When Volatility Returns

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Periods of calm make the best times to prepare portfolios for volatility

The best time to buy hurricane insurance is during an unusually long spell of clement weather. In those conditions, hurricanes tend to be out of mind and policies come cheaper. By contrast, the same insurance can cost a great deal more just after a hurricane has struck and demand soars. Much the same applies in investment. Preparing one’s portfolio for stormy market conditions can cost a lot less during extended periods of serenity. Likewise, we advise investors to hedge when it is cheap, not at times when the cost reflects fear of an impending disaster. This was one of Citi Private Bank’s investment themes in 2014 – *Hedging Portfolio Risk* – and it has great relevance for the year ahead.

Figure 1. Various volatility measures

<table>
<thead>
<tr>
<th>Volatility Index</th>
<th>Long-term average</th>
<th>Jan 1, 2009</th>
<th>July 1, 2014</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity (VIX)</td>
<td>20.0</td>
<td>39.2</td>
<td>11.2</td>
<td>13.3</td>
</tr>
<tr>
<td>Treasury (MOVE)</td>
<td>97.4</td>
<td>144.8</td>
<td>58.4</td>
<td>67.1</td>
</tr>
<tr>
<td>High Yield</td>
<td>10.5</td>
<td>32.9</td>
<td>4.4</td>
<td>8.3</td>
</tr>
<tr>
<td>FX (CVIX)</td>
<td>10.0</td>
<td>21.8</td>
<td>5.3</td>
<td>8.6</td>
</tr>
<tr>
<td>Crude Oil (OVX)</td>
<td>35.7</td>
<td>87.7</td>
<td>16.2</td>
<td>36.4</td>
</tr>
</tbody>
</table>

Sources: Wall Street Journal, Bloomberg and Citi Private Bank as of 1 Dec 2014.
Past performance is no guarantee of future results. Real results may vary.
For much of the last two years, financial markets have enjoyed something approaching the “perfect calm.” A benign combination of moderate economic growth, low inflation, high corporate profitability and a more secure banking sector contributed to strong but steady gains in equities and other assets. Above all, central banks have helped keep markets placid with rock-bottom interest rates, copious injections of liquidity, and promises of more. This long period of engineered stability made it hard for investors to envisage any troubles ahead and indeed for troubles to occur.

The near-perfect calm in financial markets broke in September 2014 as the US Federal Reserve effectively ended its commitment to keep cash interest rates near to zero under almost any circumstances. Fourteen of seventeen committee members now expect the first rate-hike “at some time in 2015”, assuming the US economy improves as expected. This “data-dependent” approach means policy is now not nearly as predictable as it has been in recent years when tightening was off the table no matter how strongly the US economy grew. That predictability – which helped suppress financial-market volatility – was an aberration from the historical norm – figures 1 and 2. Since September’s rude awakening, though, some asset markets have steadied themselves once more, presenting opportunities for hedgers yet again – figure 3.
Even after this short outbreak of turbulence, some forward asset prices seem to forecast an unusual degree of financial market calm, implying narrow price ranges ahead. For example, based on options-market pricing, the markets forecast less than a 1 in 150 probability of US 10-year Treasury yields hitting 4% or higher during the coming year. These long-term yields have stayed at or above such a level 60% of the time since World War II, even excluding the inflationary periods in the 1970s and 1980s.

Still, while US Treasury yields may look low, sovereign bond yields are much lower elsewhere. In fact, US Treasury yields are now three to five times greater than those of other perceived ‘safe-haven’ borrowers such as Germany, Switzerland and Japan. So, how certain can we be that the 10-year US Treasury yield seen in 2012 of 1.4% won’t be reached again?

Because US monetary-policy easing measures were taken earlier than elsewhere and are now unwinding, the dollar looks set to strengthen further, adding to its perceived safe-haven appeal for international investors. This could further stoke demand for US Treasuries, pushing yields down closer to those elsewhere. However, the market-implied odds of this are also less than 1 in 150.

We view events that are merely unlikely as being priced in the marketplace as if they were extremely improbable. As such, they would offer extraordinary payoffs if they occurred. We think, therefore, that volatility in some financial markets is the cheapest asset today. Investors can use low volatility potentially to improve the balance between returns and risks in their portfolios through hedging. And some investors can opportunistically enhance their returns outright.

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Figure 4. Stronger dollar, weaker oil

Sources: Federal Reserve Board and Wall Street Journal as of 6 Nov 2014.
Unusually low volatility means that the risk of sharp drops in asset prices can potentially be hedged at relatively little cost. For example, when US equities hit a twelve-year low in 2008, the cost of hedging against a further 10% drop over the next three months was about 9%. Now that equities have roughly tripled from those lows, the cost of hedging against a 10% drop is less than 1%. In effect, at current levels, an investor might help protect ninefold the size of an equity position from a 10% drop at the same cost per dollar. But aren’t US stocks – up 200% in almost six years – now more vulnerable than in 2008 at that 12-year low? We certainly think so.

Just as we were writing this piece, an event considered to be highly improbable struck in the markets. Crude oil prices dropped 30%, despite fears of disruption to supplies arising from conflicts in the Middle East and Ukraine. As Citi Research analysts suggest in Geopolitical Risks on the Rise, world oil supplies are finely balanced, with security threats in unstable oil-producing regimes on the one hand and vast increases in US output on the other. A 20% rise in the US crude oil price within a six-month period has happened in more than half of the last 35 years. Over the next six months, however, the probability of a 20% rise in oil prices is estimated to be less than 1 in 30.

The greater and more interesting risk within oil is still that of further drops in the price. After a decade of “high” prices and the recent dramatic increase in US production, a continued collapse in the price is a possibility. It has already weakened despite numerous disruptions across the world ranging from sanctions to invasions. Yet, imagine if production in Iran is restored following a political settlement. And what if the spigots opened fully in Libya and Iraq once more? Recall that in 1986, crude oil sank 60% as the Organization of the Petroleum Exporting Countries refused to cut back production. Notably, there was no global or US recession that year behind the price-drop.

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A strengthening US dollar has traditionally coincided with falling oil prices, as it did in late 2014 – figure 4. With the Fed potentially raising interest rates in 2015, the US importing much less energy, and the possibility of foreign investors buying more US assets as a perceived safe-haven, the dollar could well strengthen even more. And, as some oil-producers are financially unable to cut back on their own output, crude could be at risk of a further large drop. Despite this, the market prices the chance of a further 20% collapse in Brent in 2015 at just 1 in 60.

We see risks in both directions for crude oil and many other assets despite an optimistic “base case” or “most likely” scenario for the world economy in 2015. With domestic crude-oil production booming and the US therefore much less reliant on foreign energy, perhaps the US will become more willing to take greater international political risks – or even simply become less inclined to intervene abroad. These are reasonable concerns that the narrow range of volatility in global markets seems to ignore.

Beyond risks to energy, there may be darker threats lurking. Events in the past year suggest big companies are vulnerable to cyber-attack. Could the whole system be at risk? This is hard to dismiss completely when 55 million people in North America lost electric power a decade ago owing to a mere software glitch in the energy supply grid. Another wildcard could be a global pandemic, such as the Spanish flu that struck after World War I. Events like these are entirely unpredictable and uncorrelated to any economic variable.

The Eurozone has already been the source of numerous financial-market shocks around the start of the present decade. However, fears that the single-currency project might fall apart have largely been banished by the European Central Bank’s words and actions since July 2012, helping government borrowing costs to fall significantly across the Eurozone. But the economic recovery there remains patchy, with some peripheral nations like Italy and Greece still struggling. At some point, when growth elsewhere and US monetary policy are not as helpful towards Eurozone stability, we believe investors will once again test the unity of European policymakers.

None of these events are very likely to come about in 2015. Improbable as they may be, however, we still see them as bigger risks than financial-market pricing currently implies. As risk-managers for our clients, we have to consider the full range of possible outcomes as we seek to build strong portfolios. This means exploring hedges as well as seeking out the opportunities to exploit complacency. The improbable is always a matter of degree – and has a price.

We think 2015 remains an especially good time to look at how best to prepare portfolios for a wider range of possibilities than markets have witnessed during the calm of recent years.
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