Multi Asset

Volatility – why we play it safe

Betting on low volatility has been a winning strategy lately. But how long can central banks still tame markets? We avoid playing with fire and ride safely.

"Making predictions is particularly difficult this year, as the future is more uncertain than ever." Over the past couple of years, this phrase most likely belonged to the least liked statements by financial advisors. Recently, however, investors have been harassed with another platitude: "We expect rising volatility." With very few exceptions most capital-market experts have embedded said truism as a customary warning into their comments. Although sounding less threatening, the second statement, too, has its risks, not least to the person uttering it. The first statement either exposes the inadequacies of the analysts' forecasting models or simply a lack of courage to make bold predictions. The second statement, however, is easily verifiable. And it has long been wrong. Putting aside minor eruptions, the overall volatility levels have been on a downward trend since the Financial and the European sovereign-debt crises.

Volatility near historical lows

Lately, the downward trend in volatility has been especially pronounced in equity markets. On May 8th of this year, the Vix marked a long-term low at a level of 9.77. Since its inception in 1992 this lower bound has been crossed only three times. Despite having certain peculiarities, this index – tracking implied volatility of short-term call and put options on the S&P 500 Index – is no special case. Volatility levels of various asset classes have been declining. This may seem surprising at first, in light of the current economic and political situation:

- The consequences of both the Financial and the European debt crisis are still unfolding and present.
- Productivity growth and inflation remain sluggish.
- There are no precedents for the extremely loose monetary policy of the world's major central banks; the consequences of a policy normalization are completely unclear.
- A major driver of the demand for some of the most important raw materials and industrial goods is China – a country that shows some very unique economic indicators and trends.
- In our view, Brexit and Trump have weakened the Western alliance precisely as China and Russia are aiming to increase their regional and geopolitical influence.
- Digitalization is said to have the potential to shake up entire industries.

This list claims by no means to be complete, but indicates that there are enough reasons to justify high volatility. Hence, there also must be reasons for the markets' current calmness that are

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Expectations in a nutshell

- Various volatility indices have been testing historical lows this year.
- This might be surprising in light of politically turbulent times. We believe that strong economic data and active central banks are the best explanation for this.
- We expect decreasing central-bank interference with capital markets. Moreover, we are worried about the increase of volatility sellers and prefer to hedge against more turbulent times.

overcompensating the aforementioned apparent volatility drivers. We could think, amongst others, of the following factors:

- Again: central banks. Market participants have become accustomed to central banks' interventions once markets start shaking too much. Thus any rise in volatility is immediately stifled by additionally injected liquidity.
- Brexit, Trump, the refugee crisis or North Korea's growing aggression may present historical ruptures or escalations, but most consequences (especially in economic terms) only become fully visible in the medium term. This rarely triggers short-term peaks in volatility. The story was different in 2008 and 2009 as well as in 2011 during the European debt crisis. Back then, dramatic events and ad-hoc bail-out transactions reduced visibility to a few hours.
- The volume of share buyback programs of U.S. companies also had a stabilizing impact on stock prices. However, we expect declining buybacks for the current year. According to Bloomberg Finance L.P. data, the number of announced share buybacks has been decreasing since the first quarter of 2015.
- Investors trying to benefit from further decreasing volatility are (short) selling volatility instruments, which further depresses their prices.
- However, we believe that the key reason is still related to the fact that the global economy has been growing steadily despite political and other turbulences. This growth might not have been the most dynamic, with rates ranging between 3 and 3.5% for the past six years. But at least it hasn't slid back into recession. For the current year, we actually expect a slight acceleration of global growth.

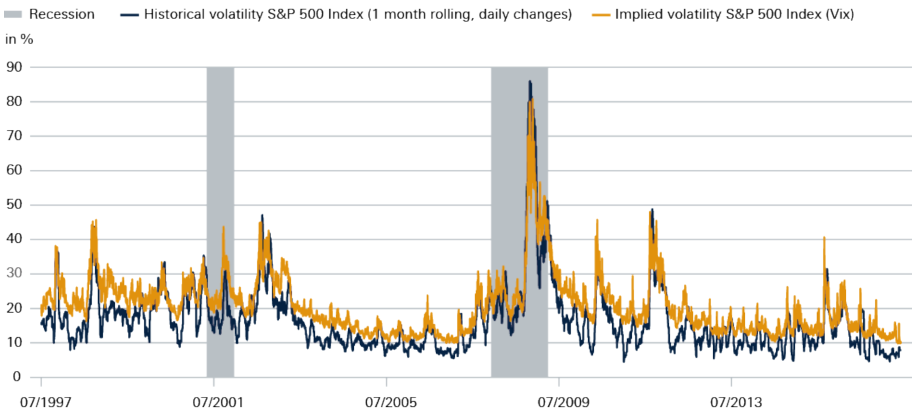
Volatility indices are poor leading indicators

Recession and market turbulences are anyhow common associations in the context of volatility. Paradoxically many market participants become nervous just when the very indicator of market nervousness, market volatility, trades on extremely low levels – like now. There are two reasons for this juxtaposition: The first reason being that low volatility signals investors' complacency and overconfidence. This might be dangerous, as a minor crisis could be enough to trigger panic and revaluations. The other explanation often cited is that historically market crashes have been preceded by low-volatility environments.

We have a different view here. In our opinion, equity-volatility levels fall (and valuation multiples increase) in relation to the time that has passed since the last recession. Indeed, investors have the tendency to become more complacent the longer an expansion lasts. Furthermore, nobody wants to miss out on a stock rally. However, volatility does not serve as a lead indicator, as it regularly starts increasing only when the market is already in decline. Clearly, the risk of a recession increases with the duration of the economic upswing, but volatility indicators do not help for timing purposes.

There are doubts concerning the explanatory power of common volatility indices such as Vix, VDax[1] or VStoxx[2] as they measure the implied volatility as expressed by option trader's pricing for short-term contracts. Nonetheless, a comparison between historical (realized) volatility and implied volatility shows very similar patterns.

Whether implicit or historical – volatility has recently been on the downfall



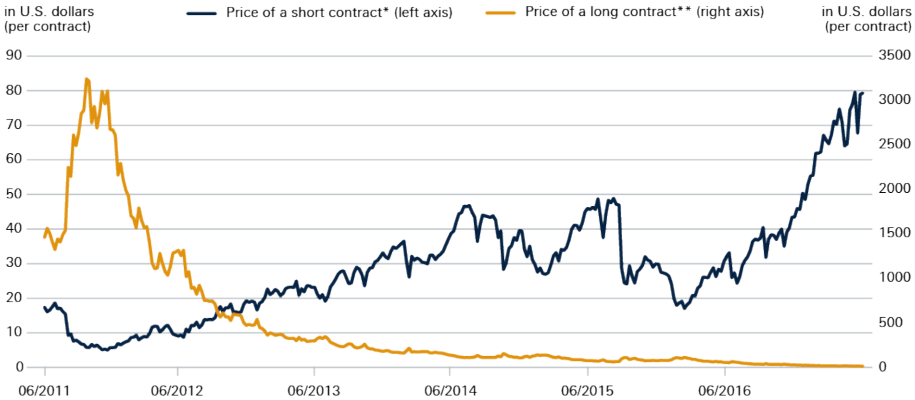
Source: Thomson Reuters Datastream, Deutsche Asset Management Investment GmbH calculations; as of 6/1/17

Shorting volatility was the winning strategy

While there may be different theories trying to explain the stubbornly low volatility, in practice it looks straight forward: volatility (vol) sellers have mostly made money, while buyers have lost it. This has been going on for so long and recently at such a pace that this investment strategy has found more and more imitators. One style in particular seems very popular with investors trying to boost their performance in this low-return environment: selling ("writing") call options on volatility indices and collecting the option premium. As direct investments in vol indices are not possible anyway, derivatives are being used that track (for better or for worse and with a certain lag) the performance of the underlying vol index. Additionally, option writers seem to take good care of their own profit-and-loss account. The following graph not only depicts the potential gains (by selling or "shorting" the option) or losses (by purchasing or "going long" the option) of volatility strategies, but also that this has not been a zero-sum game for investors. Long investors have lost over 99% on their capital invested over the last six years, whilst short investors have "only" quintupled their investment.

[1]The VDax is a measure of the implied volatility of the Dax.
[2]The VStoxx is a measure of the implied volatility of the Euro Stoxx 50 Index.

Vol buyers' pain exceeded vol sellers' gain



Source: Thomson Reuters Datastream; as of 6/1/17
* VelocityShares Daily Inverse Vix Short-Term ETN
** Barclays Ipath S&P 500 Vix Term Future ETN

The popularity of low-vol strategies has its risks

Even if one certainly looks smarter on summer cocktail parties in London or New York when boasting about one's own short-volatility strategies, we see the recent developments with some skepticism and remain, as old fashioned as this might seem, buyers of volatility. We worry about the number and breadth of the volatility sellers. In case markets face persistent pressure and volatility cannot be contained immediately by central banks, the exit of the volatility trade will certainly be crowded. Just as on the way up, markets are also likely to develop self-reinforcing patterns on their way down: falling stock markets increase volatility, forcing vol sellers to either cover their shorts, which further boosts volatility. Or they are hedging their positions by selling the equity index, which in turn again increases volatility. Since downward corrections tend to be more abrupt than upward rallies, the number of panic sales and/or margin calls could exacerbate the situation. The full scope of the asymmetric risk-return profile would then be unfolding: in the best case, the call-option writer locks in the premium, in the worst case losses are potentially unlimited. In this case, we prefer standing on the safe – the long – side, despite giving up on some returns recently. As this is the very nature of an insurance: you pay a premium in order to receive protection from bigger losses.

We stay on the safe side and reduce volatility in our portfolios

Our main scenario of rising volatility latest by 2018 is not based on economic forecasts, e.g. assuming a recession, but rather on an anticipated end of the loose monetary policy of major central banks. We stick to our view that we will face rising interest rates and less interventionist central banks. The end of the so-called Trump trade and (again) weaker inflation figures might have reduced the number of supporters of this view. However, we believe that the pressure exerted on central banks will increase, resulting in a reduction of their engagement in capital markets.

Looking at the steepness of the term structure of short-term volatility contracts, we prefer to engage in contracts with a maturity of around two years. In that way we reduce roll-down losses[3] and manage our volatility strategy in a more cost efficient way. Moreover, we prefer Europe over the U.S., since the former traditionally has been more prone to market fluctuations.

In the context of Multi-Asset portfolio management, volatility strategies are an important component to improve the risk-return profile of our portfolios. Long volatility positions smooth the risk profile by reducing overall price swings. We are willing to pay the premium to achieve this.

[3] Roll-down gains or losses can occur for investors rolling over short-term forward contracts as a result of a bent term structure (where contract prices vary with their maturity).

Glossary

CBOE SPX Volatility Index (Vix)

The Volatility index (Vix) is a trademarked ticker symbol for the Chicago Board Options Exchange Market Volatility Index. It is a popular measure of the implied volatility of S&P 500 Index options.

Dax

The Dax is a blue-chip stock-market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange.

Euro Stoxx 50 Index

The Euro Stoxx 50 Index tracks the performance of blue-chip stocks in the Eurozone.

Margin call

A margin call is a call for additional funds (in form of cash or securities) to be deposited if losses on the current value of assets exceed some predefined percentage.

S&P 500 Index

The S&P 500 Index includes 500 leading U.S. companies capturing approximately 80% coverage of available U.S. market capitalization.

Trump trade/rally

The terms "Trump trade" or "Trump rally" describe the strong movements in various asset prices in the weeks and months following the U.S. elections of November 2016.

Volatility

Volatility is the degree of variation of a trading-price series over time. It can be used as a measure of an asset's risk.

Risk warning

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