

Research Update: Trend Following with Managed Futures

Research Update: Trend Following with Managed Futures

We have long been proponents of managed futures strategies for their powerful diversification benefit, and more specifically for their ability to deliver positive contributions to a portfolio at times when nothing else seems to be working. Understanding how trend-following managed futures' strategies work, and how they take advantage of market and investment trends, is important for setting expectations for what is behind their performance. The evidence of the long-term value that managed futures bring to a balanced portfolio of stocks and bonds is compelling, however there can be shorter periods where sharp see-saw patterns can lead to disappointing returns. But in a year like 2022 that saw significant declines for both stocks and bonds, managed futures experienced large gains (see table below) and were one of the only asset classes to provide meaningful downside protection.

What Are Managed Futures and Trend-Following Strategies?

Managed futures strategies are employed by investment managers who are registered with the Commodities Futures Trading Commission ("CFTC") as Commodity Trading Advisors (CTAs)- a designation that establishes proficiency requirements and oversight for those advising on and trading in derivatives including futures contracts.

Managed futures strategies can be market-neutral, where they seek to identify securities mispricings and can play spreads or use arbitrage to capitalize on them, or trend following, where they can use technical or fundamental data to inform buying or shorting futures to capture either rising or falling price trends in various markets such as stocks, bonds, commodities and currencies. Our due diligence work has led us to favor quantitatively driven trend-following managed futures strategies, for several reasons. While most strategies we look at bring the benefit of very low correlation to core asset classes like stocks and bonds, we have more confidence in the trend-following strategies because of the ongoing persistence of trends which are a primary driver of absolute returns for these quantitative approaches. Strategies that use fundamental analysis can be more dependent on qualitative judgments and in theory this can reduce the reliability of the diversification benefit during periods when it's needed most.

But trend following strategies require the existence of trends in order to work. Periods with weak or choppy trends and poor relative performance from trend following managed futures strategies inevitably lead some to question whether fundamental changes to investor behaviors - perhaps driven by information technology, automated trading, artificial intelligence, etc. - mean the kinds of trends we've seen in the past are unlikely to occur in the future. While we acknowledge and observe that there are periods where trends are weaker, we see no evidence suggesting that going forward we are unlikely to continue to see the kinds of trends that managed futures strategies can take advantage of to produce positive returns for investors.

Investment advisory services offered through A&I Wealth Management a dba of A&I Financial Services, LLC, a registered investment adviser. Securities provided through Gêneos Wealth Management Inc., member FINRA, SIPC. Certain material in this work is proprietary to and copyrighted by iM Global Partner Fund Management, LLC and is used by A&I Wealth Management with permission. Reproduction or distribution of this material is prohibited and all rights are reserved.

A very simple way to think about the persistence of trends over time in this investment context is well described by *The Hedge Fund Journal*¹, which writes:

...many managed futures strategies profit from sustained capital flows in financial markets. These flows occur as a particular market moves from a state of imbalance toward a new equilibrium. Capital flows can take the form of rising markets as well as falling markets...

What that description captures nicely is the point that trends aren't just seemingly random ebbs and flows that may or may not persist for any particular duration. They are deeper rooted and connect to innate investment behavior in which it takes time for "water to find its own level" as underlying fundamentals change and are eventually reflected in pricing.

What We Look for in Managed Futures Strategies

The sometimes black-box nature of the quant approaches adds to the challenge of identifying managers likely to deliver the complementary performance we seek from owning managed futures. While managers are not likely to share *exact* details on the inner workings of their proprietary models, our research on the strategies we have selected has allowed us to gain a strong sense of their overall approach, including:

- The use of shorter-term, mid-term or longer-term trend signals
- The degree to which these can dynamically change
- How various signals are weighted (e.g., always constant versus overweighting stronger signals)
- Which markets are traded and how they weight various markets and contracts
- Their volatility target and whether it can change
- How allocations to other strategies involving factors like carry or mean reversion are determined (if any are used, as these are much less common than trend following and have different return profiles)

In assessing performance, we look at attribution to understand how various aspects of the strategy have contributed to performance during historically relevant periods. The more models they use and markets they trade the more difficult it can be to accurately determine attribution, especially during periods with weaker trends. However, during periods of stronger performance for trend followers, like 2008, 2014 and 2022, attribution becomes more clear and helps us set performance expectations in different market environments with somewhat more confidence.

That said, just as with equity managers, some managed futures approaches will work better during certain market environments than others. Given that we don't believe it's realistic to predict those environments over shorter periods, we want manager diversification in our managed futures allocation. The attributes we look for in managers we use in our portfolios include:

¹ Source: The Hedge Fund Journal ; originally published June 2013 ; <https://thehedgefundjournal.com/an-overview-of-managed-futures/>

- Intellectual honesty and humility about the inherent limitations of creating, evaluating and adapting models
- Reasonable level of transparency around model specifications and portfolio construction
- Sensible and clear approach to risk management
- Balance of trying to improve the process over time (in terms of models, portfolio management, trading costs, etc.) without over-optimizing for recent performance/market environment
- Good historical performance, obviously, but performance that makes sense in the context of the manager's investment style
- There *should* be periods of poor performance and the manager should be open in explaining them and, again, it should make sense in the context of their investment process/style
- Strong firm-level infrastructure and operational capabilities

Our due diligence work on managers and the strategies they employ helps us create a diversified allocation to managed futures where in aggregate we have confidence in the benefit it brings to the portfolios we manage – namely that they improve the risk-return profile through their strong diversification benefit.

Diversification Benefits of Managed Futures

Managed futures are regarded as an "alternative" asset class, in that their role is to provide diversification and mitigate the volatility and downside risk of a portfolio primarily comprised of more traditional investments, such as stocks and bonds. And the compelling evidence that managed futures improve the long-term risk return profile of an otherwise-diversified portfolio convinced us a number of years ago to include managed futures in our standard client portfolios. We will walk through some of the more compelling evidence by looking at portfolios with and without managed futures in terms of their long-term returns, volatility and drawdowns in bad market environments.

If you look at adding managed futures pro rata to a 60/40 portfolio (60% stocks/40% bonds) at various allocation levels, starting with 5% managed futures and increasing at 5 percentage point increments up to 25% managed futures (1/1/2000 through 9/30/2022, rebalancing annually), each additional notch higher in the managed futures allocation modestly increases returns since inception, and significantly decreases the portfolio's standard deviation (which measures the volatility of returns), thus also materially increasing risk-adjusted return measures (shown as the Sharpe Ratio and Sortino Ratio).¹

Time Period: 01/01/2000 - 12/31/2022	Annualized Return	Cumulative Return	Standard Deviation	Sharpe	Sortino
45% US Stocks, 30% Agg Bond, 25% SG CTA	5.77	263.35	7.01	0.60	0.93
48% US Stocks, 32% Agg Bond, 20% SG CTA	5.79	264.96	7.38	0.58	0.88
51% US Stocks, 34% Agg Bond, 15% SG CTA	5.80	266.09	7.79	0.55	0.83
54% US Stocks, 36% Agg Bond, 10% SG CTA	5.81	266.72	8.25	0.53	0.78
57% US Stocks, 38% Agg Bond, 5% SG CTA	5.81	266.85	8.75	0.50	0.74
60% US Stocks, 40% Agg Bond	5.81	266.46	9.28	0.48	0.70

See below for important composite disclosure²

These measures are impressive, but – to mangle an investment adage – *you can't eat Sharpe Ratio*. The investor experience is usually driven much more by absolute numbers, positive or negative. Looking at the reduction in drawdowns in various crisis periods may be the most valuable way to understand the real-life implications of a managed futures allocation.

Below we show the reduction in drawdowns of a 60/40 portfolio with the managed futures combinations, using as examples the bear market following the Tech Bubble (2000-02); the Global Financial Crisis bear market (2007-09); and the current inflation-/interest-rate- driven bear market. Seeing historical data showing a benefit probably has *some* resonance, but there's nothing quite the same as actually living through a bear market like the current one to reinforce the power of diversifying strategies.

Tech Bubble Drawdown	Max Drawdown	Peak Date	Trough Date	Recovery Date
45% US Stocks, 30% Agg Bond, 25% SG CTA	-10.61	2/1/2001	9/30/2002	5/31/2003
48% US Stocks, 32% Agg Bond, 20% SG CTA	-12.31	2/1/2001	9/30/2002	9/30/2003
51% US Stocks, 34% Agg Bond, 15% SG CTA	-14.34	9/1/2000	9/30/2002	10/31/2003
54% US Stocks, 36% Agg Bond, 10% SG CTA	-16.73	9/1/2000	9/30/2002	12/31/2003
57% US Stocks, 38% Agg Bond, 5% SG CTA	-19.07	9/1/2000	9/30/2002	12/31/2003
60% US Stocks, 40% Agg Bond	-21.37	9/1/2000	9/30/2002	2/29/2004
GFC Drawdown	Max Drawdown	Peak Date	Trough Date	Recovery Date
45% US Stocks, 30% Agg Bond, 25% SG CTA	-20.59	11/1/2007	2/28/2009	3/31/2010
48% US Stocks, 32% Agg Bond, 20% SG CTA	-22.67	11/1/2007	2/28/2009	3/31/2010
51% US Stocks, 34% Agg Bond, 15% SG CTA	-24.73	11/1/2007	2/28/2009	4/30/2010
54% US Stocks, 36% Agg Bond, 10% SG CTA	-26.76	11/1/2007	2/28/2009	10/31/2010
57% US Stocks, 38% Agg Bond, 5% SG CTA	-28.77	11/1/2007	2/28/2009	10/31/2010
60% US Stocks, 40% Agg Bond	-30.75	11/1/2007	2/28/2009	12/31/2010
2021/2022 Drawdown	Max Drawdown	Peak Date	Trough Date	Recovery Date
45% US Stocks, 30% Agg Bond, 25% SG CTA	-8.60	1/1/2022	-	-
48% US Stocks, 32% Agg Bond, 20% SG CTA	-10.91	1/1/2022	-	-
51% US Stocks, 34% Agg Bond, 15% SG CTA	-13.22	1/1/2022	-	-
54% US Stocks, 36% Agg Bond, 10% SG CTA	-15.54	1/1/2022	-	-
57% US Stocks, 38% Agg Bond, 5% SG CTA	-17.85	1/1/2022	-	-
60% US Stocks, 40% Agg Bond	-20.16	1/1/2022	-	-

² US Stocks represented by S&P 500, a market-cap weighted index that includes 500 of the largest companies. Agg Bond represented by Bloomberg US Aggregate Bond Index, a broad-based benchmark that includes U.S. dollar denominated investment-grade bonds. SG Trend Index is designed to track the largest trend following CTAs and represent the trend followers in the managed futures space.

Investment advisory services offered through A&I Wealth Management a dba of A&I Financial Services, LLC, a registered investment adviser. Securities provided through Gēneos Wealth Management Inc., member FINRA, SIPC. Certain material in this work is proprietary to and copyrighted by iM Global Partner Fund Management, LLC and is used by A&I Wealth Management with permission. Reproduction or distribution of this material is prohibited and all rights are reserved.

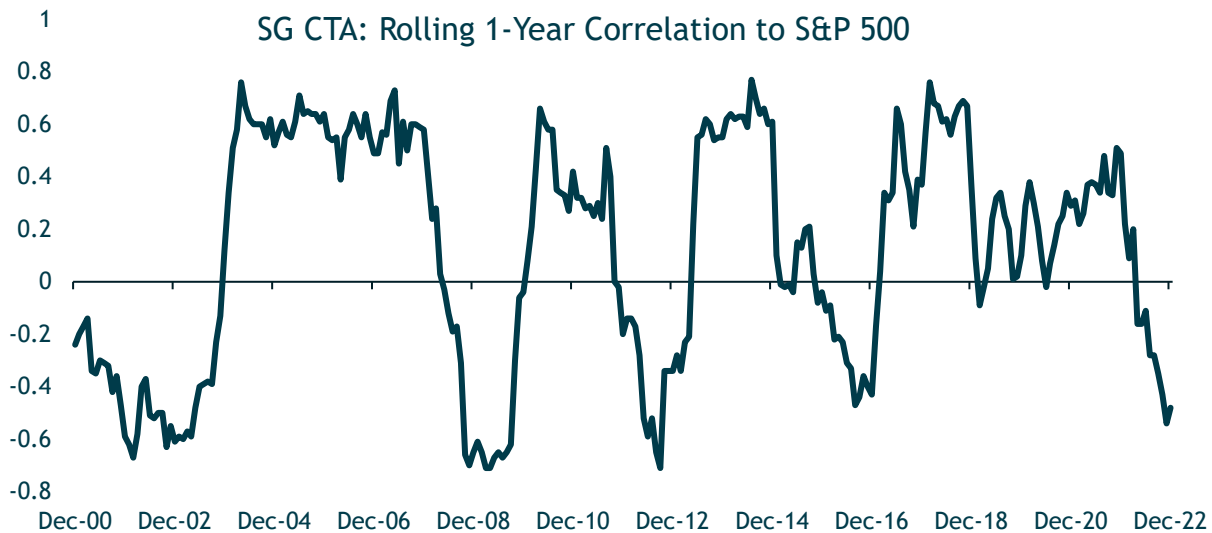
Once again, the numbers are impressive. Even a small 5% allocation to managed futures would have saved you about 2.3 percentage points of performance this year - reducing a loss of 20.2% to 17.9%. A 10% allocation would have come close to cutting losses by a quarter.ⁱⁱ

How We Allocate to Managed Futures

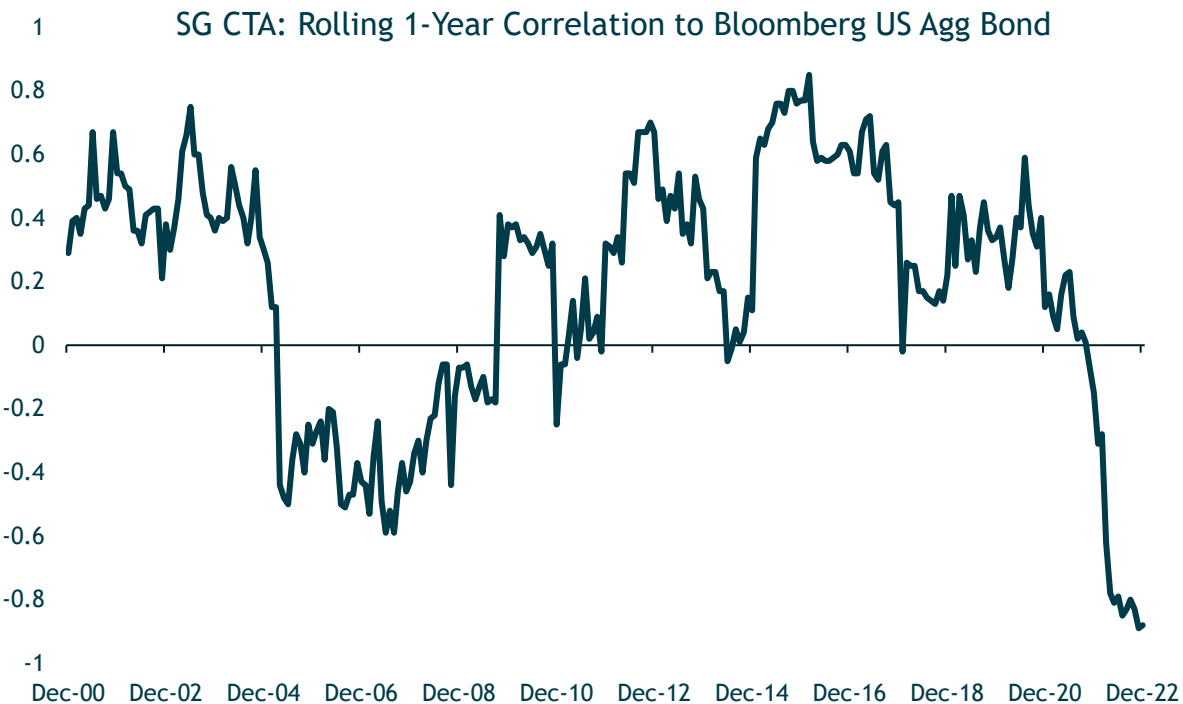
The answer doesn't come from looking at an asset allocation optimizer. If the goal is increasing *risk-adjusted returns*, an optimizer would tell you to allocate more than most investors are comfortable with, typically in the range of one-third of the portfolioⁱⁱⁱ with some variation higher or lower depending on the measurement period. This is one case where the decision should clearly be based on more than numbers.

A practical constraint on sizing allocations to highly diversifying strategies like managed futures is how much of a portfolio we are comfortable holding in an unconventional strategy that may experience extended periods of underperformance relative to other portfolio investments. This can be particularly challenging during periods when traditional stocks and bonds are doing well while managed futures are struggling.

Why would an optimizer tell you to invest so much in managed futures? Simply put, because the strategy (as measured by the SG CTA Index) has generated similar long-term returns to a 60/40 portfolio^{iv}, *but with essentially zero long-term correlation* to both stocks and bonds: specifically, -0.09 correlation to the S&P 500 Index from January 2000 through September 2022, and 0.08 correlation to the Bloomberg Aggregate Bond Index (using monthly returns). Rolling 12-month correlations range between about -0.8 and +0.8 for both, with the potential for dramatic shifts over short timeframes. This makes intuitive sense given the potential for managed futures to be long or short any asset class. The combination of long-term positive expected returns with no correlation (and a propensity to perform well during market dislocations) we feel makes the strategy an incredibly valuable addition to a portfolio.



Investment advisory services offered through A&I Wealth Management a dba of A&I Financial Services, LLC, a registered investment adviser. Securities provided through Gēneos Wealth Management Inc., member FINRA, SIPC. Certain material in this work is proprietary to and copyrighted by iM Global Partner Fund Management, LLC and is used by A&I Wealth Management with permission. Reproduction or distribution of this material is prohibited and all rights are reserved.



How should you fund a managed futures allocation?

Because managed futures have essentially no long-term correlation to anything, it makes sense to fund them pro rata from an existing allocation. The existing allocation has presumably been balanced for the investor’s return goals and risk tolerance based on the performance and correlation characteristics of its underlying components. Funding pro rata from these sources should preserve the expected return profile of the portfolio’s core, while adding the diversification benefits and (likely) crisis alpha of managed futures.

A reasonable case could also be made to fund an allocation more than pro rata from bonds, given stocks outperform bonds over long time horizons, and managed futures tend to perform well during extended stock market weakness (i.e., periods of weeks to months, not days to weeks). The “optimal” allocation depends on what is being optimized (risk-adjusted returns, *expected* maximum total return, etc.).

Opportunity costs factor into our calculus, particularly as an allocation becomes larger. To pick an extreme (and unrealistic) example for effect, if a managed futures allocation was funded entirely from equities beginning in 2015, the opportunity cost of that decision would have been huge over the next five years, as managed futures were essentially flat cumulatively, while the S&P 500 was up over 70% and a 60/40 portfolio was up almost 50%. One could of course find counterexamples, but the point is simply that the further one moves away from pro rata funding, the more it becomes an active “bet” against existing asset allocation, and the greater the chance of an extreme outcome that could

Investment advisory services offered through A&I Wealth Management a dba of A&I Financial Services, LLC, a registered investment adviser. Securities provided through Gêneos Wealth Management Inc., member FINRA, SIPC. Certain material in this work is proprietary to and copyrighted by iM Global Partner Fund Management, LLC and is used by A&I Wealth Management with permission. Reproduction or distribution of this material is prohibited and all rights are reserved.

derail an otherwise successful investment plan by potentially leading an investor to throw in the towel.

Summary

By virtue of their almost total lack of long-term correlation to other asset classes, combined with their ability to generate a modest long-term absolute return, trend following managed futures are a powerful diversifier to broader portfolios that include a traditional mix of stocks and bonds. They generally improve risk-adjusted returns and have provided downside protection during periods when stocks and bonds experienced large downturns. An added benefit in today's economic environment is that historically managed futures have also been an effective inflation hedge during periods of elevated inflation.

But managed futures are complicated, in more ways than one. The trend following strategies used and the asset class itself can be difficult to understand and that can impact investors' comfort. We hope the information we presented here helps to demystify this space and explain the fundamental aspects of what these investment strategies do and how they work.

Beyond the complexity, managed futures can sometimes be frustrating to own given their tendency to generate lower absolute returns relative to stocks and bonds during extended periods when those assets classes are performing well. This was the case for a lengthy stretch prior to 2022, and some investors found it difficult to stick with their allocation to managed futures. Now, after a difficult year for traditional stock and bond markets, and where managed futures had very strong absolute and even stronger relative performance, it is a good time to remember that it may be necessary to be patient in order to gain the diversification and downside mitigation benefits that managed futures can bring over the long term.

Important Disclosure

Nothing herein should be construed as legal or tax advice, and you should consult with a qualified attorney or tax professional before taking any action. Information presented herein is subject to change without notice.

For discretionary use by investment professionals. This document is provided by iM Global Partner Fund Management, LLC ("iMGPFM") for informational purposes only and no statement is to be construed as a solicitation or offer to buy or sell a security, or the rendering of personalized investment advice. There is no agreement or understanding that iMGPFM will provide individual advice to any investor or advisory client in receipt of this document. Certain information constitutes "forward-looking statements" and due to various risks and uncertainties actual events or results may differ from those projected. Some information contained in this report may be derived from sources that we believe to be reliable; however, we do not guarantee the accuracy or timeliness of such information. Past performance may not be indicative of future results and there can be no assurance the views and opinions expressed herein will come to pass. Investing involves risk, including the potential loss of principal. Any reference to a market index is included for illustrative purposes only,

Investment advisory services offered through A&I Wealth Management a dba of A&I Financial Services, LLC, a registered investment adviser. Securities provided through Gêneos Wealth Management Inc., member FINRA, SIPC. Certain material in this work is proprietary to and copyrighted by iM Global Partner Fund Management, LLC and is used by A&I Wealth Management with permission. Reproduction or distribution of this material is prohibited and all rights are reserved.

as an index is not a security in which an investment can be made. Indexes are unmanaged vehicles that do not account for the deduction of fees and expenses generally associated with investable products. A list of all recommendations made by iMGPFM within the immediately preceding one year is available upon request at no charge. For additional information about iMGPFM, please consult the Firm's Form ADV disclosure documents, the most recent versions of which are available on the SEC's Investment Adviser Public Disclosure website (adviserinfo.sec.gov) and may otherwise be made available upon written request to complianceus@imgp.com

The [investor] acknowledges that AdvisorIntelligence is beneficially owned by iM Square SAS, a Paris based investment and development platform ("iM Square"). AdvisorIntelligence, from time to time, expects to include in its investment models certain investment funds (collectively, "iM Square Funds") sponsored or managed by investment advisers in which iM Square has a beneficial ownership interest ("iMGpus Affiliates"). This arrangement creates a material conflict of interest because AdvisorIntelligence has an incentive to include iM Square Funds in its investment models. iMGpus Affiliates do not waive fees for these investments. Therefore, assets invested in iM Square Funds will be charged two layers of fees, one by AdvisorIntelligence and another by the iM Square Funds.

Our due diligence process for managers and funds is grounded in our conviction, supported by extensive research, that skilled managers can and do deliver superior performance over the long term. An essential part of the value we provide is the multiple decades of experience we bring to bear in assessing and selecting exceptionally skilled managers. We engage in exhaustive quantitative and qualitative research aimed at uncovering those select managers with an identifiable and sustainable investing edge. Here are just a few critical elements we look for in our due diligence:

- A clearly defined and well-articulated investment process supported by evidence of successful implementation over time
- A manager or team that demonstrates a high level of integrity, intellectual honesty, and a passion for investing
- Supportive team dynamics and a culture that insulates key investment personnel from noninvestment-related responsibilities
- Outperformance versus relevant benchmarks and peers that is consistent with our expectations given certain market environments
- Consistent outperformance (i.e., over rolling periods) versus benchmarks and peers that is a result of a time-tested investment process

This rigorous process yields a select list of managers. For those we decide to invest with, our analysis is not a once-and-done exercise. We continue to closely monitor fund performance and investment decisions through regular updates with our managers, aimed at making sure they remain committed to their investment process and disciplined in its execution and is the basis for the opinions shown below.

Recommended = These are funds we are confident will outperform an index fund alternative over a market cycle.

Approved+ = Approved funds we are actively researching and consider to be realistic candidates for upgrading to Recommended.

Approved = Funds we believe will perform at least as well as, if not in excess of, an index fund alternative over a market cycle.

Noteworthy = Funds we view as promising. The record may be too short or we may need to do additional due diligence before making a final decision on the status (Approved, Recommended) of the fund.

Under Review = We are currently conducting follow-up due diligence to address questions that have arisen since our last review. While these questions are material enough to warrant further investigation, we do not feel they are material enough to warrant an immediate downgrade.

Recommendation - Index Funds & ETFs

Core = Funds/ETFs that are our preferred vehicle for gaining index exposure to an asset class. These vehicles are recommended for those who would rather use an index fund in lieu of funds in the model portfolios.

Tactical = ETFs and index funds we are currently using or have used in the past for tactical purposes in place of Core funds.

Alternative = Funds we believe are acceptable alternatives to Core funds, though they are not our preferred choice due to any number of factors, including expenses, asset base, index construction and methodology, and the experience of the fund sponsor.

ⁱ We start to see diminishing marginal benefits to annualized returns at a 25% managed futures allocation, though the marginal benefits to risk-adjusted returns are still very strong. An optimization would still be increasing the allocation, but we limit our analysis to 25% as the high end of the range that bold advisors might be comfortable with, although we suspect that the practical limit for the vast majority is lower than 25%.

ⁱⁱ We should note that this year the value in reducing losses is somewhat greater than in prior crises since stocks and bonds have declined simultaneously, whereas in prior downturns bonds have cushioned the losses from stocks. Although this relative level of protection may not be the norm, we think it still reinforces one of the more attractive features of managed futures: the flexibility of the strategy offers the potential to protect against a variety of dislocations (including ones considered unlikely, or more importantly, ones that are not even contemplated at all).

ⁱⁱⁱ We used the optimization tool at PortfolioVisualizer.com to look at Sharpe Ratio optimization for two-asset portfolios of VBIAX (Vanguard Balanced Index Fund) and a managed futures mutual fund (either AQMIX (AQR Managed Futures Strategy Fund) or ASFYX (AlphaSimplex Managed Futures

Strategy Fund), two of the oldest managed futures mutual funds, both dating back to 2010. Even starting at the beginning of the decade where 60/40 dominated, an optimization through September 30, 2022 produced a portfolio of 65% VBAIX and 35% managed futures, regardless of which fund was chosen, despite their differing total long-term returns.

A CME Group study cited by RCM Alternatives (<https://www.rcmalternatives.com/2016/04/the-optimal-allocation-to-managed-futures>) found the optimal allocation to managed futures for the 20 years ending February 2008 (right before the worst of the GFC) to be 20%. RCM did the same exercise for the period of January 1994 through December 2015 and found the updated optimal allocation to be 35%, though ending the study any year end 2008 through 2012 would have resulted in a 40% managed futures allocation.

^{iv} This is highly endpoint sensitive, as managed futures outperformed the 60/40 portfolio significantly for the decade of the 2000's, the reverse was true in the 2010's, and the advantage has shifted back to managed futures thus far in the 2020's. An optimization exercise run strictly during one decade versus another (much less one year versus another) could show either dramatically more benefits from including managed futures or essentially no benefit. We think this long-term view that includes strong and weak periods for the strategy is a fair way to look at the question, and we'd note that timing an allocation is not a realistic strategy.