Invesco

Evaluating liquid alternatives

Applications for asset allocation

Invesco Solutions

Evaluating liquid alternative strategies
Main takeaways

1. Liquid alternatives are hedge fund strategies that attempt to capture alternative sources of alpha and are publicly available in both mutual funds and ETF vehicles.

2. We evaluate these assets using our investment process to determine their ability to improve traditional portfolios from both a risk-based and objective-oriented perspective.

3. Our conclusion is that a modest and selective allocation to liquid alternatives, in particular systematic trend and derivative income strategies, may enhance return or generate additional yield while reducing risk of traditional portfolios.
   - A 5% allocation to a systematic trend strategy, with funding from the fixed income sleeve and combined with an overweight to equity, improved outcomes at the aggregate portfolio level across scenarios.
   - Event-driven and market neutral strategies demonstrated variation in optimal allocations with lower equity weightings seeing the largest benefit.

What are liquid alternatives?

Hedge fund strategies that aim to generate alpha in a tradeable vehicle

Investors often search for uncorrelated returns to traditional assets to improve the risk profile of their portfolios, a category commonly referred to as alternatives. While alternatives are notably distinct from traditional assets, they come in many forms and are often quite different from each other within the category itself. For example, private credit, an illiquid alternative, looks and acts closer to traditional fixed income than a liquid managed futures exchange traded fund (ETF), a systematic trend liquid alternative, compares to private credit.

In their original form, liquid alternatives presented themselves as hedge funds and are now available in liquid vehicles like mutual funds and ETFs totaling $540 billion in assets under management (AUM) as of November 2024[1]. This paper aims to review the diverse landscape of liquid alternatives and highlight how they may be implemented within a traditional portfolio. To do this, we utilize the framework presented by Morningstar to organize these assets as modifiers, diversifiers, and opportunistic; all of which play different roles in a portfolio.

Modifiers

Aim to reduce traditional risk in down markets while enhancing return or yield

Derivative income

Equity strategies that sell options to generate income

Long-short equity

Equity strategies that aim to reduce market equity beta through short positions

Diversifiers

Aim to eliminate traditional risk and provide uncorrelated exposures

Equity market neutral

Minimizes equity risk through long and short positions

Event-driven

Invests in equities that have announced corporate actions

Options trading

Engages in a variety of options contracts to generate returns

Opportunistic

Aim to capture positive returns in both bull and bear markets

Macro trading

Systematic or discretionary trading on macroeconomic ideas across assets

Systematic trend

Aims to capture price momentum through trend-following

Sources: Invesco Solutions, Morningstar. 1. AUM sourced from Morningstar Direct as of January 17, 2025. Includes Worldwide Open-End funds and ETFs classified as “Alternative”, excluding money-market, Fund-of-Funds and feeders.

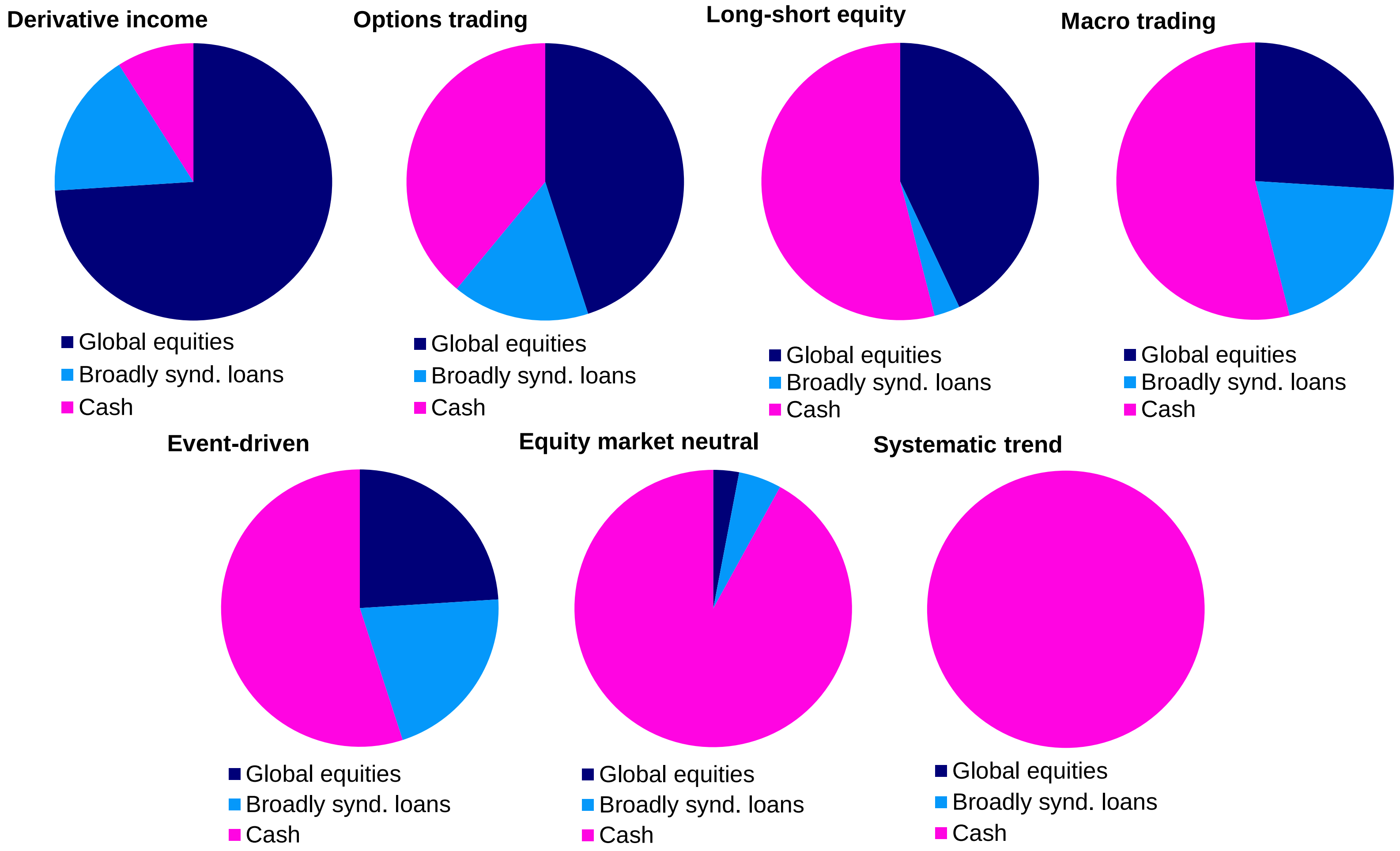
How should they be benchmarked?
Liquid alternatives are not all the same and require unique benchmarks

Since each liquid alternatives strategy has different characteristics and underlying investments, we needed to create unique benchmarks to properly analyze them.

We attempted to replicate these assets by minimizing the tracking error of a portfolio of three asset classes, equities, broadly syndicated loans, and cash. These assets were chosen due to their low correlations to each other and since they are common investments within the liquid alternatives categories themselves.

The resulting set of benchmarks contain variable weights of each of the three benchmark assets and provide reasonable expectations for the performance of each liquid alternatives categories. Derivative income, for example, has a benchmark with significant equity exposure, which is intuitive as the underlying investments are mostly equities, while equity market neutral has almost no equity exposure at all.

Custom benchmark weights to reflect equity and credit beta



Sources: Invesco Solutions, as of Dec. 31, 2024. Liquid alts categories are represented by Morningstar categories.

How do they perform?

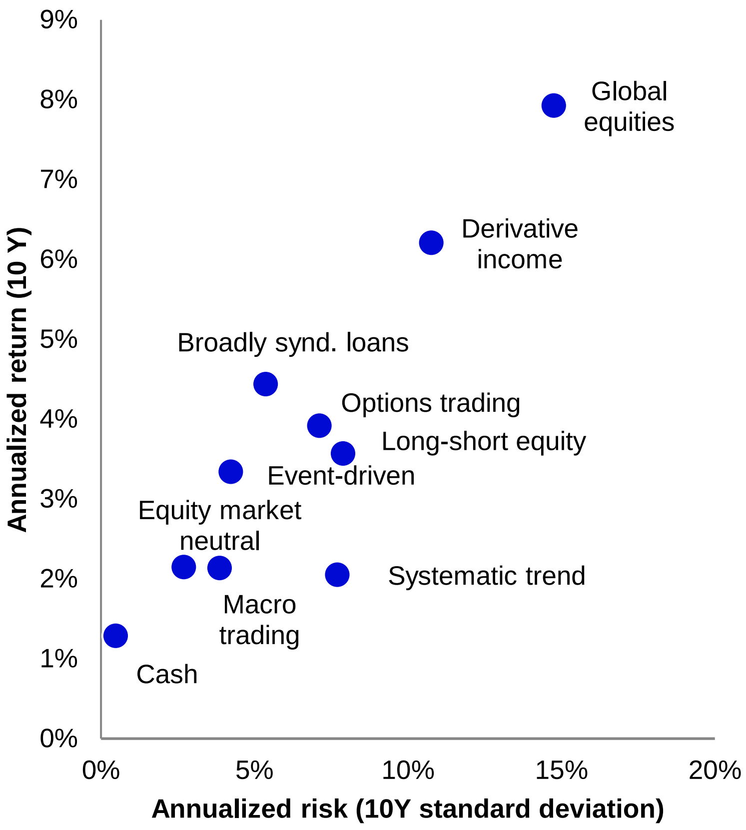
Systematic trend and market neutral have added alpha with near zero beta[1]

Performance across the liquid alternatives spectrum is variable over the past 10 years. While this decade has exhibited a global pandemic, it has mostly been a bullish period for equity markets. As such, liquid alternatives categories have underperformed global equities to various degrees, but have done so at lower levels of risk, delivering higher return-to-risk ratios outside of the systematic trend category.

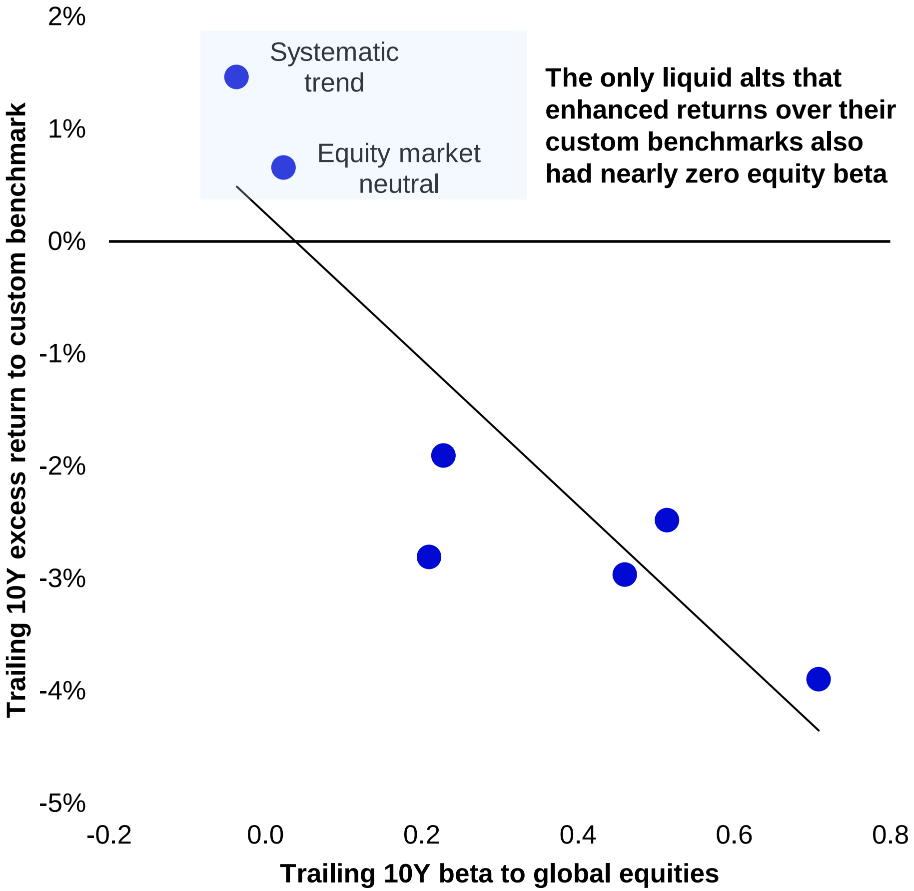
The underperformance of liquid alternatives to equities is not the whole story; however, it is the reason a set of custom benchmarks are needed to evaluate the alpha that these assets can deliver and if they are able to play a role in a portfolio.

When analyzing the excess returns of liquid alternatives to their custom benchmarks, only systematic trend and equity market neutral outperformed. Further, they had near zero exposure to equities, providing a hint at how they may add value to a traditional portfolio through diversification.

Return and risk of liquid alts and traditional assets



Comparing liquid alternative exposure to global equity beta to their excess returns



Sources: Invesco Solutions, Bloomberg, Morningstar Direct. Liquid alts categories represented by Morningstar categories; definitions are listed in the appendix. Global equities represented by the MSCI ACWI index, Broadly syndicated loans the Morningstar LSTA US Leveraged Loan Index and cash is the average yield on the 3-month U.S. T-bill Chart data uses the trailing 10 years ending Dec. 31, 2024. Past performance is not a guarantee of future results. An investment cannot be made directly into an index.[1] Alpha is excess return; beta is equity beta.

Managed futures ecosystem correlations

Diversification – historically low correlation to traditional asset classes

Systematic trend strategies are highly diversifying. Since common inception, the correlation of the popular industry benchmarks to stocks and other traditional markets is effectively zero. Intuitively, this is because trend-followers seek to capture trends in all these markets simultaneously, either up or down.

These correlations also show just how little diversification is obtainable within asset classes with US and ex US stocks correlating almost perfectly. Even so-called diversifiers represented by HFRI FoF and the Morningstar (M*) Multi-strategy universe offer little diversification to stocks. Trend-following, on the other hand, represented by the SG Trend and the M* Systematic Trend universe, is much more diversifying, exhibiting low or negative correlation to both stocks and bonds over the long term.

	1	2	3	4	5	6	7
	S&P 500	ACWI ex US	HFRI FoF	M* Multi Strat	BBG US Agg	SG Trend	M* Sys Trend
1	1.00	0.87	0.75	0.88	0.25	-0.05	-0.06
2	0.87	1.00	0.80	0.91	0.29	-0.05	-0.07
3	0.75	0.80	1.00	0.85	0.14	0.17	0.13
4	0.88	0.91	0.85	1.00	0.19	0.16	0.12
5	0.25	0.29	0.14	0.19	1.00	-0.13	-0.21
6	-0.05	-0.05	0.17	0.16	-0.13	1.00	0.89
7	-0.06	-0.07	0.13	0.12	-0.21	0.89	1.00

HFRI FoF index and the Morningstar multi-strategy universe median look much more like equities than managed futures

Greater than 0.7 | 0.1 to 0.7 | Less than 0.1

Low correlation:

- Common managed futures indices and the Morningstar Systematic Trend Universe median demonstrate low correlation to both equities and bonds

Consistent behavior:

- The managed futures indices and the Morningstar Systematic Trend universe are all highly correlated with one another

Source: Invesco analysis. Data from 03/31/07 – 12/31/24 using monthly returns, Pearson correlation. Past performance is not a guarantee of future results. An investment cannot be made in an index .Index proxies and definitions are listed in the appendix.

Liquid alternatives as a strategic return driver

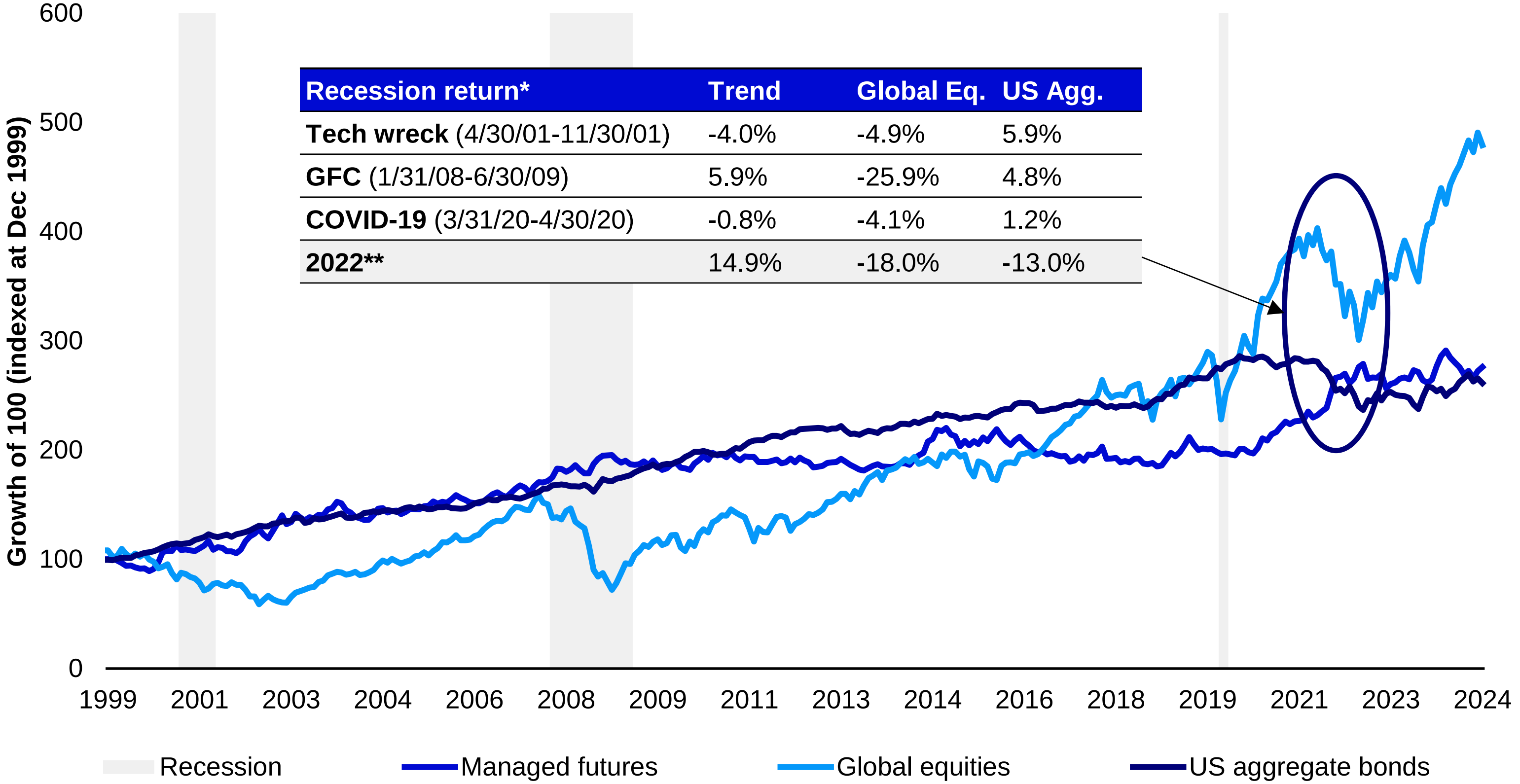
Systematic trend strategies: Non-directional macro

Beyond low correlations, systematic trend strategies also offer non-directional returns, harvesting the persistency of macro trends across equity, fixed income, currency and commodity markets, as investors chase recent performance, exacerbating price trends.

When extending the time period of systematic trend to 2000, adding an additional cycle, their outperformance over traditional fixed income becomes clear. The combination of excess returns and low correlations provide ample opportunity to enhance traditional portfolios.

A reason to consider these strategies as a replacement for fixed income is their lack of interest rate sensitivity. This feature is evident in the relative outperformance of systematic trend compared to core fixed income since 2020, after one the sharpest tightening cycles of monetary policy in decades.

Systematic trend strategies (managed futures) cumulative performance compared to fixed income and global equities (2000 - 2024), with recessions examined



Recession return*	Trend	Global Eq.	US Agg.
Tech wreck (4/30/01-11/30/01)	-4.0%	-4.9%	5.9%
GFC (1/31/08-6/30/09)	5.9%	-25.9%	4.8%
COVID-19 (3/31/20-4/30/20)	-0.8%	-4.1%	1.2%
2022**	14.9%	-18.0%	-13.0%

Source: Invesco Solutions. January 2000 – December 2024. Barclays BTOP50 managed futures index uses to represent systematic trend. Global equities are represented by the MSCI ACWI index. US aggregate bonds are represented by the Bloomberg aggregate bond index. * Figures are annualized for periods longer than a year. ** It is debatable if there was a recession in 2022, and while the NBER did not determine the two consecutive negative quarters of GDP growth was enough to qualify as a recession, both equities and fixed income sold off significantly due to rate hikes. Past performance is not a guarantee of future results.

How should they be added into a portfolio?
Systematic trend allocations can add value and allow for overfunding to equities

Given the possible portfolio diversification benefits, allocation to systematic trend strategies can be funded from fixed income and combined with modest equity overweight, without increasing portfolio risk. We estimate the historical information ratio of a strategic allocation to trend strategies at around 0.4 to 0.6*.

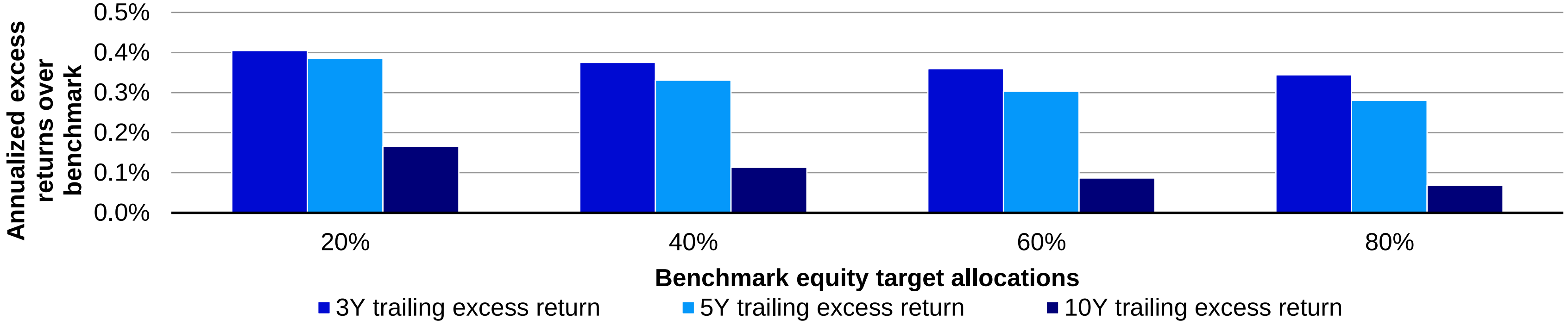
A hypothetical 5% allocation to systematic trend combined with a 1% overweight to equities, funded with a 6% underweight in fixed income, generates approximately 50 basis points (bps) of tracking error (TE), and maintains the same level of total portfolio risk. This 5% allocation improves annualized returns for each portfolio over the past three, five, and ten years, at every level of equity targeted from conservative (20%) to aggressive (80%).

While all the portfolio tracking error is not sourced directly from the liquid alternatives allocation, this modest level allows for the possibility of also implementing a wide variety of portfolio return drivers such as security selection, tactical asset allocation, and factor exposures.

Examples of funding systematic trend strategies with 50 bps of tracking error (TE) at various equity targets

Equity target (%)	Equity portfolio (%)	Fixed income portfolio (%)	Systematic trend allocation (%)
20	22.2	73.6	4.2
40	41.6	53.8	4.6
60	61.3	33.9	4.8
80	81.1	14.0	4.8

Hypothetical performance enhancement of a 50 bps TE allocation



Sources: Invesco Solutions, data as of Dec. 31, 2024. 1. Assuming a 5% allocation to systematic trend combined with a 1% overweight to equities, funded with a 6% underweight in fixed income. For illustrative purposes only. The performance results shown are hypothetical (not real) and were achieved by means of the retroactive application of the statistical model. It may not be possible to replicate the hypothetical results. *Historical information ratio range, depending on sample periods, regional markets and portfolio construction assumptions. Index proxies and definitions are listed in the appendix. Equity and fixed income portfolio weights listed in the appendix.

Why not other liquid alternatives?
Diversifiers can add value for portfolios with lower equity targets

Diversifiers, such as event-driven and equity market neutral strategies, aim to fully eliminate traditional risk and provide uncorrelated exposures to a portfolio. Both strategies attempt to do so in different ways. Event-driven strategies aim to generate alpha by finding arbitrage opportunities in equities that are going through corporate actions while market neutral strategies attempt to do so by going long and short equities, often in the same industry, that should behave similarly but are priced inefficiently.

Using the same portfolio analysis methodology described before, diversifiers tend to add value to a portfolio at lower equity targets because of their high sharpe ratios. However, when the portfolio contains more than 50% equities, we have found that allocations to these types of liquid alternative strategies are inefficient relative to traditional equities and fixed income, likely due to their relatively low returns and slightly higher correlation to traditional equities than systematic trend.

Event-driven allocations and performance (50 bps TE)

Equity target (%)	Equity portfolio (%)	Fixed income portfolio (%)	Event-driven allocation (%)
10	10.7	81.2	8.1
20	19.6	70.4	9.9
30	29.0	60.1	10.9
40	39.1	53.2	7.7
50	50.0	50.0	**0.0**
60	60.0	40.0	**0.0**
70	70.0	30.0	**0.0**
80	80.0	20.0	**0.0**
90	90.0	10.0	**0.0**

	Equity target (%)	10	20	30	40
Excess return (%)	**1Y**	0.22%	0.08%	0.01%	-0.03%
	3Y	0.38%	0.37%	0.35%	0.23%
	5Y	0.33%	0.27%	0.23%	0.14%
	10Y	0.18%	0.12%	0.08%	0.04%

Market neutral allocations and performance (50 bps TE)

Equity target (%)	Equity portfolio (%)	Fixed income portfolio (%)	Market neutral allocation (%)
10	12.9	80.8	6.3
20	22.4	69.7	8.0
30	32.0	59.2	8.8
40	40.6	56.5	2.9
50	50.0	50.0	**0.0**
60	60.0	40.0	**0.0**
70	70.0	30.0	**0.0**
80	80.0	20.0	**0.0**
90	90.0	10.0	**0.0**

	Equity target (%)	10	20	30	40
Excess return (%)	**1Y**	0.84%	0.87%	0.86%	0.27%
	3Y	0.75%	0.84%	0.87%	0.28%
	5Y	0.56%	0.57%	0.55%	0.17%
	10Y	0.29%	0.26%	0.23%	0.07%

Sources: Invesco Solutions, data as of Dec. 31, 2024. Index proxies and definitions are listed in the appendix. Equity and fixed income portfolio sleeve weights listed in the appendix. Note allocations and subsequent performance including excess returns are hypothetical. The performance results shown are hypothetical (not real) and were achieved by means of the retroactive application of the statistical model. It may not be possible to replicate the hypothetical results.

How should income portfolios be considered?

Derivative income strategies can add yield to those seeking income

Modifiers, such as derivative income strategies, attempt to reduce traditional risk in down markets while enhancing return or yield.

The objective of a conservative portfolio tends to be to reduce the downside of the portfolio by reducing equities for fixed income. Derivative income strategies utilize options to potentially lower drawdowns and generate additional yield, which is often attractive for conservative investors, especially in a low yielding environment for traditional fixed income, as we have seen for most of the past 15 years.

For a conservative portfolio looking to increase yield, adding a modest allocation towards a derivative income strategy, roughly 10% sourced mostly from equities, may improve the total yield of the portfolio by roughly 26 bps annualized while also reducing portfolio risk over the past 3-, 5-, and 10-year periods.

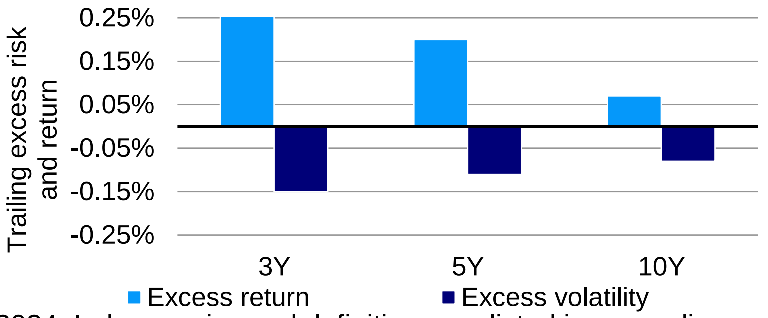
Derivative income allocations and performance (50 bps TE)

Equity target (%)	Equity portfolio (%)	Fixed income portfolio (%)	Derivative income allocation (%)
10	4.2	86.4	9.4
20	13.3	76.8	9.9
30	22.9	67.0	10.1
40	32.7	57.1	10.2
50	42.6	47.2	10.2
60	52.5	37.2	10.3
70	62.4	27.3	10.3
80	72.4	17.3	10.3
90	82.3	7.4	10.3

Yield enhancement versus a conservative benchmark

(%)	Portfolio with derivative income	30/70 benchmark
12M yield (annual average over full time period)	3.14 (+26 bps)	2.88

Relative return and risk to conservative benchmark



Sources: Invesco, data as of Dec. 31, 2024. Performance and yield study conducted over the period from Jan 1. 2015 – Dec. 31, 2024. Index proxies and definitions are listed in appendix. Equity and fixed income portfolio sleeve weights listed in the appendix. Note allocations and subsequent performance including excess returns and volatility are hypothetical. The performance results shown are hypothetical (not real) and were achieved by means of the retroactive application of the statistical model. It may not be possible to replicate the hypothetical results.

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Appendix

Index proxies

Derivative income uses the Morningstar group US Fund Derivative Income which comprises of 71 funds primarily generating income using derivative strategies.

Options trading uses the Morningstar group US Fund Options Trading which comprises of 58 funds which use the volatility premium associated with options to generate returns.

Event driven uses the Morningstar group US Fund Event Driven comprising of 195 funds which look to exploit pricing inefficiencies which may occur pre or post a corporate event.

Equity market neutral uses the Morningstar group US Fund Equity Market neutral which contains 29 funds that aim to combine long- and short- equity positions whilst maintaining a near-zero net market exposure.

Long-short equity uses the Morningstar group US Fund Long-Short Equity which holds 1,030 funds which aim to generate returns from stock selection and provide some downside protection with short positions.

Macro trading uses the Morningstar group US Fund Macro Trading which has 109 funds that trade a range of securities including equities, bonds, currencies and commodities based on economic indicators and fundamental signals to generate returns.

Systematic trend uses the Morningstar group US Fund Systematic trend which has 55 funds that implement trend-following and price-momentum strategies primarily to generate returns. These funds trade a wide-range of asset classes through the use of: swaps; futures; and options.

S&P 500 Index tracks the performance of the 500 largest publicly traded companies in the United States.

ACWI (All Country World Index) ex-US Index tracks the performance of large- and mid-cap firms in both developed and emerging markets outside the United States.

HFRI FoF (Hedge Fund Research Index Fund of Funds) Index tracks the performance of hedge finds which invest in other hedge funds

BBG US Agg is the Bloomberg United States Aggregate Bond Index measures the performance of the Unites States investment-grade bond market which includes: government; corporate; mortgage-backed; and asset-back securities.

SG Trend is the Société Generale Trend Index is designed to represent trend-following strategies within the managed futures space.

M* Multi strat is the Morningstar “Multi-Strategy” category which includes funds that allocate to a mix of alternative investment strategies

M* Sys trend is the Morningstar “Systematic Trend” category which includes funds that implement trend-following and price-momentum strategies primarily to generate returns.

Source: Invesco and Morningstar, as of December 31, 2024.

Portfolio weight information

Total Return portfolio

Equity portfolio	
MSCI ACWI All Cap	85.00%
Russell 1000	15.00%

Fixed income portfolio	
Bloomberg US HY Corp	15.00%
Bloomberg US Agg	85.00%

Income-oriented portfolio

Equity portfolio	
MSCI ACWI IMI	30.00%
MSCI ACWI High Dividend Yield	30.00%
Russell 3000 Value	40.00%

Fixed income portfolio	
Bloomberg US HY Corp	30.00%
Bloomberg US Agg	70.00%

Past performance is not indicative of future results. An investment cannot be made directly into an index.

Disclosures

Investment risks

The value of investments and any income will fluctuate (this may partly be the result of exchange rate fluctuations), and investors may not get back the full amount invested.

Alternative strategies may include investments in private equity, private credit, private real estate and infrastructure, which may involve additional risks such as lack of liquidity and concentrated ownership. These types of investments may result in greater fluctuation in the value of a portfolio. Private Market investments are exposed to risk, which is the risk that a counterpart is unable to deal with counter party its obligations. Changes in interest rates, rental yields and general economic conditions may result in fluctuations in the value of any underlying strategies. These types of strategies may carry a significant risk of capital loss and other market risks.

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