SEEYOND

Volatility Investing by Seeyond series

Written in May 2021
by Simon Aninat, Volatility Portfolio Manager

LONG VOLATILITY VS SHORT VOLATILITY INVESTING

When you mention Long Volatility and Short Volatility investing, the first thing that comes to mind is that one strategy must be the mirror of the other and, consequently, that they must have opposite performance / risk profiles. But the reality is more complex than it seems…

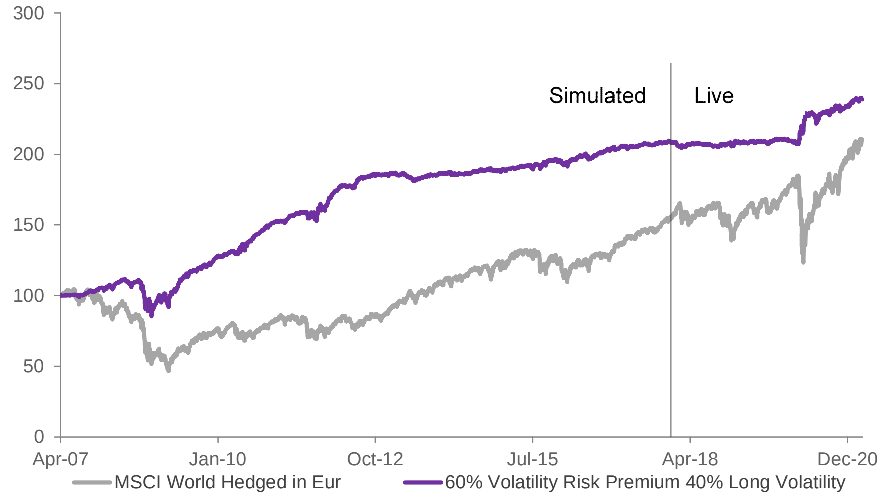
1. *Are Long volatility and Short volatility mirror strategies?*

It could be. Typically, when you implement static buying or selling strategies on volatility, their returns can be opposite. It is the case for long and short VIX ETN for example, but this is not what we do, at all. We are active managers, so we try to exploit market patterns and opportunities by dynamically adjusting the volatility exposure. The consequence is that our long and short volatility strategies are very unlikely to strictly mirror each other. For example, during quiet markets, our long volatility strategy will have a significant negative beta to Equities when our volatility risk premium strategy will only have a small positive beta to Equities. This dynamic management of the volatility exposure on each strategy explains how both strategies managed to return positive performance in 2020.[1]

The related question as an investor would be: could these strategies be combined? The typical goal for an investor would be to result in an allocation that would be as "market neutral" as possible over the long term. If you are looking for this type of allocation, you would probably look for a 60% of our Volatility Risk Premium strategy and 40% of our Long Volatility strategy. The reason of theses uneven weights is that our Long Volatility strategy was designed to be significantly long on volatility in average, when our Volatility Risk Premium strategy was designed to have a structural short volatility bias, but with a reasonable risk budget. This 60/40 allocation would have a market neutral risk profile in quiet markets, could suffer in some crisis like 2008 but would be likely to generate a crisis alpha over the whole episode of volatile markets.

1. Source : Seeyond as of December 2020. Past performance is not indicative of future performance.

Volatility Risk Premium strategy combined with Long Volatility strategy
Simulated and live net performance



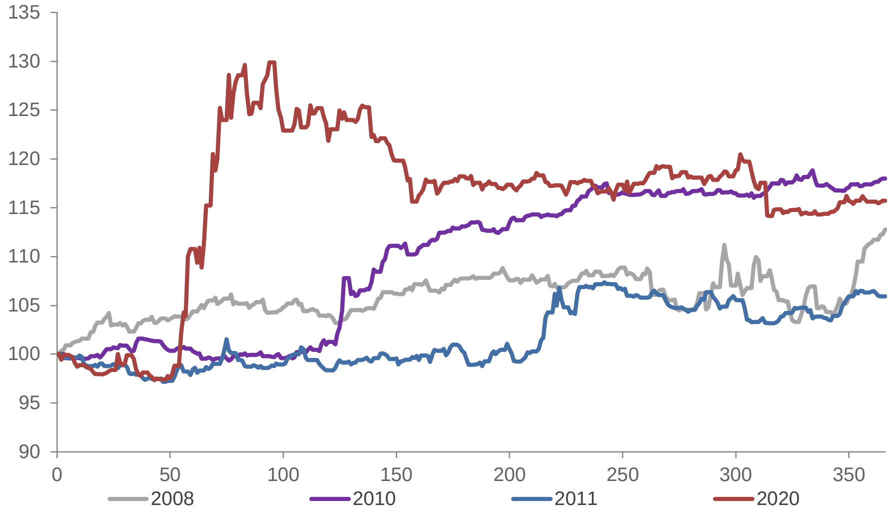
Source: Seeyond, Bloomberg, from the 20th April 2007 to the 31st of March 2021. Before 29th of Dec 2017, data are simulated (net of fees and transactions costs), after this date data are live (also net of fees and transactions costs). This simulation was carried out for indicative purposes on the basis of hypothetical investments and does not constitute a contractual agreement from the part of Seeyond. Figures refer to previous years. Past performance does not guarantee future results.

In any case, the 60/40 allocation we have displayed here is purely indicative: the right mix must be defined with each investor with regards to their tolerance to risk and their objective in terms of performance.

2. *When and how to use Seeyond's Long Volatility strategy?*

Our Long Volatility strategy was designed to generate maximum performance during volatile markets. Typically, in March 2020, the strategy performed well.

Long Volatility strategy in bear markets – Simulated and live net annual performance



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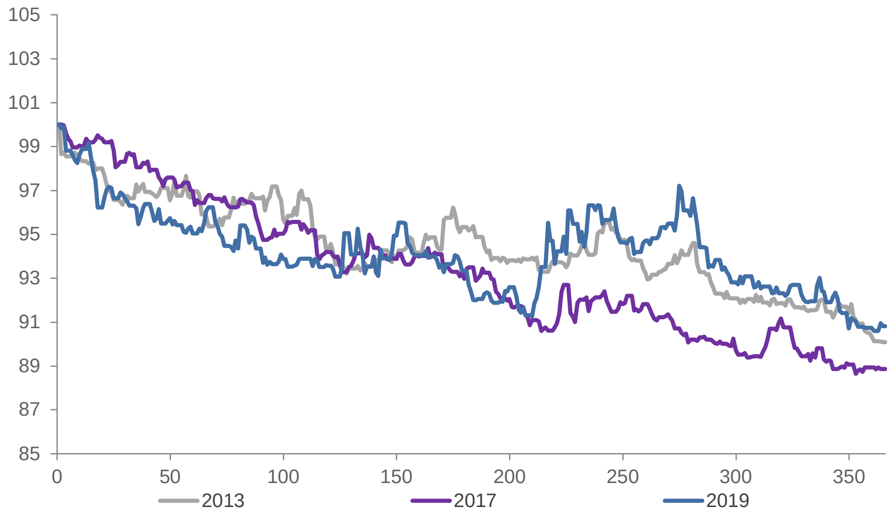
During quiet markets and bull markets however, our strategy suffers from the high cost of carry and lack of opportunities to dynamically adjust our volatility exposure. It was the case for example in 2019.

Long Volatility strategy in bull markets – Simulated and live net annual performance



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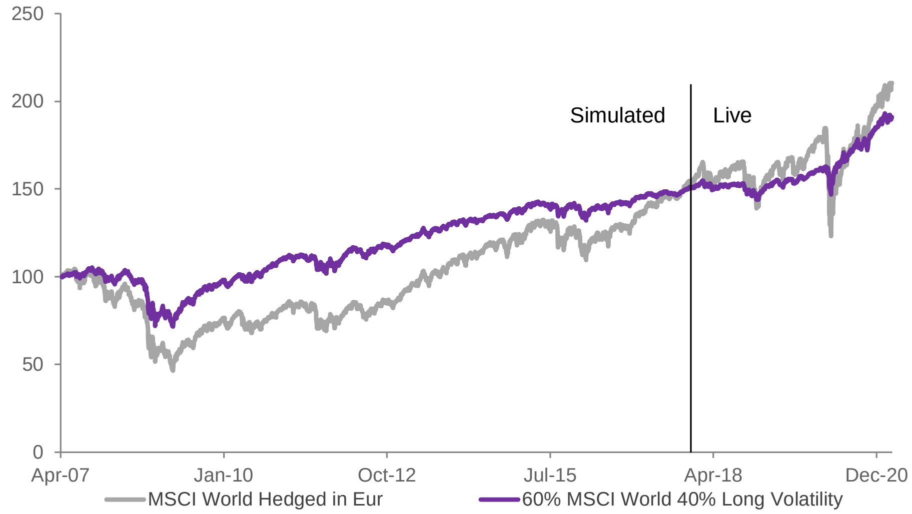
During a volatility spike, our strategy would benefit from the rise of volatility: this is what we call **the beta part** of the strategy. The lower the starting point of the volatility spike, the bigger the beta potential to volatility for our strategy, and consequently the bigger the performance potential on the volatility spike. That's what happened in March 2020: volatility was indeed very low in Jan/Feb 2020 so our contrarian strategy was very exposed to volatility. On the contrary, in 2008, the Lehman bankruptcy occurred when volatility was already very high so our strategy would have already taken most of its gain on the previous volatility rise and would consequently have benefited from a lower beta to volatility on the last part of the volatility spike. In these configurations, volatility is itself very volatile which would have required a lot of dynamic adjustments of our volatility exposure, which could have eventually resulted in positive performance. This is what we call **the alpha part** of the strategy.

That is why we think this strategy is a better fit as a diversifier within an allocation rather than as a standalone investment. Considering its behavior, it could be an interesting allocation brick within a portfolio of risky assets by providing a more robust distribution of returns.

Long Volatility strategy combined with Equities – 40/60 allocation example
Simulated and live net performance



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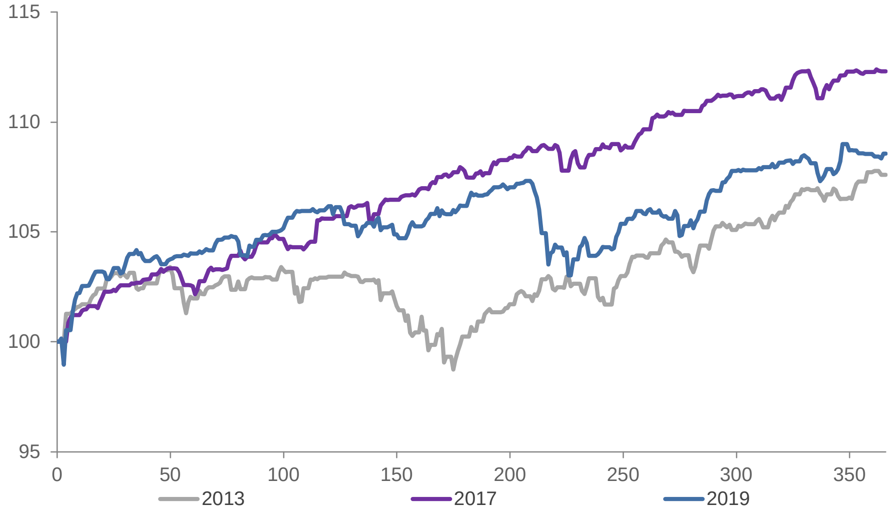
In addition, in the current market context, where government bonds no longer act as a reliable hedge to Equities, our long volatility strategy could fit this need for diversification and hedge against market volatility. It could also fit very well combined with CTA strategies (*Commodity Trading Advisors*) as they tend to suffer from sudden changes in market direction whereas our long volatility strategy tends to strive in them.

3. *When and how to use Seeyond's Volatility Risk Premium strategy?*

Our Volatility Risk Premium strategy was designed to benefit from quiet Equity markets like 2019 for example. But, thanks to its dynamic approach on volatility, it also tends to benefit from post crisis recoveries like 2020 post March.

During periods of bull market, our strategy should benefit from the cost of carry which is usually expensive in these market conditions. If there are few corrections during a bull phase, our dynamic exposure to volatility will be likely to allow adjustments with the aim for a rapid recovery.

Volatility Risk Premium strategy in bull markets – Simulated and live net annual performance



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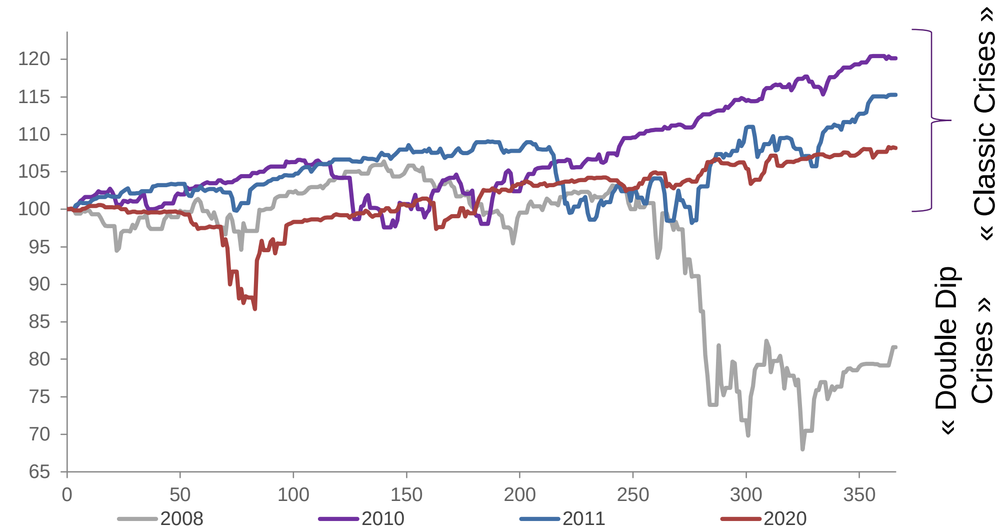
On the contrary, our strategy is likely to suffer during volatility spikes like the one we had in March 2020. During bear markets, volatility will generally spike and as we are structurally selling volatility, our volatility risk premium will suffer. But there are two different configurations worth mentioning with very different impacts.

First configuration, the **"classic crisis"** (see in the chart below: 2010, 2011, 2020): an acceleration to the downside in Equity markets followed by a very agitated market around the bottom levels and finally a crisis exit with a prolonged rebound. In this configuration, our strategy should perform well, as we would use the first leg down and its associated volatility spike to increase our short volatility exposure and our directional exposure in order to benefit from the market rebound.

Second configuration, the **"double dip crisis"** (see in the chart below: 2008): after the initial leg down, the market does not rebound and suffer a second leg down, a sort of final capitulation before a durable Equity rebound can happen. In this configuration, simulated data suggest that our strategy would have performed quite well compared to equities: simulations return less than 5% YTD of loss as at the end of September 2008 when the S&P500 has lost 27% over the same period. But as the markets were already down by almost 30% and volatility was already quite high, our strategy would have positioned itself for a market rebound. As markets meltdown in Q4 2008, our strategy would have logically recorded significant losses with a maximum drawdown around 40%. Still, and it was designed with this objective, simulated data show that our strategy would have lost less than HY Credit, and much less than Equities in 2008.

Volatility Risk Premium strategy in bear markets – Simulated and live net annual performance



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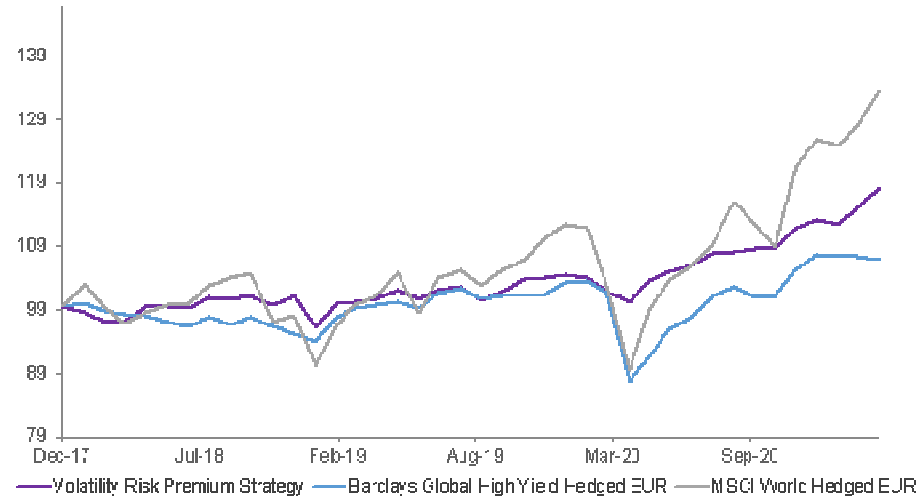
Our volatility risk premium was rather designed to have an intuitive performance and risk profile to offer investors a diversifying allocation brick to include in their risky asset mix for the long run. As we can see in the live track period, our volatility risk premium strategy has a performance and risk profile very complementary to Equities and HY Credit.

Volatility Risk Premium strategy versus Equities and HY Credit – Live net performance



Source: Seeyond, Bloomberg, from the 29th December 2017 to the 31st of March 2021 (live data net of fees and transaction costs). Figures refer to previous years. Past performance does not guarantee future results.

Main risks of the strategies: capital loss risk, volatility-linked risk, risk related to the underlying asset, model-based risk

About the Writer

Simon Aninat - Portfolio Manager

Simon worked for 4 years in the Equity Derivatives Group at J.P. Morgan, first in London and then in Tokyo, where he was a Volatility Trader on Nikkei and Topix. He has a deep experience in derivatives on Equities, FX, Rates and Credit, that he has gained with his different roles at Murex Société Générale, J.P. Morgan and Natixis.

In July 2011, Simon Aninat joined Natixis Asset Management and then Seeyond in May 2012 as a portfolio manager dedicated to volatility management.

Simon Aninat graduated from ENSIMAG (French engineering school) and holds an engineering degree in applied mathematics and computer sciences.

About Seeyond

Seeyond, an affiliate of Natixis Investment Managers, specializes in active quantitative portfolio management. By adding active oversight to disciplined quantitative investment processes, Seeyond offers strategies that seek to optimally reward risk in three core areas of expertise: equity strategies, multi-asset strategies, volatility & overlay strategies. These strategies leverage Seeyond's proprietary quantitative research.

Seeyond, a team of 26 recognized professionals with 18 years of industry experience on average, manages around EUR 9 billion of assets[1]. Seeyond's solutions are marketed by the global Natixis Investment Managers' distribution platform, one of the largest asset managers in the world[2], and via the retail networks of Groupe BPCE, the second largest banking group in France[3].

> For further details: www.seeyond-am.com and in

1 Source: Seeyond, as of 31/12/2020
2 Source: Cerulli Quantitative Update: Global Markets 2020 ranked Natixis Investment Managers as the 17th largest asset manager in the world based on assets under management as of December 31, 2019.
3 Source : BPCE S.A. – 31/12/2019

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