertainty index vs Cboe SPX Volatility Index (VIX) to Dec 2008—Pre QE



Source: DataStream, UBS Asset Management March 2018.

Exhibit 1b: US Economic policy uncertainty index vs Cboe SPX Volatility Index (VIX) from Dec 2008 - Post QE



Source: DataStream, UBS Asset Management March 2018.

Even with a new chair at the helm of the Federal Reserve, we expect the process of policy normalization to be gradual and well communicated. We do not expect monetary policy-setters to react violently to early signs of a more normalised pricing environment when achieving it was an explicit goal of

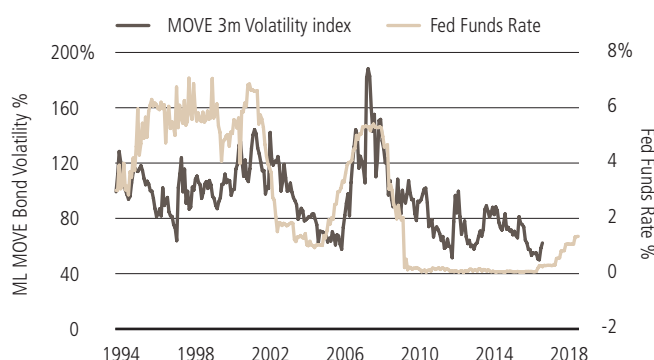
monetary policy in the first place. We also expect central banks to retain significantly larger balance sheets than they had prior to the financial crisis. Nonetheless, the increase in macroeconomic uncertainty comes at a time when liquidity is likely to be withdrawn slowly from the global economy. Gradual as

the process may be, it is also likely to place sustained upward pressure on asset price volatility.

When it comes to markets' reaction to changing interest rates, history gives us a very clear guide on what to expect. As exhibits 2–5 show, there has been a lag of around two years between changes in benchmark US interest rates and a change in bond, equity, FX and commodity market conditions respectively. It is very clear from these charts that there is a strong relationship between short-term interest rates and volatility—and also that the relationship extends across all major asset classes.

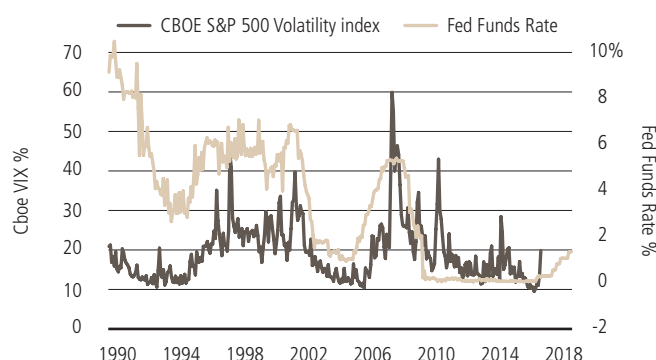
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Exhibit 2: Bond volatility and interest rates: ML MOVE 3m Volatility Index (LHS, %, 2y lag) v Fed Funds Rate (RHS, %)



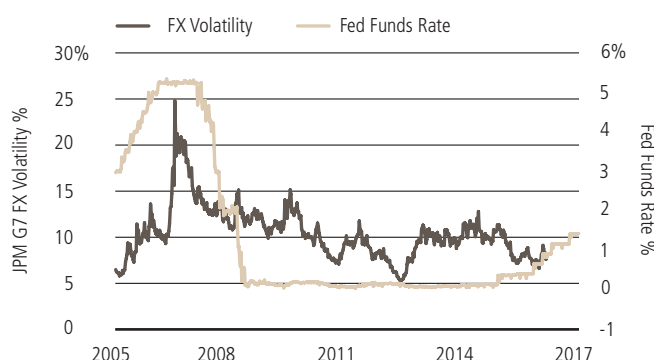
Source: DataStream, UBS Asset Management March 2018.

Exhibit 3: Equity volatility and interest rates: Cboe S&P 500 VIX Index (LHS, %, 2y lag) v Fed Funds Rate (RHS, %)



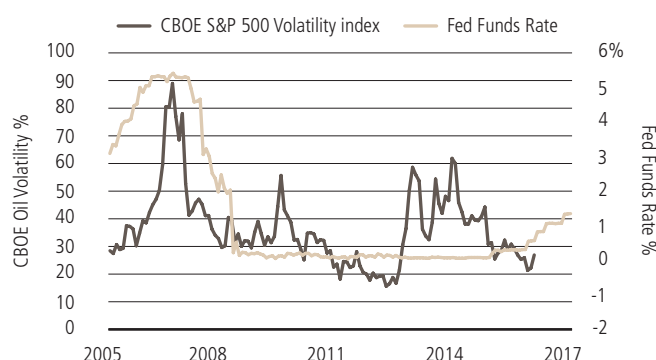
Source: DataStream, UBS Asset Management March 2018.

Exhibit 4: FX Volatility and interest rates: JPMorgan G7 FX Volatility Index (LHS, %, 2y lag) v Fed Funds Rate (RHS, %)



Source: DataStream, UBS Asset Management March 2018.

Exhibit 5: Commodity volatility and interest rates: Cboe Crude Oil Volatility Index (LHS, %, 2y lag) v Fed Funds Rate (RHS, %)



Source: DataStream, UBS Asset Management March 2018.

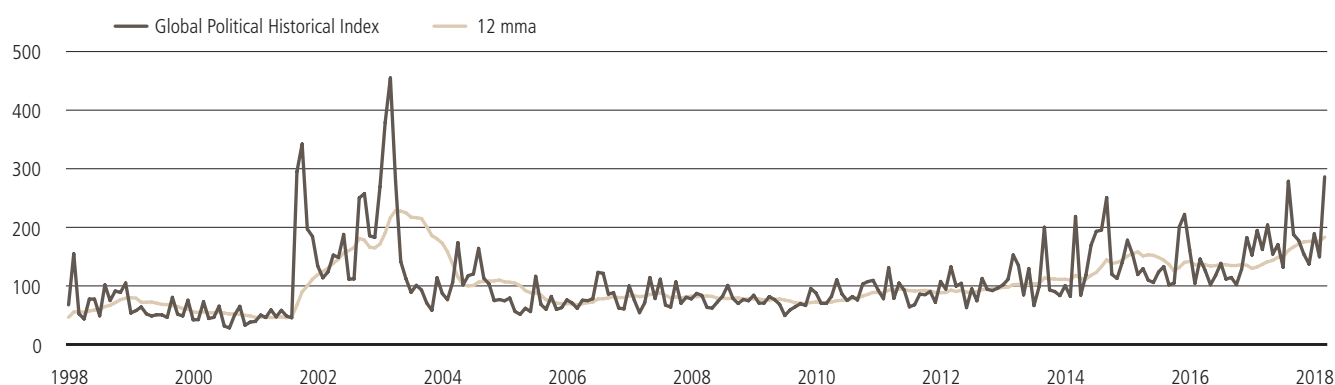
Geopolitics is clearly front and centre in investors' minds too. For once, those concerns are not centred on events in Europe where the risks have broadly dissipated, but have not disappeared given the uncertain outcome of the Italian general election and the on-going Brexit negotiations. Of more concern currently to investors are the growing trade tensions between the US and China, the two behemoths of the global economy, and the broader trend towards trade protectionism over free trade. According to one measure compiled by economists at the US

Federal Reserve (exhibit 6), geopolitical risk is at its highest level since 2003. In our view, the only winner in any large scale trade war is stagflation.

Unsurprisingly, individual stock return dispersion and underlying index volatility have followed each other closely historically. With clear macro drivers to higher index volatility and a host of more idiosyncratic risks at the stock and sector level, we expect stock return dispersion to follow index volatility higher.

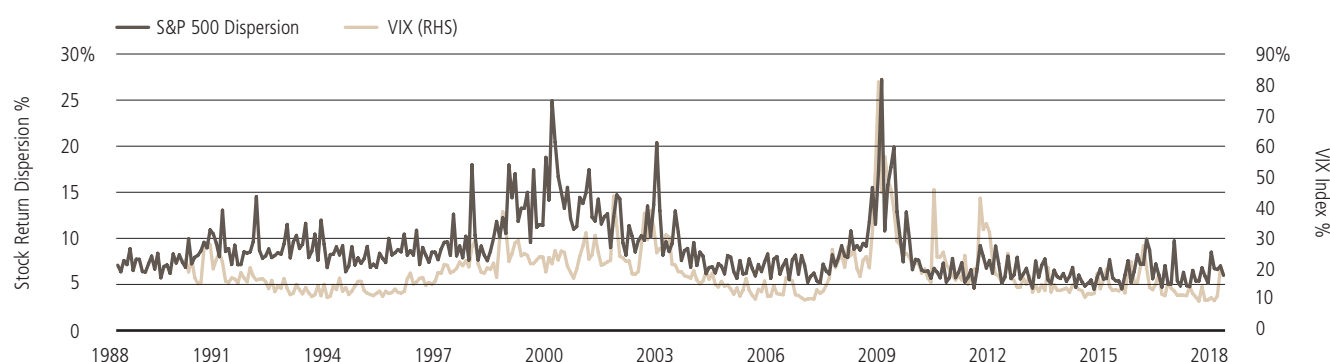
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Exhibit 6: Geopolitical risk indicator at highest level since 2003



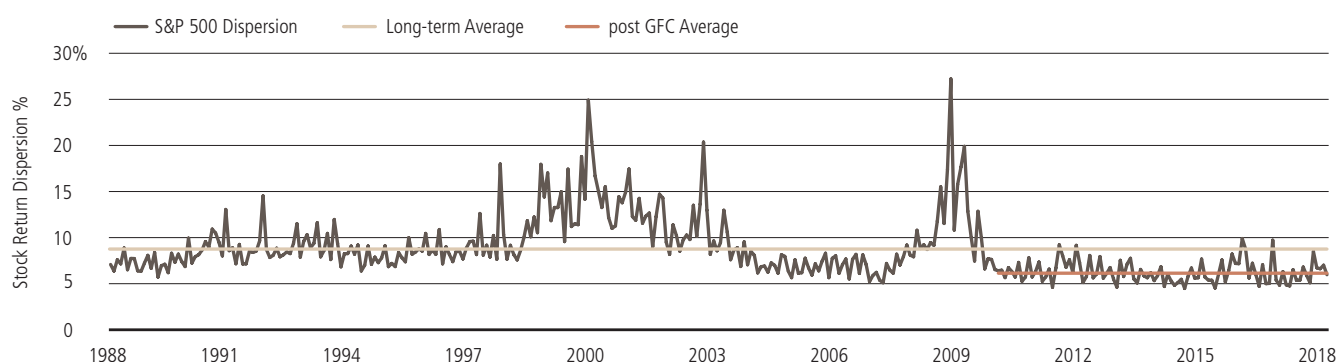
Source: Source: Caldara, Dario and Matteo Iacoviello, "Measuring Geopolitical Risk," working paper, Board of Governors of the Federal Reserve Board, February 2018.

Exhibit 7: S&P 500 Stock Return Dispersion March 1988-2018, Estimate, v CBOE SPX Volatility Index (VIX), Monthly data



Source: DataStream, UBS Asset Management March 2018.

Exhibit 8: S&P 500 Stock Return Dispersion March 1988-2018, Estimate, Monthly Data



Source: DataStream, UBS Asset Management March 2018.

And like volatility, the starting point to higher dispersion is a low one. The dispersion regime that has existed since the end of the financial crisis has been significantly lower than the longer-term average for return dispersion among US large caps. Higher dispersion regimes, such as the one that prevailed for some six years between 1997 and 2003, have persisted over multi-year periods historically. Given the structural macro drivers to higher volatility and growing idiosyncratic drivers, we do not expect an increase in stock return dispersion to be short-lived.

There are other reasons to believe that the higher volatility and dispersion environment may persist. Last month we wrote about the changing correlation between equities and bonds (Investment Insights: Relationship troubles) and that the rise in government bond term premia over recent months may reflect investors' belief that bonds are unlikely to be as effective a portfolio diversifier as they have been.

As inflation expectations and the volatility of realised inflation both increase, we expect the correlation between these core asset classes to move higher from the strongly negative

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correlation regime that has existed for most of the past two decades. But in the absence of a sustained spike in inflation, we do not expect the correlation to be strongly positive either.

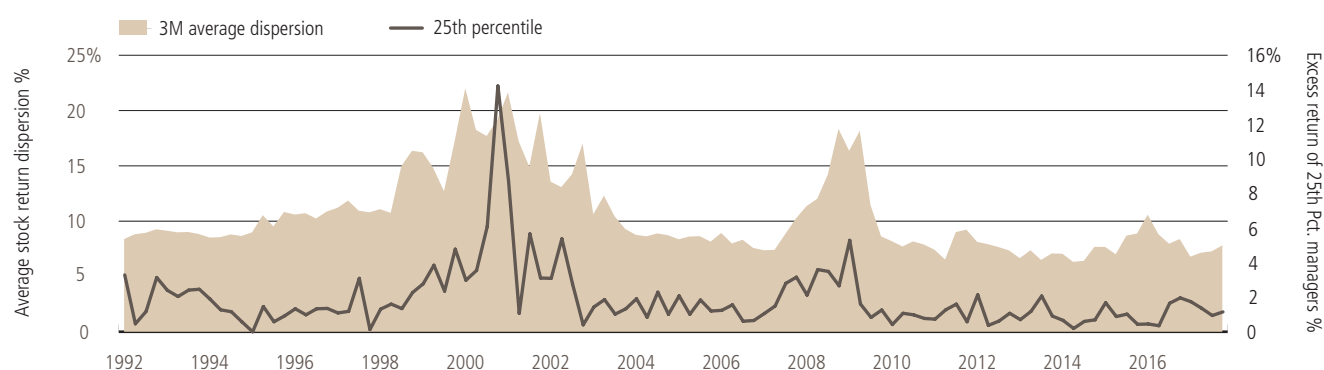
This has potentially significant implications for traditional equity/bond portfolio volatility. With a strong negative correlation between equities and government bonds, investors have been able to allocate to equity beta and adopt a buy and hold strategy with relative impunity from a potential risk-adjusted returns perspective. In such environments, there is little apparent reward for paying up for active management.

But if the returns environment and correlation regime are indeed changing, then the case for active management is not simply about the case for excess returns, but about the stronger potential portfolio diversification properties that active strategies can bring relative to

benchmark indices. Shifting correlations may also necessitate large scale asset allocation rebalancing away from traditional asset classes and towards alternatives that may itself drive volatility and dispersion higher.

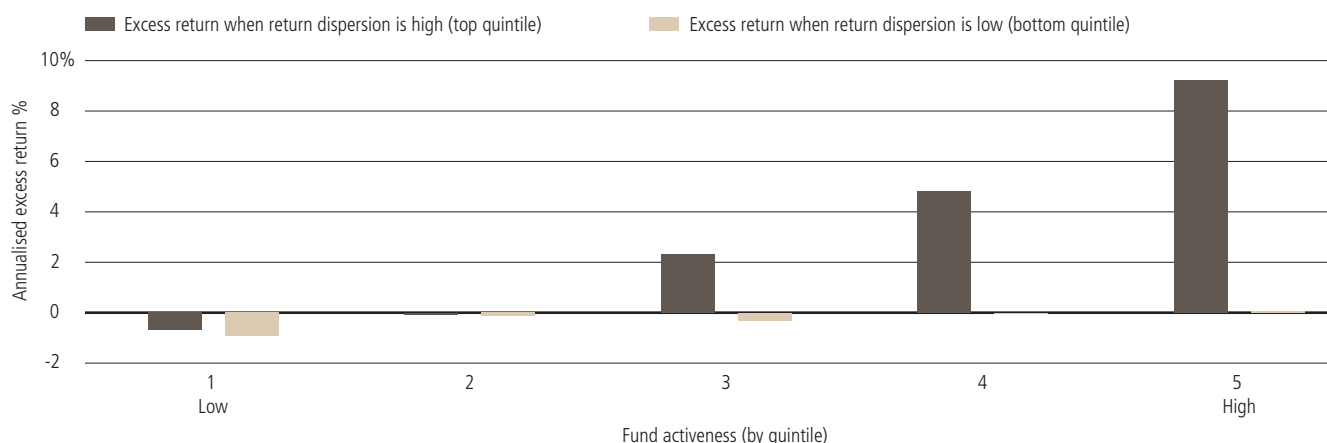
But why does all of this matter to active managers? It is probably self-evident that the scope for active managers to add value is determined first and foremost by the scale of the opportunity set. Most analysis focuses on two market characteristics to describe the 'available alpha' set for active managers: security return correlation and security return dispersion. If all stocks move in the same direction (high correlation) and the difference between returns relative to the average is small (low dispersion), the potential to generate returns that are significantly different to the underlying index is limited.

Exhibit 9: Russell 1000 stock dispersion vs. excess perf of 25th percentile active US Large Cap funds



Source: Morningstar, UBS AG, December 2017.

Exhibit 10: US equity fund activeness and net excess return in periods of high and low stock return dispersion



Source: Anna von Reibnitz, Australian National University, *When Opportunity knocks: Cross-Sectional Return Dispersion and Active Fund Performance*, September 2015.

In reality, it is return dispersion that is overwhelmingly the greater driver of the active opportunity set. Both our own analysis of mutual fund performance (exhibit 9) and a number of academic studies (exhibit 10) reinforce the point. Indeed, in *Cross Sectional Return Dispersion and Active Fund Performance* (2015) Anna von Reibnitz concludes simply and compellingly that “active strategies have the greatest impact on returns during periods of high dispersion, when alpha produced by the most active funds significantly exceeds that produced in other months”, adding that

“switching between highly active and passive funds based on dispersion produces significant alpha”.

Additional academic studies also demonstrate broadly analogous results when looking at excess returns in the hedge fund industry. In *Equity Hedge Fund Performance, Cross-Sectional Return Dispersion, and Active Share* (2014) David Smith finds that “the active alpha generated across virtually all equity investment styles is significantly higher during high-dispersion periods”. His analysis of US equity hedge funds

between July 1996 and September 2013 showed that the mean monthly alpha generated by hedge funds was 0.50% when monthly dispersion was above average and just 0.09% when dispersion was below average.

With the backdrop seemingly supporting a sustained period of higher volatility and dispersion, this is the market that active managers have been waiting for since the financial crisis.

Time will tell if they deliver.

Further reading

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- Alliance Bernstein, *What really makes for a good stock picker's market?*, March 2018
- Anna von Reibnitz, Australian National University, *When Opportunity knocks: Cross-Sectional Return Dispersion and Active Fund Performance*, September 2015
- David M Smith, Department of Finance and Center for Institutional Investment Management, University at Albany, *Equity Hedge Fund Performance, Cross-Sectional Return Dispersion, and Active Share*, January 2014

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