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ALLOCATOR'S ANGLE

A Quarterly Newsletter from *IOR*isk Aware

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Investment Office Resources

SUMMARY IN BRIEF

- In recent months the positive correlation between stocks and bonds has frustrated allocators who typically rely on stock-bond diversification to manage toward risk targets.For those investing in bonds as a way to offset equity market volatility, the simultaneous move down in stocks and bonds renders the typical downside protection techniques ineffective. We find evidence this positive correlation may persist, suggesting that investors may have to look for other risk-mitigating strategies to dampen portfolio volatility. In recent reports we suggested moving cash to the upper range of policy targets and introducing macro/CTA managers to protect capital during these times.
- We see mounting evidence that equity style factor returns are becoming tightly coupled, which may lead to elevated factor volatility. Amid this backdrop, allocators should reevaluate their style factor exposures and ensure their risks are intentional, and their portfolios can withstand potentially violent factor moves.

CIO OUTLOOK

SUMMARY

The first 9 months of 2022 have proven challenging for allocators as they battle dual threats of market volatility and rising operating costs. While we eagerly await a more benign environment, we find evidence that investment headwinds may persist.

2022 has proven to be a challenging year for many asset allocators, as positive correlations between stocks and bonds have challenged traditional asset allocation frameworks. As we close the books on Q3 2022, the traditional 60/40 portfolio has returned -16% YTD, marking one of the worst return periods in history. The adverse market conditions are made worse by persistent inflation, which has had a pernicious impact on operating costs. We've been in your seat, and we understand the frustrations that accompany such challenging market environments.

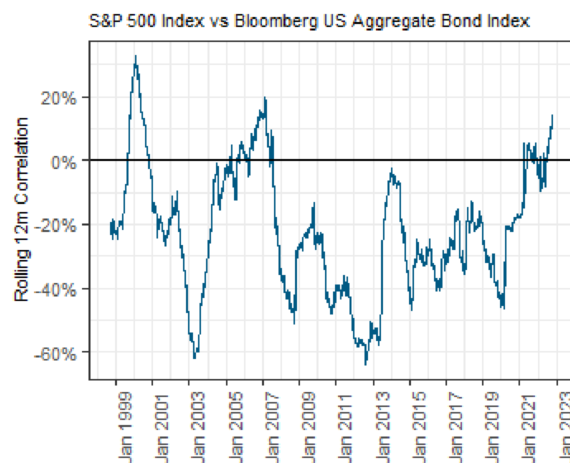
*In this edition of **Allocator's Angle**, we share our best thinking for when this environment may improve. Using our data driven approach, we seek practical and actionable portfolio structuring ideas for allocators. We have recently peered more closely into interest rates, global supply chains, and Fed policy. As we explain below, these data points taken collectively may suggest the positive correlation between stocks and bonds may persist, thus causing increased portfolio volatility. In past editions of **Allocator's Angle**, we've presented strategies for dampening portfolio risk in these environments including increased cash exposure, and Macro/CTA managers. In addition, we share observations around equity style factors and conclude that style factor volatility may increase, thus increasing the risk of tracking error in equity portfolios.*

*If you're an allocator facing a problem that may benefit from a data-driven approach, we'd love to hear from you. Please drop us a line at jkelly@iorllc.com and we may discuss it in a future edition of **Allocator's Angle**.*

NO SAFE HAVEN

In recent months the correlation between stocks and bonds has been stubbornly positive, frustrating investors who have historically relied on bonds to dampen the shock from falling equity prices. As a consequence, many allocators have realized sharp declines in their portfolios; an experience that is made worse by persistent inflation and rising operating costs. In fact, even traditional inflationary assets including REITs, precious metals, commodities, and TIPS, have offered little protection from falling asset prices. **Exhibit 1** below plots the rolling 6-month correlation between the S&P 500 and Bloomberg US Aggregate Bond Index. As of September 30th, the rolling 6-month correlation stands at 14% and is in the 97th percentile over the last 25 years. Given the implications this has on allocators' portfolios, we've asked ourselves what is driving this unusual breakdown in cross-asset correlation, and when the correlation may revert to more normal levels?

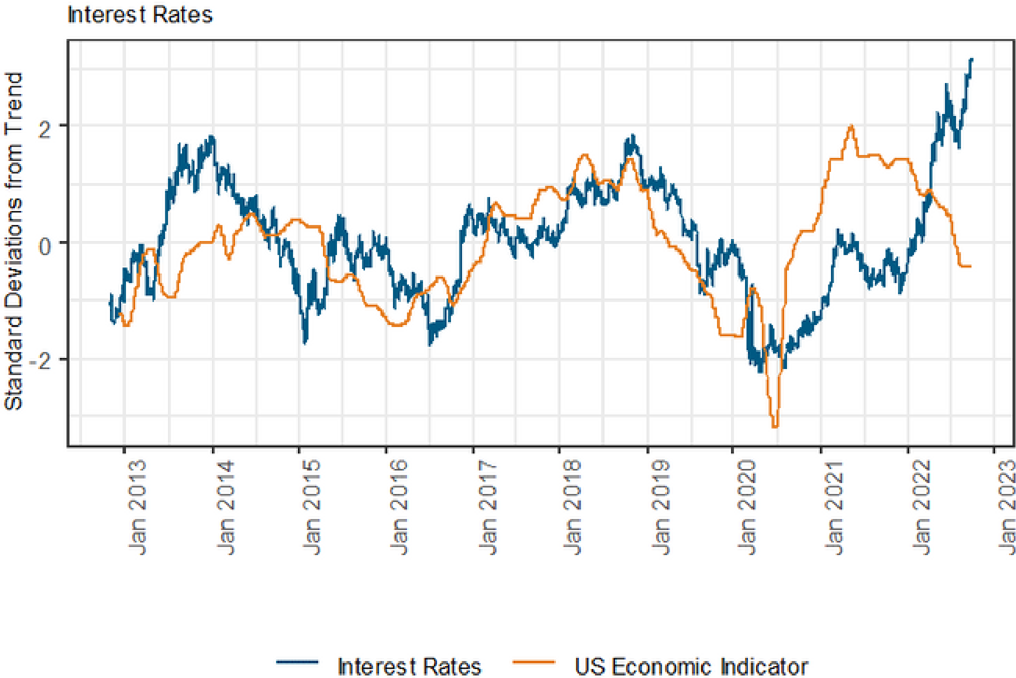
Exhibit 1: Stock – Bond Correlations Remain Stubbornly High



Source: Bloomberg, Investment Office Resources calculations as of 30 Sept 2022

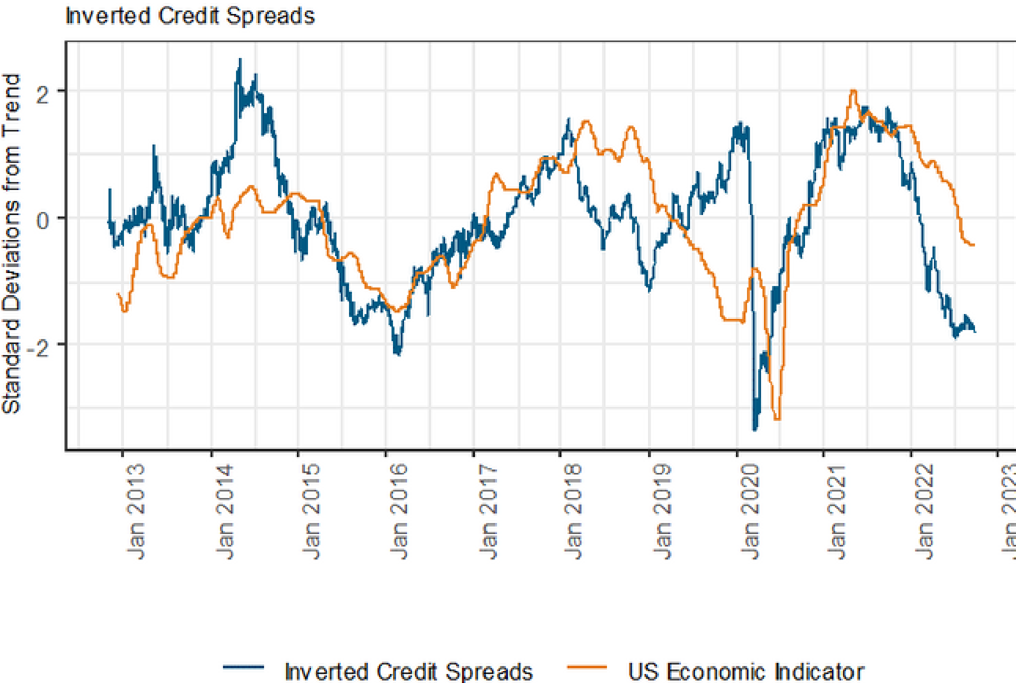
To help answer these questions, we plot interest rates vs our US Economic Indicator – both lines are de-trended and z-scored to enable apples to apples comparisons. **Exhibit 2A** suggests interest rates are more than 2-standard deviations above the economic growth rate – a statistically significant dislocation that implies interest rates are discounting robust economic growth despite a slowing US economy. This stands in sharp contrast to credit markets, which are pricing in a more pronounced economic slowdown **Exhibit 2B**.

Exhibit 2A: Interest Rates Dislocated from Economic Activity…



Source: Bloomberg, Investment Office Resources calculations as of 30 Sept 2022

Exhibit 2B*: While Credit Markets are Pricing in a Slowdown



Source: Bloomberg, Investment Office Resources calculations as of 30 Sept 2022

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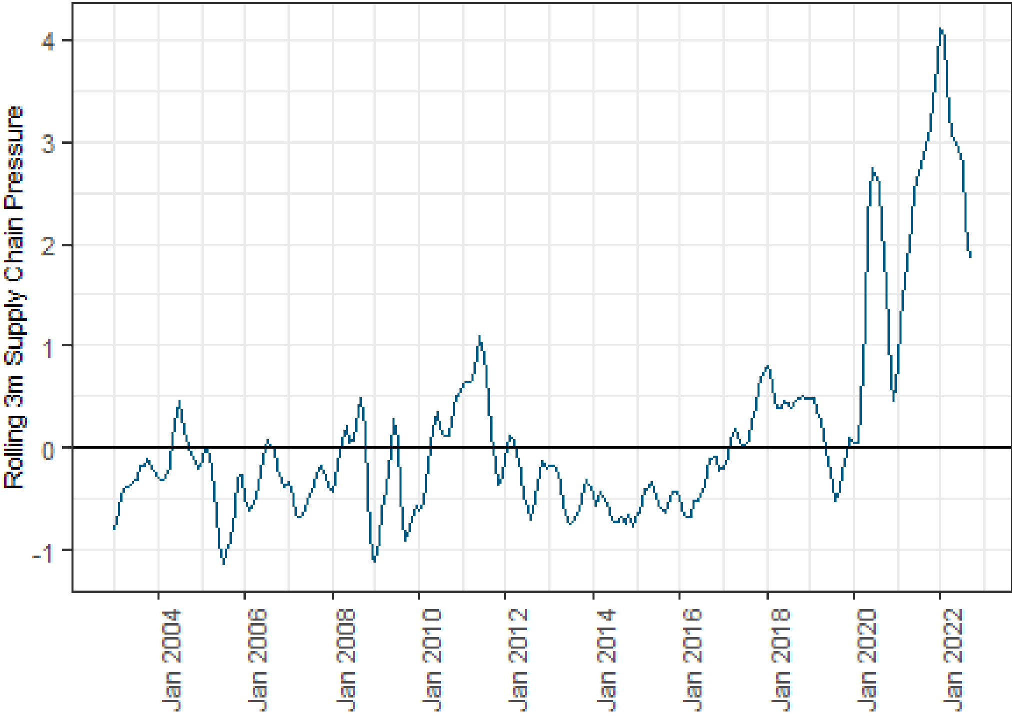
This incongruity is typical of stagflationary environments, which are often precipitated by supply shocks. Exhibit 3 plots the Federal Reserve Bank of New York's Global Supply Chain Pressure Index, which rose to an unprecedented 4 standard deviations above the mean in November 2021; in statistical terms, a shock of this magnitude should occur only 0.1% of the time! This strongly suggests the persistent inflation is due to supply-side issues, rather than increased consumer demand.

Exhibit 3: Strained Global Supply Chains



Source: Bloomberg, Investment Office Resources calculations as of 30 Sept 2022

The antidote to this scenario is, of course, a loosening of supply chain bottlenecks, something that policy makers have a difficult time addressing. As an alternative, the Federal Reserve is working to counteract the supply shock by reducing aggregate demand through a series of interest rate hikes. As of this writing, YoY CPI is over 8%, suggesting the Federal Reserve has not been successful in taming the supply shock. In his recent Ira Sohn address, Stanley Druckenmiller provided a clue for when inflation may be tamed, noting "once inflation gets above 5%, it's never come down unless the Fed Funds rate has gotten above the CPI."[1] When this happens and inflation is tamed, we may expect the correlation between stocks and bonds to turn negative once again.

To build some intuition for when the Fed Funds rate may exceed YoY CPI, we plot two variables: (1) Expected YoY CPI and (2) Expected Fed Funds Upper Policy Target. From these nosebleed price-levels, the base effects make further monthly increases in CPI more challenging. Considering this, we assume the Consumer Price Index will grow 0.25% per month for the next 12 months, which is the average monthly increase since 1980. Forecasting the Fed Funds Upper Policy Target is a bit more straightforward; we simply plot the futures market implied policy rate for the next 12 months.

1 https://brandonadams.substack.com/p/notes-from-stanley-druckenmillers

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At the current projected pace of interest rate hikes, the Fed Funds rate (orange line) may exceed YoY CPI (blue line) in Q1 or Q2 2023. Timing this inversion with precision is a fool's errand, but this analysis suggests the positive correlation between stocks and bonds may persist in the near term. When the Fed tames inflation, we expect the correlation between stocks and bonds to normalize, a welcome sight for many allocators as their portfolios may once again feel the benefits of diversification. In the meantime, the positive correlation between stocks and bonds may amplify portfolio volatility. In recent editions of ***Allocator's Angle***, we have highlighted strategies that may dampen portfolio volatility including increasing cash exposure to the upper range of policy targets and allocating to Macro/CTA managers. For additional information please contact us.

EQUITY MARKET FRAGILITY

It is well understood that active portfolio weights can drive meaningful tracking error relative to policy benchmarks. What is less well understood, is the impact that style factors may have on tracking error. Style factors are well known trading strategies that have a positive expected return over time; examples include Value, Momentum, Size, Quality, and Low-Beta. While factors may have positive expected returns, they are not immune to bouts of underperformance. Many allocators, knowingly or unknowingly, have exposure to these style factors via active managers in their equity portfolios. Left unchecked, these exposures can adversely impact portfolio returns if a factor falls out of favor.

Exhibit 4: Taming Inflation?

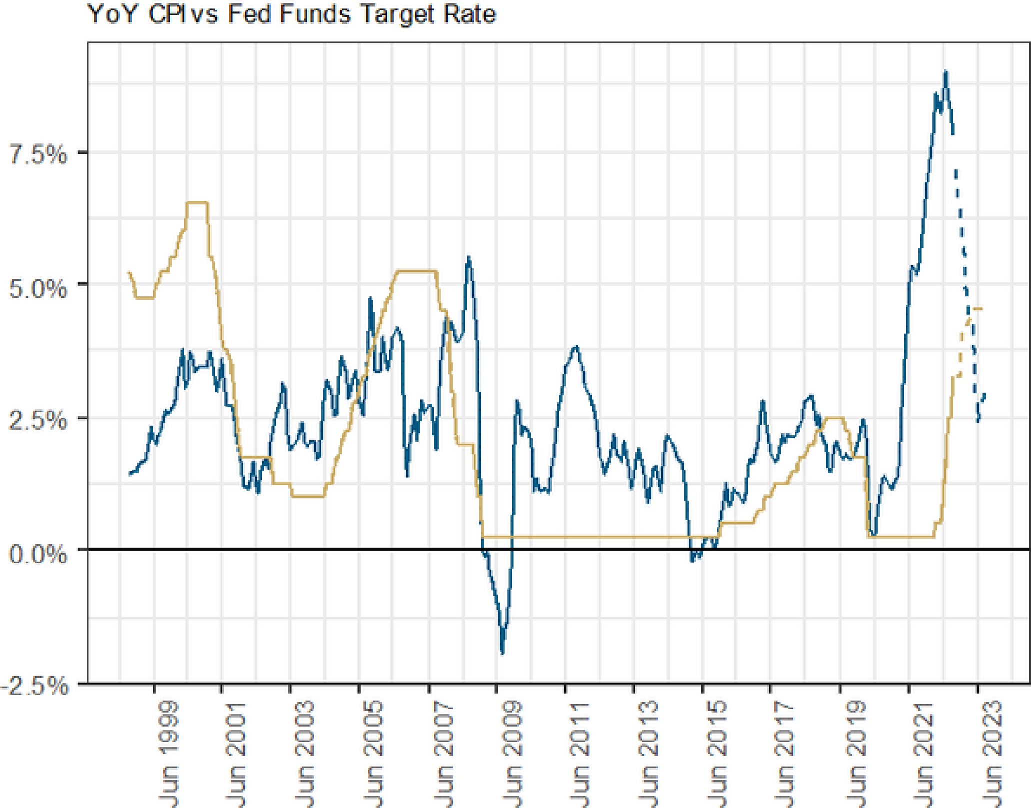

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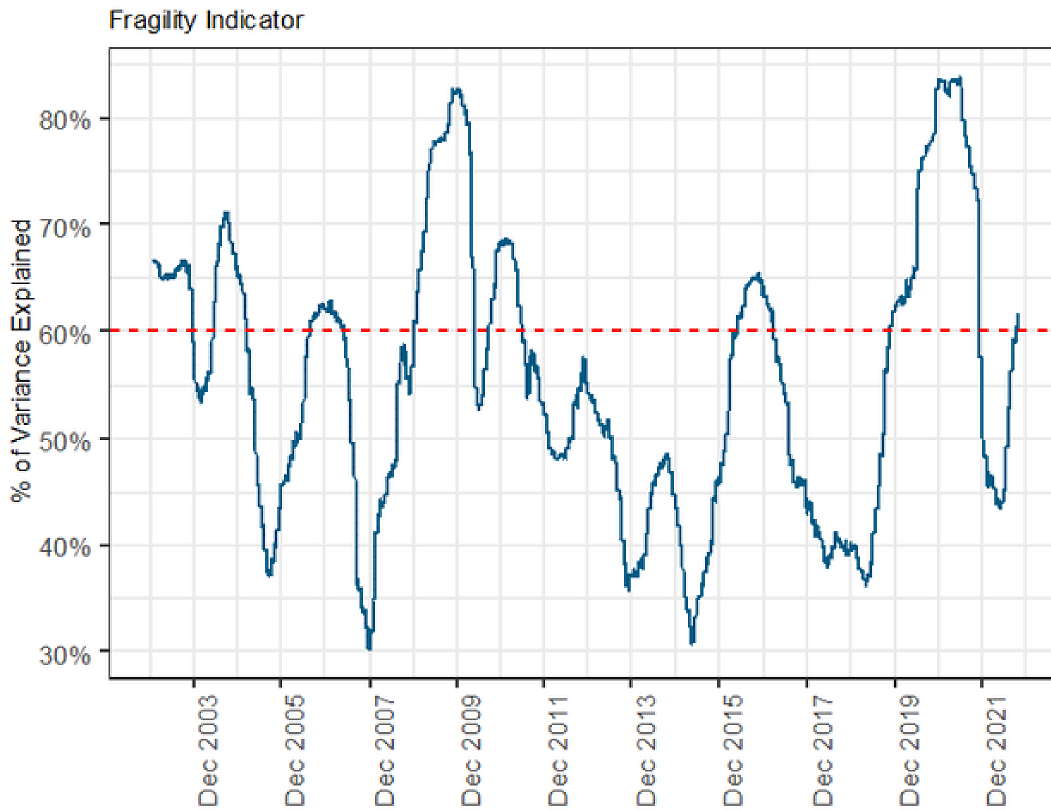
Exhibit 5: Concentrated Factor Risks



Source: Bloomberg, Investment Office Resources calculations as of 30 Sept 2022

To help allocators anticipate periods of elevated factor volatility, we introduce our proprietary breadth indicator, which quantifies the extent to which a diverse set of factors is becoming tightly coupled. A low breadth reading suggests factors are trading as diverse sources of risk, while a high reading suggests factor risks are more concentrated and may be susceptible to heightened bouts of volatility following a market shock. Readings above 50% suggest a majority of factor risk can be explained by a single statistical variable, known as a principal component.

In recent months the breadth indicator has risen more than 60% (**Exhibit 5**). This observation suggests factors are not trading as diverse sources of risk. When this happens, factors are more fragile and negative shocks may propagate more widely and violently than is typical. Amid this environment, allocators should re-underwrite their style factor exposures to ensure that any risks are known and intended. Doing so may help ensure that tracking error remains in-line with allocators' appetite for risk.

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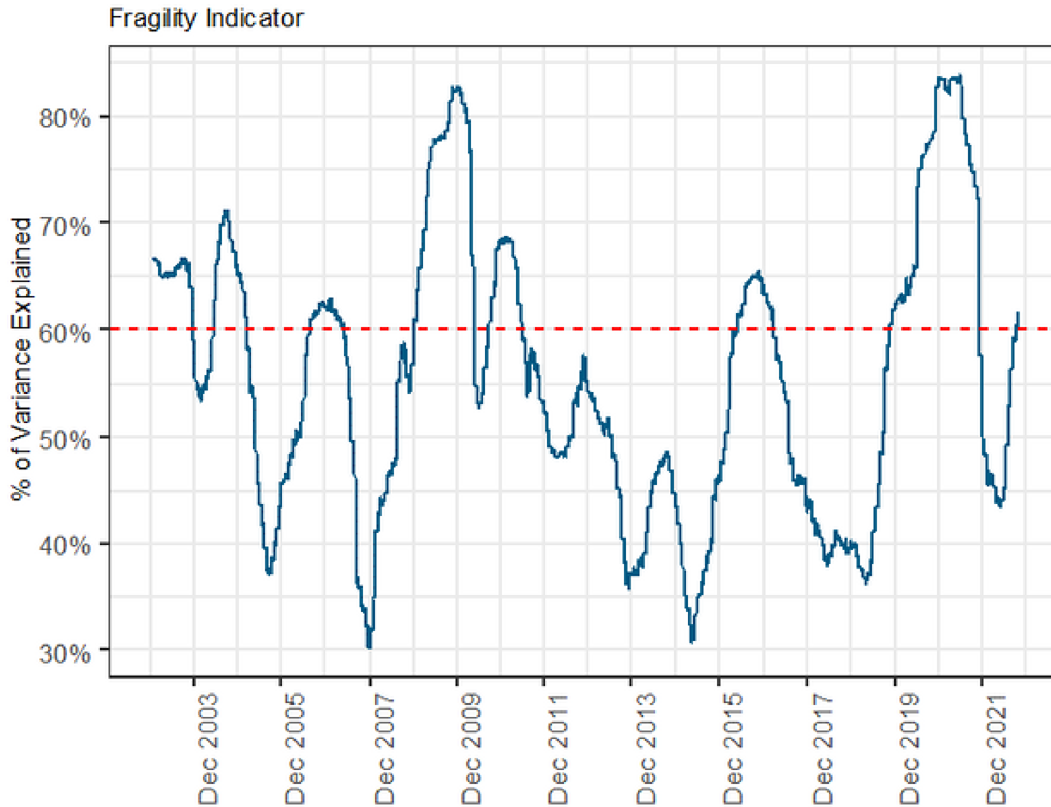

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