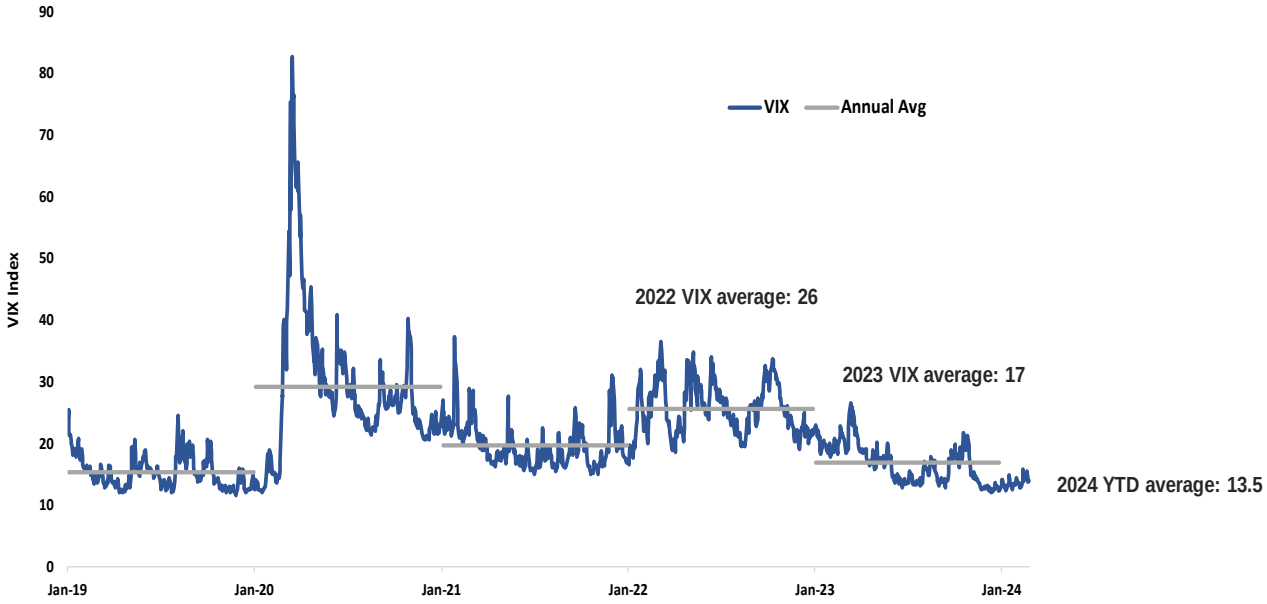
# Are Option Income Funds Suppressing Volatility?

## What's Behind the Low VIX® Index Level?

Equity volatility has fallen significantly over the past year, with the VIX index declining from an average of 26 in 2022 to just 17 in 2023. The 9 pt year-over-year decline ranks as the 3rd largest annual drop in equity volatility on record, behind only 2010 (post-GFC) and 2021 (post-covid). So far, 2024 looks to be much of the same, with the VIX index averaging just 13.5 YTD, well below levels we saw even pre-pandemic.

**Exhibit 1: VIX Index Has Fallen From An Average of 26 in 2022 to Just 13.5 YTD**




*Source: Cboe*

**Are Vol Selling Funds to Blame?**

This large decline in volatility has not only been historic, but also surprising, which has led investors to round up the usual suspects of potential culprits. Chief among them, at least nowadays, is the rise in popularity of yield enhancement ETFs and mutual funds – so called "derivative income" funds – that sell covered calls or cash secured puts for income. Total AUM in these "derivative income" funds have grown a jaw-dropping sixfold since 2019, from $20bn to now over $120bn (see Exhibit 2). As you can see from the chart below, majority of that growth in recent years have come from the ETF space, with option-selling ETFs now rivalling their traditional mutual fund counterparts in size (~$65bn apiece). These funds are a behemoth in the derivatives market – but are they the reason the VIX index has been so low?

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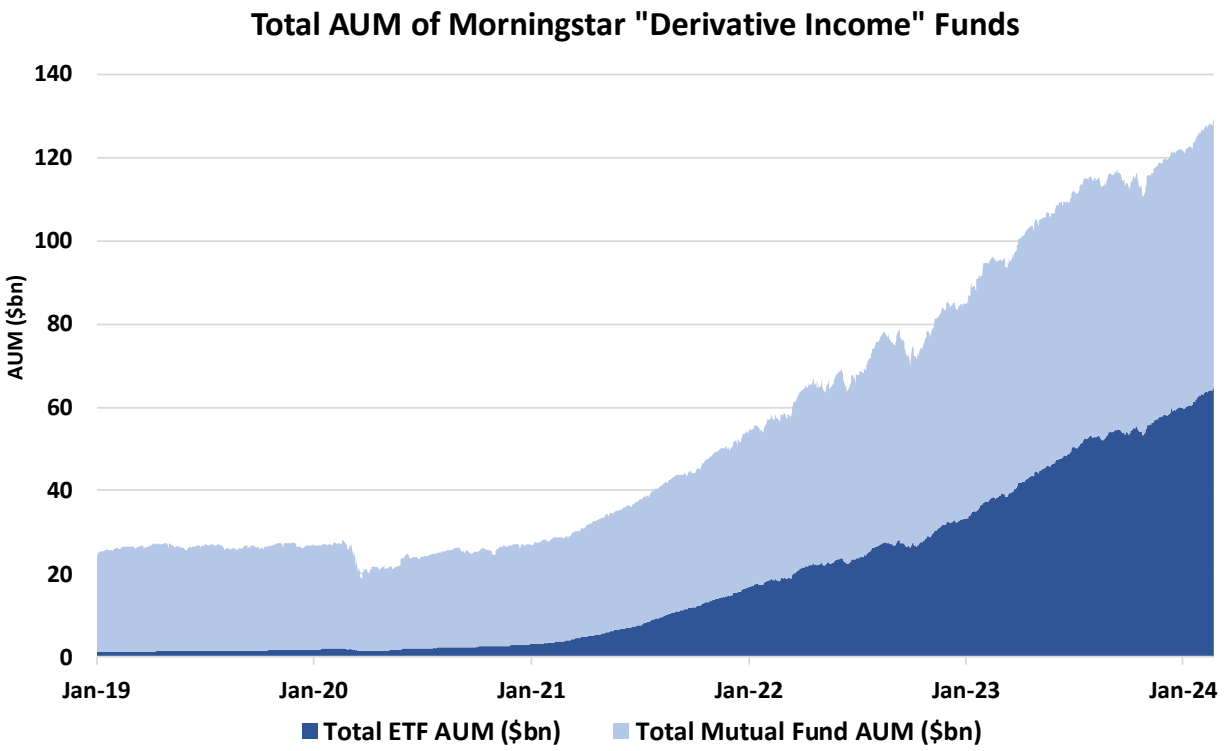
**Exhibit 2: Growth in Option Income Funds**




*Source: Cboe*

First, it's important to note that not all these funds deploy the same strategy. While some overwrite on the S&P 500® index, others overwrite on the Russell 2000 or Nasdaq 100 indices, or even single stocks and sectors (not surprisingly, mega-cap Tech buy-write funds have been particularly popular recently). The tenor and strike of the options sold also differ, from at-the-money to 25-30 delta OTM options, and ranging from weekly (or even daily) expiries all the way out to 3-months tenors. Thus only a fraction of overall AUM is deployed in strategies that have a direct impact on the VIX® index (e.g. 1-month over/underwriting strategies on the S&P 500 index). The diversity in underlying, tenor, and strike selection means the overall impact on the volatility surface is likely to be quite diluted vs. if these funds were all acting as a monolith.

Second, if volatility selling strategies were to blame for the low levels of the VIX index, you would expect the volatility risk premium (VRP) to shrink as the implied-realized volatility spread narrows (i.e. the VRP is what option sellers aim to monetize and thus should decrease as more sellers enter into the market). Instead, what we've seen over the past year is the opposite – the S&P 1M volatility risk premium (as measured by the difference between the VIX index vs SPX 1M realized volatility) actually increased quite meaningfully, from 1.5% in 2022 to 3.6% in 2023 (see Exhibit 3). Implied volatility may be low, but it's not trading particularly cheap compared to realized volatility (SPX 1M realized vol went from averaging 24% in 2022 to just 13% in 2023).

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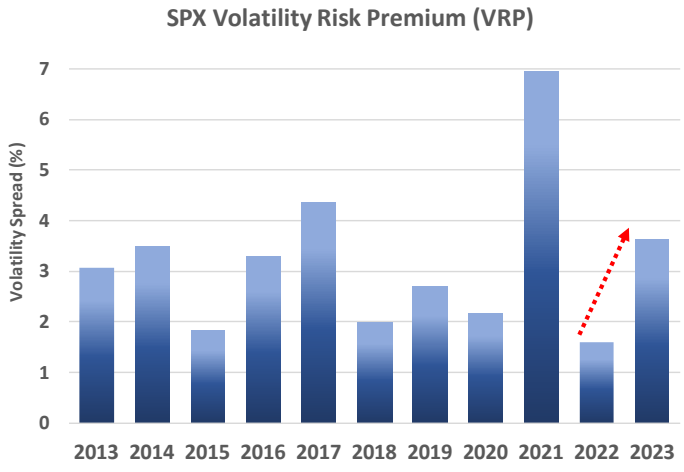
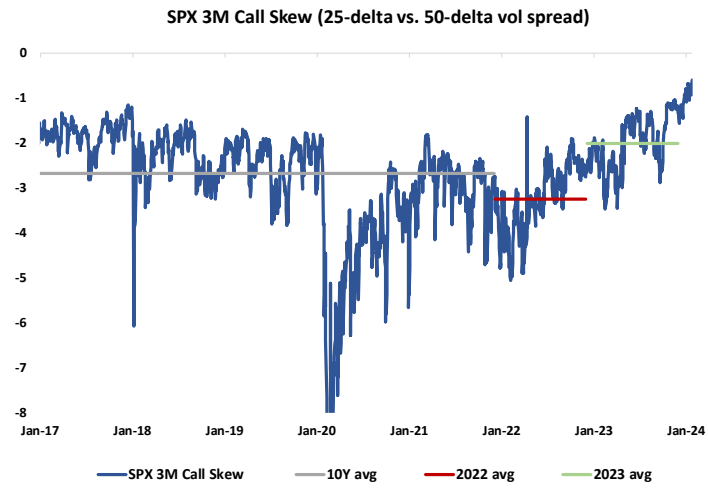
**Exhibit 3: SPX Volatility Risk Premium Increased Last Year**




*Source : Cboe*

**Exhibit 4: SPX Call Skew Hitting Extremes on Upside Demand**




*Source : Cboe*

Third, if buy-write strategies were distorting the market, we should see very low levels of call skew (defined as the difference in implied volatility between OTM call options vs. ATM call options) as selling pressure on OTM calls depress their volatility relative to ATM options. Instead, what we see is very much the opposite. SPX® call skew (25-delta call vs. 50-delta call) is trading near historic highs across a number of tenors on the back of elevated demand for upside calls, with 3M call skew recently surging to a 10-year high (see Exhibit 4). The dominant force in the derivatives market right now is upside call *buyers*, not sellers, as investors use options to tactically increase their leverage to the equity market.

## So…What Exactly is Behind the Low VIX® Index Level?

If it's not the growth in vol-selling strategies, then what exactly is behind the low levels of the VIX index? To answer that question, it's important to take a step back and look at what's happening to volatility not just within equities but across asset classes. As you can see in Exhibit 5 below, low vol isn't a unique feature of the equity market, but a phenomenon we're observing across every asset class (with the notable exception of rates). Implied volatilities have fallen broadly and significantly over the past year across equities, credit, FX, and commodities. A year ago, every asset class volatility was trading rich (1-5 standard deviations above their 10-year average). Fast forward to now, every asset class volatility is trading below their 10-year average (apart from rates), with equities squarely in the middle of the pack (both credit and FX implied volatilities screen cheaper than equity vol). This suggests that whatever is driving VIX index lower is very much macro fundamental in nature rather than equity-specific – hence the cross-asset nature of the volatility decline. More specifically, it's the positive turn in the economic outlook as investors went from fearing a recession to now expecting a soft landing. The "immaculate disinflation" that many

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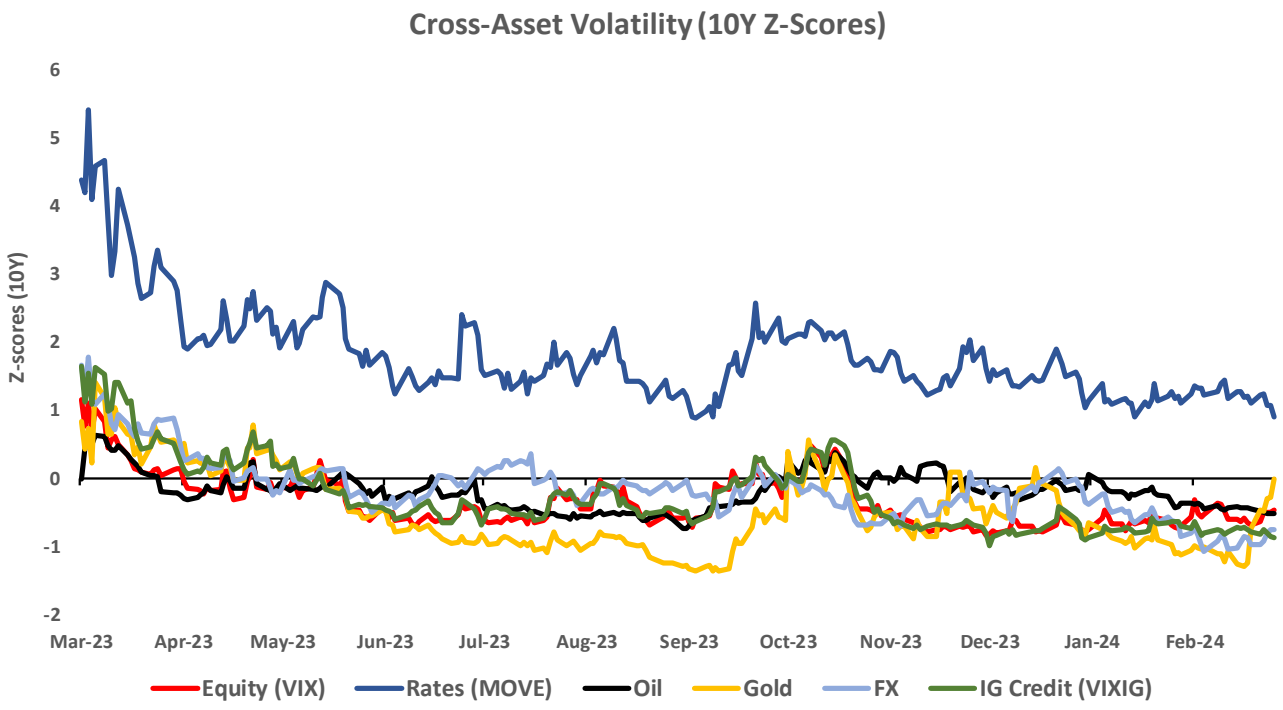
economists warned was impossible turned out to be very much possible – and that in turn has led to a decline in volatility across every asset class.

**Exhibit 5: Volatility Has Fallen Across Asset Classes**




*Source: Cboe*

Another reason why equity volatility has been so subdued, at least at the index level, is the incredibly low correlation environment we've been in over the past year. As leadership has swung back and forth between Growth vs. Value, cyclical vs. defensive, "old economy" vs. "AI" stocks, dispersion has remained extremely elevated. This is just another way of saying there *has* been volatility – we've observed many outsized idiosyncratic moves at the single stock level and large rotations at the sector and factor level – but because these stocks and sectors are all moving in different directions, it's kept index volatility muted (see Exhibit 7). S&P 1M implied correlation, as measured by the COR1M Index, collapsed to a low of 9% last year (vs. 10-year average of 32%), levels not seen since 2017 when the VIX® index fell to a record low of 9% (see Exhibit 6). Dispersion, as measured by the DSPX℠ index, has averaged over 26% this past year, on par with what we saw in 2020 when VIX index averaged almost 30. In fact, the spread between average single stock vs. SPX® index implied volatility (1M) reached a record high of 21% last July. For more on the DSPX index, please see our full report here.

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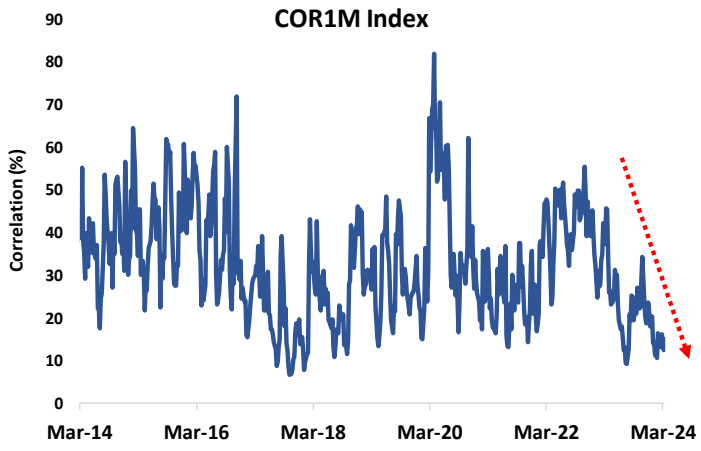
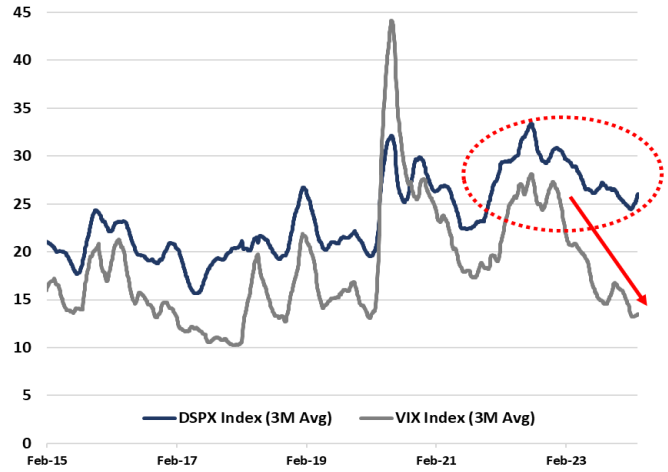
**Exhibit 6: SPX 1M Implied Correlation Near Record Low**




*Source : Cboe*

**Exhibit 7: High Dispersion vs. Low Index Volatility**




*Source : Cboe*

## Conclusion

While yield enhancement funds have grown in popularity in recent years, there's no compelling evidence that these funds are having a disproportionate impact on the equity volatility market, with the decline in equity vol very much in line with what we're observing across asset classes. A more interesting question to ask is why yield enhancement using options have become more popular during a period when bond yields have risen and investors can now get 4-5% in Treasuries and 7-9% in high yield corporate bonds. This is a topic we'll be exploring in more depth in our next Volatility Insights piece. To sign up for the Derivatives Market Intelligence distribution list, please subscribe here.

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