PIVOTAL PATH
Trusted Hedge Fund Industry Expert

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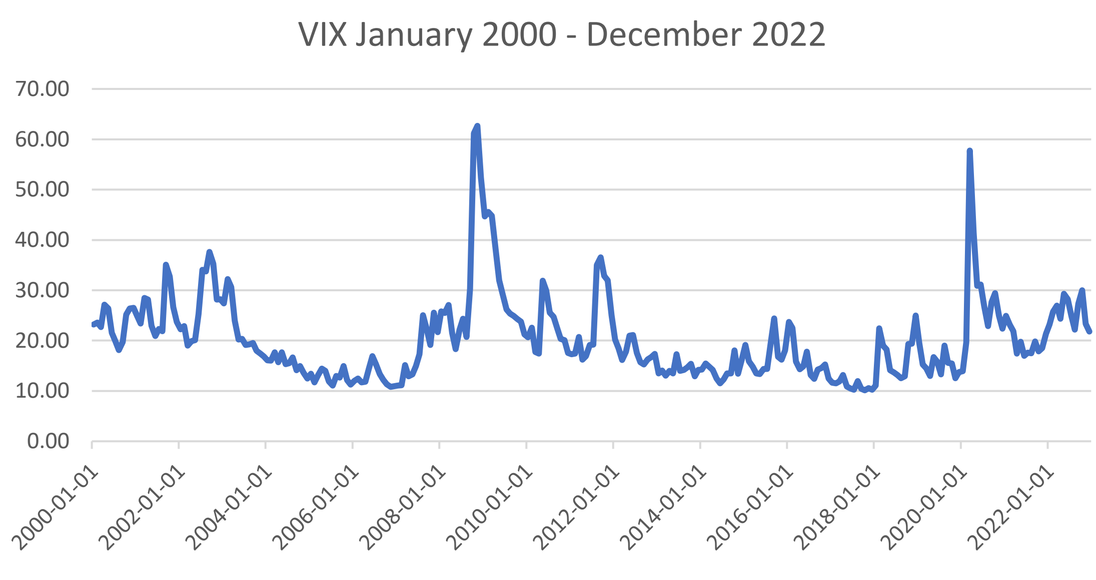
# The Volatility Effect on Hedge Funds

The following analysis is part three of a series in which PivotalPath parses hedge fund performance under macroeconomic regimes. Our suite of *PivotalPath Hedge Fund Indices** is uniquely fit for this type of analysis.

**In this analysis, we use the CBOE Volatility Index (VIX) as a proxy for market risk.**

The VIX (options implied volatility of the S&P 500 over the next 30 days) has captured the interest of investors as a forward-looking measure of equity volatility since it first went live in 1993. Since then, it has grown to represent the markets' forward view of risk more broadly and is often referred to as the *fear index/gauge*. Notable spikes in the VIX have coincided with market crises ranging from LTCM (1998), Dot Com bust (2000-2002), 9/11 (2001), the Global Financial Crisis (2007-2009) and most recently the Covid Pandemic (2020-2022).




***Source: Bloomberg** (VIXCLS): CBOE Volatility Index: VIX, Index, Monthly, Not Seasonally Adjusted

## Volatility effect on hedge fund performance

While the relationship between heightened levels of risk and contemporaneous equity returns tends to be negative, the effects on hedge

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funds are not so easily summarized. In this analysis we look at realized manager returns conditioned on levels of risk. As a substitute for manager returns, we use the PivotalPath Indices, while as a proxy for general market risk, we use the VIX. Our data covers the period Jan 2000- Dec 2022. Results are below.

| PIVOTAL PATH | Conditional Performance | | |
|---|---|---|---|
| **Risk Regime** | **Low Risk (VIX<20)** | **High Risk (VIX>20)** | **Spread** |
| *# Months* | *163* | *115* | |
| **MACRO VARIABLES** | | | |
| VIX Average | 15.06 | 27.47 | |
| S&P 500 Index | 16.44% | -3.48% | -19.92% |
| **HEDGE FUND PERFORMANCE** | | | |
| PPATH Composite | 10.30% | 7.90% | -2.40% |
| PPATH Credit | 10.26% | 7.60% | -2.66% |
| PPATH Equity Diversified | 12.66% | 5.29% | -7.37% |
| PPATH Equity Sector | 15.80% | 8.28% | -7.52% |
| PPATH Event Driven | 11.97% | 5.79% | -6.19% |
| PPATH Global Macro | 6.35% | 11.16% | 4.81% |
| PPATH Managed Futures | 5.81% | 12.59% | 6.78% |
| PPATH Multi-Strategy | 10.04% | 8.03% | -2.02% |
| PPATH Volatility | 6.30% | 13.93% | 7.62% |

**VIX as proxy for market risk **All returns are annualized. ***History: Jan 2000-Dec 2022*

As shown in the table, since 2000, the level of market risk coincided with large differences in the S&P 500 Index, while differences in hedge fund performance were smaller during periods of Low Risk (LR) vs. High Risk (HR). Here are some core observations:

- The S&P 500 Index lost 3.48% annualized during periods of HR while it gained 16.44% during periods of LR, a difference of almost 20%. This large difference in performance is statistically significant (at a 5% confidence interval).
- While the **PivotalPath Composite Index** generated lower returns of 7.90% during HR, the difference is only 2.40% and is not statistically significant than performance in LR.

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- As might be expected, equity centric strategies with the largest exposure to the S&P 500 Index including **PivotalPath Equity Sector** and **Equity Diversified Indices** experienced the largest drop in performance during HR though still maintained positive performance.
- **PivotalPath Volatility, Managed Futures** and **Global Macro Indices** produced better performance during HR, though only the difference in **Volatility** is statistically significant.
- Since 2000, the VIX has averaged 20.2 or just above the value used to separate regimes and has spent more months (163) in LR than HR (115).

**What can we learn from this?** While historical data is never completely indicative of future performance, it can be informative, especially when representing changes to such a profound metric as market risk.

With the VIX ~16 as of the end of August 2023 (less than half of the peak sustained through much of 2022, and below its historical average), investors should consider this context to inform their asset and strategy allocation.

## About PivotalPath

PivotalPath is a leading hedge fund research firm. Harnessing our research portal, PivotalPath empowers a diverse set of institutional investors with over $300 billion in combined hedge fund investments with valuable insights and necessary tools for informed investment decisions.

Our dedicated research team has built trust and lasting partnerships with both allocators and hedge funds, providing transparency and ensuring that clients can always evaluate each manager in the right context. PivotalPath protects confidential manager information and only shares insights with its institutional investor clients.

Pivotalpath enables clients with the full cycle of investment due diligence: intelligence reports, analytics, and performance analysis tools.

**In building trust and partnerships with both hedge funds and institutional investors, PivotalPath has developed a comprehensive (>$2.5tn in hedge fund AUM) and representative set of hedge fund data, creating a unique window into evaluating strategy performance across various regimes.*