2021 Global Liquid Alternatives Landscape

A new generation of strategies aims to deliver where pioneers failed.

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Erol Alitovski
Senior Manager Research Analyst
erol.alitovski@morningstar.com

Matias Möttölä, CFA
Associate Director
matias.mottola@morningstar.com

Francesco Paganelli, CFA
Senior Manager Research Analyst
francesco.paganelli@morningstar.com

Simon Scott
Director, Alternatives Ratings, Global Manager Research
simon.scott@morningstar.com

Executive Summary

Born after the global financial crisis, the first generation of liquid alternative strategies was like the first iPad, a solution to a problem that we weren't quite sure we had. This inarticulation led liquid alternatives to became known for high fees, complexity, and adding little value for the investors who had put $500 billion in the sector globally as of May 2021. The onset of the global pandemic and effects of central bankers' actions have pushed these strategies back into the spotlight. As they post some of their best returns in recent history, inflows have turned positive, and broader hedge fund launches have exceeded liquidations for three consecutive quarters. Could these strategies, which provide a diversifying exposure to traditional market risk factors, finally offer a real solution instead of a problem?

Investors still lack awareness of these funds' challenges and risks and often fail to form realistic expectations for them. Chasing performance has been rampant, causing wild swings in asset flows among funds and in and out of the asset class. This paper examines what has changed in the past decade and how investors should set future expectations using Morningstar's 2021 redefined alternatives classifications.

Key Takeaways

- The 2020 returns for the Credit Suisse Liquid Alternative Index were the strongest since 2009.
- This has led to inflows for liquid alternatives, particularly within the United States, to levels not seen since 2013.
- New hedge fund launches are once again exceeding liquidations and are revitalizing the sector. The new generation of liquid alternative strategies has learned from the many challenges of the first wave.
- The market environment may finally be conducive to these strategies' performance in isolation and as part of a 60/40 portfolio.
- Investors must set realistic expectations for these strategies. Viewing strategies within larger cohorts of "modifiers," "diversifiers," and "opportunistic" can help form those expectations.
- Manager selection is crucial for liquid alternatives. The revamped Morningstar Category methodology can assist in the selection of top-quintile investment managers.

The Origins of Liquid Alternatives

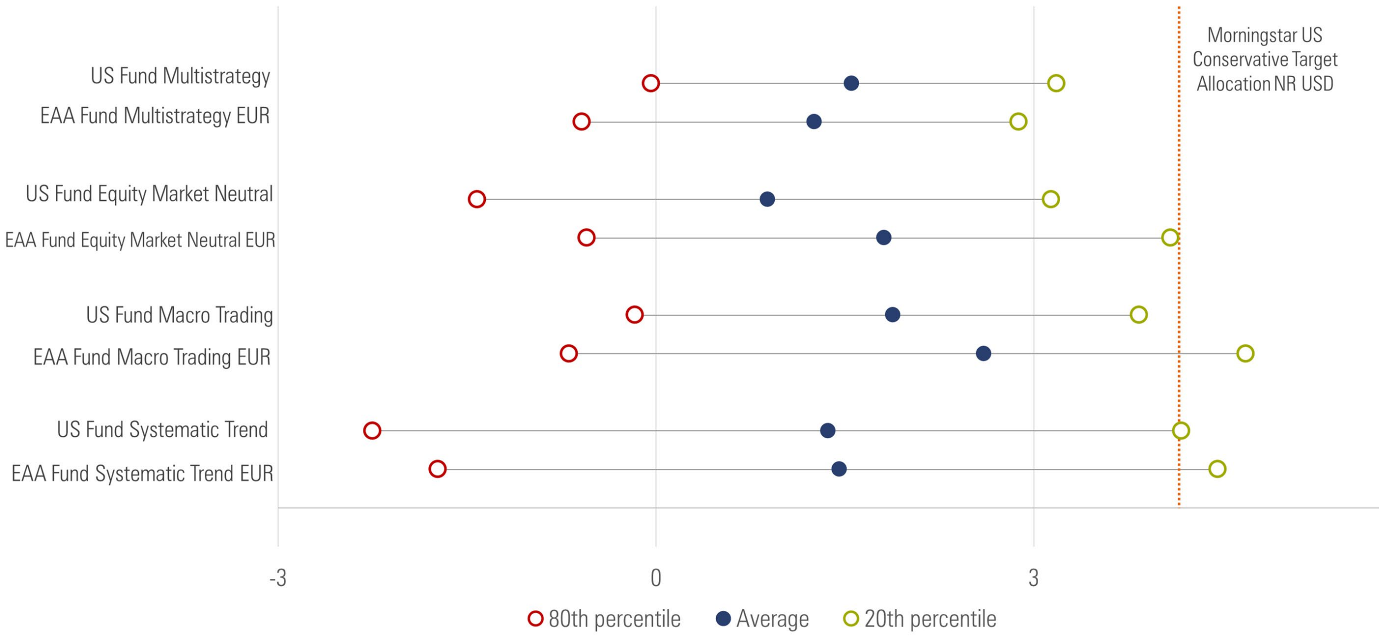
Alongside risk parity and other solutions to traditional asset-allocation problems, liquid alternative funds in their current form were borne out of the global financial crisis. Some managed accounts and other more accessible vehicles experimented with alternative strategies before the crash, but at that time, hedge funds dominated the category, and investors' experience with them, on average, had been poor. Many funds used large amounts of leverage, provided only quarterly liquidity, and sent asset flows into opaque Cayman Islands master funds. When liquidity was needed, redemption limits were imposed, then in some cases took years to unwind, leaving a bad taste for investors. Some hedge fund returns, however, were too good to ignore, leading to an increased demand in a more liquid form.

Asset managers designed liquid alternatives (or "hedge fund lite") to meet the demand. They used a mix of investment strategies, securities, and techniques that differed from traditional long-only exposures to asset classes such as equities or bonds, in a familiar mutual fund or exchange-traded fund form. The new funds offered redemptions on a daily or weekly basis to bolster investor confidence in the strategies' liquidity. U.S. liquid alternatives typically registered under the Investment Company Act of 1940, while European funds used the UCITS structure, allowing fund promoters to go after global investors and enabling global feeder fund structures.

Liquid Alternatives by the Numbers

So how did this new breed of products fare in the 2010s? Liquid alternative funds have produced largely disappointing returns compared with traditional market benchmarks. Exhibit 1 shows the excess returns above the risk-free rate in some key alternative categories over rolling three-year periods between January 2011 and March 2021. The level of dispersion highlights the crucial role of manager selection in this sector. For example, while the typical U.S. equity market-neutral strategy delivered a dismal 0.89% average three-year excess annualized return over the period, funds in the top fifth returned, on average, at least 3.14% annualized over cash.

Exhibit 1 Average Rolling 3-Year Excess Returns of Selected Alternative Categories Between January 2011 and March 2021



Source: Morningstar Direct. Data as of March 31, 2021. Three-year rolling periods' excess returns with quarterly steps. Risk-free rates are FTSE EUR EuroDep TR EUR and USTREAS T-Bill Auction Average 3 Months. The middle point represents the average of the three-year category averages, and the left- and rightmost points are the 80th and 20th percentile returns in the average period, respectively.

To strengthen manager selection tools, Morningstar redefined its alternative categories in April 2021. This paper advocates a more nuanced approach to measure alternatives' success as there are often no passive options available and the strategies often prioritize diversification and minimizing losses over maximizing returns. As explained in the second part of the paper, alternative investment strategies attempt to *expand*, *diversify*, or *eliminate* dominant risk factors, such as equity, credit, and rates, in traditional market indexes with flexible, differentiated, and/or diversifying exposure to assets and strategies with little correlation to traditional market indexes.

Exhibit 2 shows how the average returns of the redesigned Morningstar Categories have underwhelmed over standard trailing periods. Though they have done well since early 2020's coronavirus-triggered market crash, most have lagged broad stock, bond, and allocation indexes over the trailing three-, five-, and 10-year periods. In the five-year period ended May 31, 2021, for example, U.S. category averages ranged from 0.32% annualized for equity market neutral to 5.60% for relative value arbitrage. The European category averages looked weaker on an absolute basis owing to lower interest rates and higher hedging costs for euro-based investors. In fact, if we adjust the broad equity market returns by the average equity beta of each category, there is very little alpha after fees, suggesting that broad market movements explain the returns.

Exhibit 2 Trailing Performance of Morningstar Alternative Categories, in Base Currency

NAME	BASE CURRENCY	TOTAL RETURN 3 YRS ANNUALIZED	TOTAL RETURN 5 YRS ANNUALIZED	TOTAL RETURN 10 YRS ANNUALIZED	STANDARD DEVIATION 3 YEARS	EQUITY MARKET BETA USD 3 YEARS
EAA FUND EQUITY MARKET NEUTRAL EUR	Euro	-1.66	-0.87	1.69	6.70	0.24
EAA FUND EQUITY MARKET NEUTRAL USD	US Dollar	2.03	2.56	3.55	5.93	0.09
US FUND EQUITY MARKET NEUTRAL	US Dollar	-0.43	0.32	0.33	7.33	0.04
US FUND EVENT DRIVEN	US Dollar	6.67	5.35	4.16	7.02	0.28
EAA FUND MACRO TRADING EUR	Euro	0.93	0.92	2.64	7.67	0.44
EAA FUND MACRO TRADING GBP	Pound Sterling	2.23	2.36	2.92	7.73	0.47
EAA FUND MACRO TRADING USD	US Dollar	3.36	2.82	2.86	7.72	0.28
US FUND MACRO TRADING	US Dollar	4.52	3.90	2.23	7.63	0.26
EAA FUND MULTISTRATEGY EUR	Euro	-0.32	0.66	0.80	6.78	0.42
EAA FUND MULTISTRATEGY GBP	Pound Sterling	0.44	1.98	1.32	6.97	0.48
EAA FUND MULTISTRATEGY USD	US Dollar	1.67	2.74	1.09	7.09	0.23
US FUND MULTISTRATEGY	US Dollar	3.99	3.44	2.47	7.77	0.31
US FUND OPTIONS TRADING	US Dollar	5.33	4.08	4.17	10.68	0.43
US FUND RELATIVE VALUE ARBITRAGE	US Dollar	6.49	5.60	4.16	6.09	0.24
EAA FUND SYSTEMATIC TREND EUR	Euro	2.91	1.08	0.93	10.51	0.25
EAA FUND SYSTEMATIC TREND USD	US Dollar	5.70	3.63	2.52	11.56	0.11
US FUND SYSTEMATIC TREND	US Dollar	4.48	2.08	0.13	10.01	0.07
MORNINGSTAR GBL CORE BOND GR HDG USD	US Dollar	4.42	3.20	3.80	3.14	0.01
MORNINGSTAR US CONSERVATIVE TARGET ALLOC NR USD	US Dollar	7.20	5.91	5.16	4.84	0.24
MORNINGSTAR US MODERATE TARGET ALLOC NR USD	US Dollar	11.73	10.87	8.85	11.34	0.63
MORNINGSTAR GLOBAL MARKETS (EQUITY) NR USD	US Dollar	13.52	14.01	9.59	18.32	--

Source: Morningstar Direct. Data as of May 31, 2021.

Could Conditions Be Ripe for a Revival?

Classic 60/40 stock-bond portfolios have served investors well in recent years in a period of expansive central-bank policies and low interest rates, but those conditions will not always prevail. Investors who are accustomed to a near double-digit return each year for the past decade will need to recalibrate their expectations. Elevated stock prices, rising interest rates, and talk of resurgent inflation are all results of the huge rebound from the March 2020 lows.

Despite the underwhelming decade shown in Exhibit 2, the average liquid alternative fund as represented by the Credit Suisse Liquid Alternative TR USD Index was up 6.2% for the first half of 2021, just over half the 15.2% increase of the S&P 500. The 10-year U.S. Treasury bond's yield tripled in little over half a year, pushing bond prices down and reducing bonds' damping influence on portfolios. Liquid alternatives' promise of positive, uncorrelated returns may become more valuable if stock and bonds struggle to offer the same diversification benefits and returns in less accommodating market regimes. The ability to mitigate, diversify, or eliminate traditional risk exposures, incorporate broader asset types like currencies or commodities, and take advantage of falling markets may derisk equity holdings.

Liquid alternatives continue to reinvent themselves. A broad public market index no longer gives the same number or breadth of investments it once did; as institutions and pensions increase private-market investments, many large companies are delaying or forgoing public listings. The number of public securities continues to fall, and investment firms are increasingly providing access to portfolios of private securities in liquid form.

Some funds in our coverage list have increased allocation to special-purpose acquisition companies, or SPACs. These are essentially cash shells that seek to bring private companies to market without the onerous red tape. Another way to manage downside, buffer funds have been increasingly prominent in the U.S. Once considered specialized structured investments, these offerings are now in ETF form and provide a collar around a stock price. That is, they provide both a cap and a floor on the potential price of an investment, giving increased comfort to those who fear missing out on continued rises.

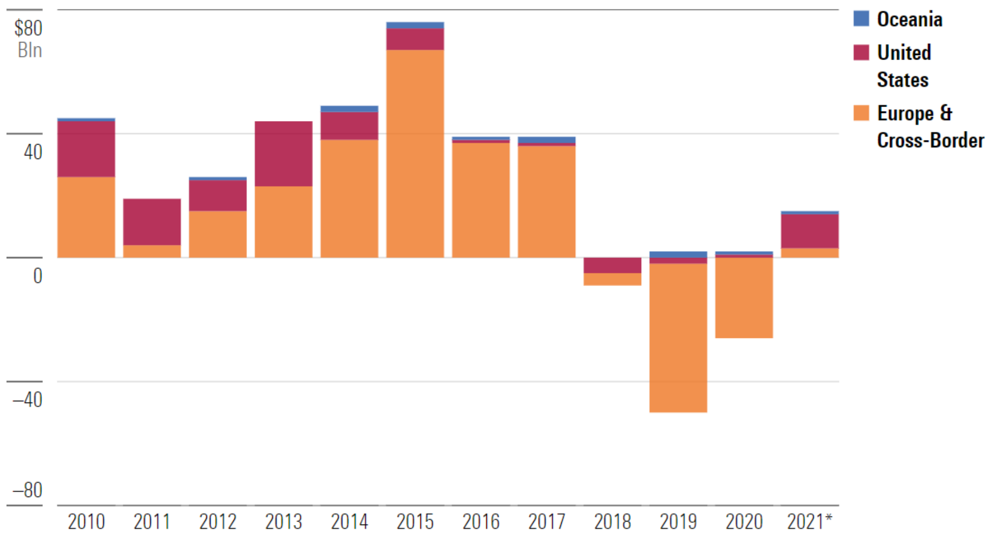
ETFs and factor investing have forced liquid alternatives to evaluate their fees. Funds that once looked attractive compared with hedge funds are now looking expensive compared with a bundle of ETFs that offer the same exposures for less. Competitive pressures also help drive fees lower. Once one manager moves, its main competitors generally follow suit. In Australia, Acadian Asset Management and CFM abolished their performance fees, and then Winton Capital reduced its fee to 10.25% from 16.40%. Winton Capital also cut its base management fee by 30 basis points, and Aspect Capital trimmed its by 40. Third-party distributors such as Ironbark saved investors' money by moving from a multimanager vehicle to an all-weather portfolio managed by Graham Capital. While welcome, it's not always altruistic, with many strategies being materially below high-water marks of prior performance and so unlikely to receive performance-related payments in the coming years.

Flowing Back?

Regardless of why liquid alternative funds have had a hard time, future market cycles may give investors reasons to reconsider their alternatives allocation. There have been signs of renewed interest since governments and central banks around the world embarked on unprecedented fiscal and monetary stimulus, and the range of available strategies has expanded. In the U.S., after a period of muted interest and continued outflows, investors are slowly coming back to the asset class in 2021, as shown in Exhibit

3. In EMEA, outflows from the asset class started later than in the U.S. and were focused not just on a shorter period but also on some large strategies. Abrdn's Global Absolute Return Strategies, for example, shed almost USD 30 billion in 2018-19 alone.

Exhibit 3 Alternative Funds' Asset Flows by Calendar Year—2010 Through May 2021 (in USD)



Source: Morningstar Direct. Data as of June 29, 2021.

While institutions have adopted liquid alternatives, they're not yet an established portfolio building block for retail investors. As illustrated in Morningstar's 2021 Target-Date Strategy Landscape Report, liquid alternatives have found their way into just a small handful of target-date lineups. Australian multi-asset portfolios, which have more flexibility to mix in illiquid assets, have been more apt to include them, according to Morningstar's 2020 paper "Are Multi-Asset Managers Worshipping at the Altar of Alternative Assets?"

Liquid alternatives have gone in and out of favor in cycles. In the U.S., after the 2013 "taper tantrum," investors rushed into alternatives with assets reaching a short-lived peak in 2014. Similarly, in Europe, the sector boomed around 2015 as negative rates pushed investors out of fixed-income funds, with some strategies such as Abrdn's GARS and Invesco's Global Targeted Returns topping the charts of the largest funds in the region. But that, too, proved to be fleeting. Disappointing results as 2018 ended prompted outflows a cycle of outflows that has only recently begun to subside. In short, the flows in this sector illustrate an industry subject to rapid sentiment changes, a phenomenon that is more pronounced among alternative categories. In the next section we will explain the boom-and-bust nature of flows in the asset class.

Many alternative strategies have experienced net outflows over the prior few years, but a handful of winners appear to dominate industry assets. JPMorgan Hedged Equity, which has a Morningstar Analyst Rating of Silver, topped the one-year flow charts with around USD 8 billion in inflows through May 2021. Nearly half of the options-trading category's assets now sit in JPMorgan Hedged Equity. Other strategies with strong inflows over the 12 months through May 2021 included established funds like BlackRock Event Driven Equity, BlackRock Systematic Multi-Strategy, the Nordea Alpha range, and

Calamos Market Neutral Income, and new entrants, such as Crabel Gemini. Established firms J.P. Morgan, BlackRock, and Natixis were the three largest liquid alternative asset managers (see Exhibit 4). Indeed, few of the top 20 firms listed in Exhibit 4 could be considered specialist alternatives firms. Some are already reconsidering their priorities, such as Natixis' announcement of its intention to sell its majority stake in subsidiary H2O Asset Management. The common factor in Exhibit 4 is the ability to raise assets across regions, something a global firm can do more easily. Morningstar rates many of these strategies in two or more regions.

Exhibit 4 Top Liquid Alternative Fund Companies by Assets Under Management

Branding Name	Total Net Assets ($ Billion)	Number of Funds
JPMorgan	34.4	69
BlackRock	25.7	58
Natixis	17.8	48
LGT	15.4	20
Calamos	14.3	2
Nordea	11.7	13
Invesco	9.3	33
Aviva	9.3	16
AQR	8.1	22
Pictet	8.0	20
Amundi	7.7	120
Challenger	7.1	8
Lyxor	7.0	66
Goldman Sachs	6.6	55
Blackstone	6.2	3
Nomura	5.9	118
Man Group	5.4	45
Schroders	5.1	40
Aberdeen Standard Investments	4.9	8
Westchester Capital	4.6	3

Source: Morningstar Direct. Data as of May 31, 2021. Worldwide open-end, money market, and exchange-traded funds; excluding funds of funds, feeder funds, and Latin America firms.

Liquid Alternatives' Challenges (and Related Lessons)

Why did the first generation of liquid alternative funds fail to deliver attractive returns? Many blame the extremely loose monetary policies that have driven stock markets to all-time highs while keeping bond yields low. In turn, stimulated markets have buoyed large-cap growth equities that typically are not high on alternative managers' buying lists and made shorting even more of a challenge. There are, however, several factors related to liquid alternatives that have contributed to the difficulties. The following list summarizes a few common explanations of the tough decade and identifies risks to be aware of when considering liquid alternatives.

Exhibit 5 Key Challenges Facing Liquid Alternatives Investors

	Challenge	Comment	Example	Domicile	Peak assets $	Liquidated
1	**Lineup Churn**	A constant nuisance in the liquid alternative world. Many new strategies have been launched while even long-standing players have shut their strategies after turn of the flow tide.	IPM Systematic Macro UCITS (Macro Trading)	IRE	1.7 bln	2021
2	**Liquidity Mismatch**	Liquidity mismatch can lead to disastrous outcomes in a short time span, especially if investors panic.	GAM MultiBond Absolute Return Bond (Long/Short Credit)	LUX	10.2 bln	2019
3	**Complexity**	Portfolio complexity can hide and compound risks, and hinder predictability.	AllianzGI Structured Return (Options Trading)	US	0.7 bln	2020
4	**Leverage**	Leverage amplifies gains as well as losses, creating a vicious path dependent dynamic.	H2O Allegro (Macro Trading)	FRA	2.5 bln	2020
5	**Constraints**	Not all hedge fund strategies can be replicated in a liquid wrapper. In some cases, performance will be diluted due to regulatory constraints.	-	-	-	-
6	**Instability**	Losing a key manager can have profound consequences on a strategy's viability.	Lumyna York Event Driven (Event Driven)	LUX	1.2 bln	2020
7	**Fees**	Fees eat out performance. On average, alternatives are more expensive than traditional funds -- though investors don't have solid, low-cost, passive options at their disposal in this space.	-	-	-	-
8	**Style**	Liquid alternatives' stylistic footprint can have a big impact on performance. Strategies relying on few market risk premia may require patience.	AQR Multi-Strategy Alternative (Multistrategy)	US	3.6 bln	2020
9	**Investor Gap**	Investor behavior can alter the outcome. In this space there are countless examples of self-defeating "buy-high & sell-low" dynamic, as flows aren't sticky.	BSF Style Advantage (Multistrategy)	LUX	3.5 bln	-
10	**Diworsification effect**	Managers diversifying away from the basic 60/40 portfolio had to face an uphill battle in recent years. Look beyond headline past performance.	-	-	-	-

Source: Morningstar Research. Peak assets in 2011-21. Data as of June 30, 2021.

- **Lineup Churn**: Longevity is rare in alternative categories. Many funds merge and liquidate, even as large investment houses launch new funds and dissect their offerings into more revenue streams. The average liquid alternative fund is much younger than those in traditional asset classes as shown in Exhibit 6, as even known strategies have not survived the test of time. Only around 10% of U.S.-domiciled liquid alternative funds existing today have a track record stretching back to the 2008 global financial crisis. Poor performance can subdue investor demand for years, but underappreciated funds aren't the only ones to close. Nordic systematic macro fund manager IPM closed its UCITS business in 2021 despite having an asset base of USD 1 billion in October 2019. Similarly, French systematic manager CFM also withdrew from the Asian retail market despite a significant asset base.

Available data on merged and liquidated liquid alternative funds show a significant number of closures, particularly in recent years (see Exhibit 7). The median age of a merged or liquidated fund is slightly more than four years, which is only a little older than the three years that many asset consultants require before even considering funds. Lack of investor demand and scale is often a precursor to action, something worth keeping in mind, given that most active liquid alternative funds globally had less than USD 100 million in assets under management as of May 2021.

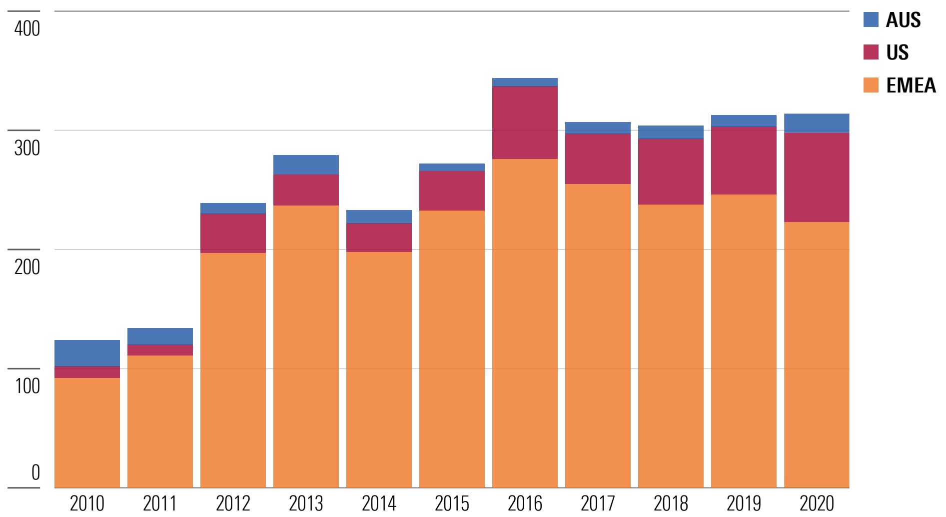
Exhibit 6 Inception Dates of Funds by Asset Class and Birth Year (All Live Open-End Funds and ETFs)

		Inception date			
Region	*Broad Category Group*	pre 2005	2005-2009	2010-2014	2015-today
US	Allocation	27%	19%	23%	31%
	Alternative	**4%**	**8%**	**29%**	**59%**
	Equity	37%	15%	17%	32%
	Fixed Income	42%	12%	19%	27%
EMEA	Allocation	28%	16%	18%	38%
	Alternative	**8%**	**12%**	**22%**	**58%**
	Equity	26%	17%	20%	37%
	Fixed Income	23%	13%	22%	42%
AUS	Allocation	49%	12%	20%	19%
	Alternative	**7%**	**12%**	**20%**	**61%**
	Equity	32%	19%	14%	35%
	Fixed Income	31%	14%	19%	37%

Source: Morningstar Direct. Data as of June 14, 2021. All funds and ETFs, oldest share class only.

- **Liquidity**: While liquidity is a problem for more than just alternative funds, it always has been a prominent concern for them. Fund managers risk liquidity mismatches when they seek higher returns in opaque or thinly traded assets, but the peril emerges only when investors demand their money back. In 2019, U.K. manager Neil Woodford invested in small companies not listed on any exchange. When things went wrong, investors demanded their money back, but the fund could not liquidate its assets in an orderly manner, leading to the fund's suspension.

Exhibit 7 Liquid Alternative Funds Merged or Liquidated by Calendar Year and Domicile Region



Source: Morningstar Direct. Data as of June 15, 2021.

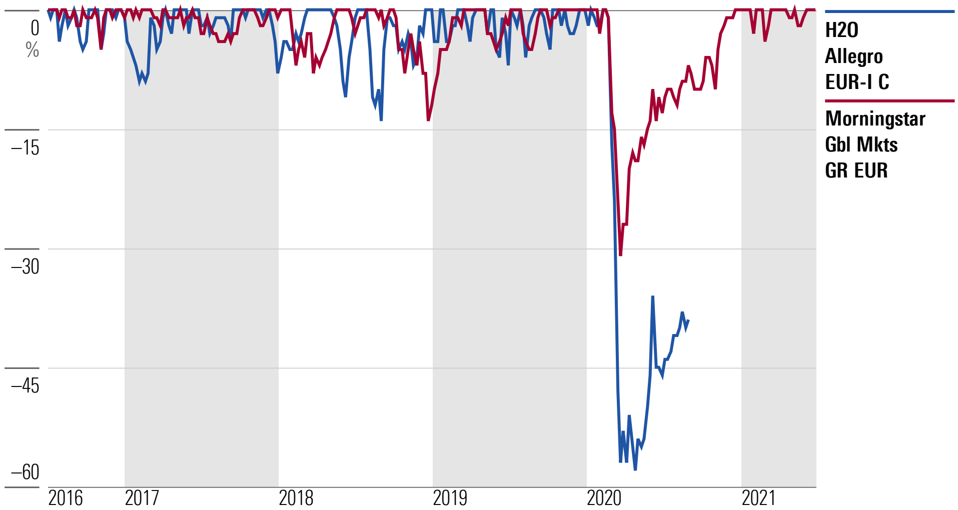
The Europe-domiciled GAM Absolute Return Bond strategy, which at its peak counted over USD 10 billion in assets under management, is another textbook case. The suspension and ultimate sacking of portfolio manager Tim Haywood in 2018 for "gross misconduct" triggered a rush for the exit, prompting the firm to suspend all market operations two days later and eventually liquidate the affected funds. These funds were stuffed full of illiquid bonds linked to supply-chain financier Greensill Capital and took the best part of a year to sell. Greensill was liquidated in 2021 as Credit Suisse froze $10 billion of funds linked to the firm over uncertainties about the valuation of the holdings.

Evaporating liquidity in selected segments of the market can also force managers to lock in losses at times of severe stress. March 2020 was a useful live test in that respect as liquidity dried up in some asset classes, such as credit, dividend futures, and even U.S. Treasuries. This hurt some strategies worse than others, such as Blackstone Alternative Multi-Strategy. Its significant exposure to credit securities hurt it as other funds became forced sellers during the 2020 crisis. Leveraged strategies and those offering investors daily liquidity when only a portion of their portfolios could be sold in a day suffered the most.

- **Complexity**: While not desirable in mutual funds, complexity is often a feature rather than a bug among liquid alternatives. Some funds can tap into the most exotic financial instruments, such as variance swaps, options structures, or VIX futures. Moreover, seemingly low-risk or "hedged" positions that rely on historic relationships may lead to unpredictable outcomes or even large losses when those relationships break down. Some relative value funds, for instance, were caught off guard when the U.S. and Chinese markets diverged in 2020. This creates additional challenges for fund selectors. Complex portfolios require time and expertise to analyze. Another example is U.S.-based AllianzGI Structured Return. Poor risk-management assumptions were compounded by a highly complex portfolio structure consisting of hundreds of options contracts. Unable to recover from its March 2020 fall, the fund liquidated before the end of the year.

- **Leverage**: This is a common feature in liquid alternative strategies, especially those attempting to benefit from a predictable long-term driver of market returns or relationship between securities. While leverage can and often does increase returns on the upside, it also magnifies losses. Natixis-owned macro manager H2O's highly leveraged Allegro strategy fell a jaw-dropping 58% in just four weeks in March 2020 after the market moved against its previously positive trades.

Exhibit 8 H2O Allegro Drawdown from June 2016 to May 2021 Compared With the Morningstar Global Equity Markets Index



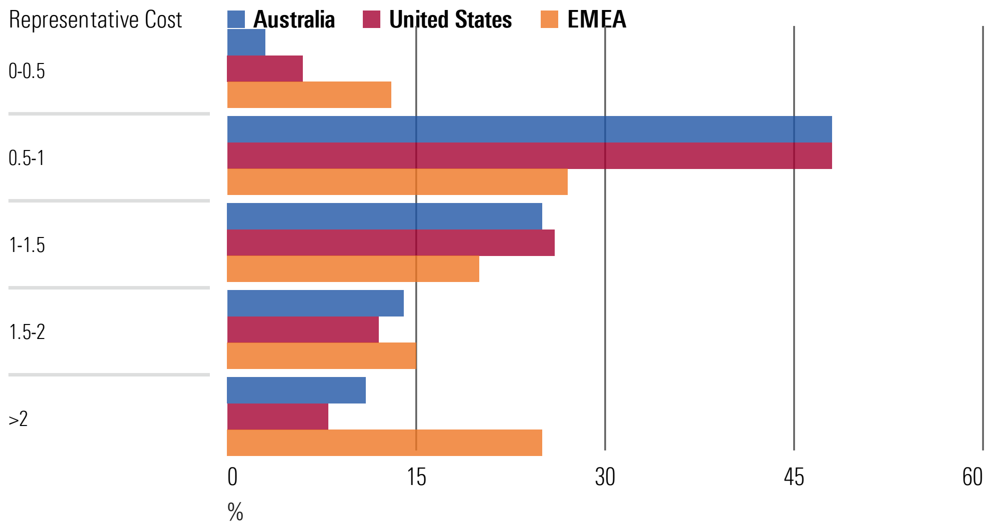
Source: Morningstar Direct. Data as of June 2021 in euros.

- **Constraints**: Good regulatory intentions can pose challenges. Whether its former hedge fund managers adapting their processes or multi-asset managers expanding their capabilities, most liquid alternative managers are inhibited by UCITS or '40 Act rules and constraints. These include limits on concentration and asset classes or a daily liquidity requirement. A liquid format may hinder a given strategy's performance and render the less-constrained hedge fund track record irrelevant. It's hard to come up with definitive data but adding non-manager-determined constraints to any strategy rarely results in better outcomes.

  In general, offshore vehicles and private hedge funds can use more leverage, own more illiquid securities, and build more concentrated portfolios. Larger clients with longer time frames and a deeper understanding of the strategies also may agree to lock up their money for years to avoid being subject to the whims of investors with shorter time frames. As such, liquid alternatives often can't invest the same way as their hedge fund counterparts and can't exploit the same inefficiencies as their less regulated brethren. Event-driven, macro-trading, and relative value strategies tend to be the least portable hedge fund approaches.

- **Instability**: Like liquidity, team turnover is not only a liquid alternative concern, but it's still a key risk factor. Departures can be ruinous to strategies reliant on small teams or star managers. Prominent New York-based event-driven manager York Capital, for example, shut down its European hedge fund business after almost three decades when co-investment chief Christophe Aurand departed in late 2020. The leadership of large Europe-based macro-trading strategies run by J.P. Morgan, Aviva, Invesco, and Abrdn also saw multiple changes in the past five years. Waves of departures and retirements come and go and often coincide with extended bull or bear markets and exogenous events, like the pandemic, that encourage some managers to re-evaluate their careers and lives. This, of course, creates additional work for fund selectors who must get comfortable with succession plans and new managers.

Exhibit 9 Assets Under Management by Fee Bucket (Representative Costs of All Share Classes)



Source: Morningstar Direct. Data as of June 29, 2021. Percentage within each region.

- **Fees**: Fees eat directly into investors' returns; they are an obvious barrier to success. High fees help explain the disappointing performance of some strategies. In fact, according to Morningstar's U.S. fee study, investors paid an asset-weighted fee of 1.31% for alternative funds in 2019, double the 0.66% asset-weighted average cost of all U.S.-based active funds. Our 2020 paper "Where Are the Liquid Alternative Shareholders' Yachts?" indicated that since 2009, investors have collectively paid about USD 1 billion more in fees to U.S. liquid alternative mutual funds than they've gained in return.

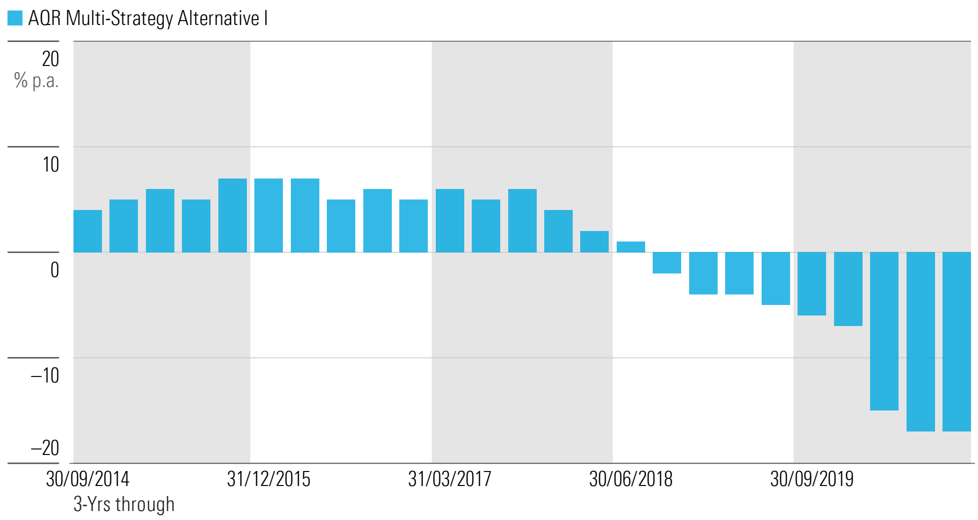
All-in costs can also be much higher than the headline management fee. For instance, performance fees are still quite common in Europe—around 40% of assets invested as of May 2021 (totaling over USD 100 billion) sat in share classes with performance fees. That's over 3,000 share classes, with structures that can vary widely depending on the asset-management firm. Key factors to consider include the presence of a high-water mark, the reference hurdle rate, and the absolute percentage (20% being the most common). On top of that, high-turnover strategies typically sustain much steeper transaction costs—all a further indirect cost to investors.

Unfortunately, though, this is an area where it remains difficult to compare data since calculation methods can differ significantly between fund companies. In Australia and New Zealand, Morningstar has developed a new total cost ratio to assist investors and provide harmonization. The total cost ratio encompasses the total nondiscretionary fees and costs associated with managing products and provides a comparable metric between offerings. In Exhibit 9, we provide a breakdown of share-class-level assets at the end of April 2021, across different representative costs buckets. Fees for European investors tend to skew upward relative to their U.S. counterparts, though the overall picture is not too dissimilar: Around half of the assets invested in the liquid alternative universe are in share classes where investors pay more than 1% annualized. Interestingly, while competition from index funds and ETFs has put pressure on active fund managers in most markets, above-average fees persist. There are a handful of low-cost indexes or "passive" strategies available, and none has managed to amass more than USD 1 billion in AUM. Several ETF providers have tried to make inroads, mostly without succeeding; we count over 100 liquidations in the U.S. and Europe across all categories, from hedge fund index trackers to systematic futures and market-neutral strategies.

That said, another breed of funds attempts to solve this issue—offering a "cheap alternative" to alternatives—by reverse engineering and replicating the average performance of a basket of hedge fund strategies via a set of futures contracts. For many funds, offering low-cost versions of their flagship strategies has better illustrated the value of their higher-priced offerings.

- **Style**: The underperformance in recent years of a common set of factors to which liquid alternatives are exposed has been a headwind. Most strategies that combine risk factors not ordinarily present in traditional equities or bonds (alternative risk-premia strategies), for example, attempt to isolate value as a factor. Focusing on stocks with low prices relative to their fundamentals, however, has been detrimental, particularly from 2017 to 2020. Exhibit 10 shows this effect on AQR Multi-Strategy Alternative, which at its 2016 peak oversaw over USD 3 billion in assets. Similarly, quantitative easing and higher correlations across asset classes have made trend-following a struggle. Moreover, while trend-following strategies were able to provide "crisis alpha" in 2008, mainly by virtue of rising bonds and a prolonged downtrend in equities, the sheer speed of the March 2020 drop, and sequent rebound whipsawed all but the fastest-moving strategies.

Exhibit 10 AQR Multi-Strategy Alternative's 3-Year Rolling Returns in USD 2011–21



Source: Morningstar Direct. Data as of June 15, 2021. Returns annualized. Quarterly moving window.

- **Investor Gap**: Investors can be their own worst enemies, especially in liquid alternatives. At times, flows have pursued the next fancy new strategy, only to dramatically exit once performance stalls. Outflows may also start a vicious loop: In the medium term, fewer assets generate less fee revenue, which limits investment or requires personnel retrenchment, hurting performance and triggering more outflows.

The so-called "investor gap," the difference between investor returns (also known as dollar-weighted returns or internal rates of return) and reported total returns, can be taxing. According to Morningstar data, across the near 800 U.S. and European liquid alternative funds where data is available, the average gap is around 100 basis points annualized. As Exhibit 2 at the start of this paper shows, this is a huge portion of the sector's meager returns.

A negative gap was two and a half times more frequent than a positive gap over the trailing three-years through May 2021. While there are some positive exceptions, several once-popular strategies, such as AQR Equity Market Neutral, its three-year 14% annualized investor loss was almost twice its 8% annualized total return loss through May 2021, burned investors. Perhaps one of the most poignant illustrations of self-destructive behavior stems from Europe-domiciled BSF Style Advantage. As Exhibit 11 shows, the U.S.-giant BlackRock's alternative risk-premia strategy gathered more than USD 3 billion quickly, reaching a peak of more than USD 3.4 billion near its three-year anniversary in early 2019, only to lose the vast majority of its assets in a few months after a double-digit drawdown in early 2020. A perfect case of buy-high/sell-low that investors should avoid at all costs.

Exhibit 11 BSF Style Advantage's Growth of $10,000 (Line, Left Axis) and Monthly Flows $ Mil (Bars, Right Axis)

Source: Morningstar Direct. Data as of June 15, 2021.

- **Diworsification**: A prolonged bond bull market and strong decade for equities (particularly U.S. large-cap stocks) have hurt anyone who diversified away from a traditional 60/40 portfolio. Looking back from today, very few liquid alternative strategies added much to multi-asset portfolios from a broader risk-adjusted return perspective. This is no surprise: Straying away from US equities has been costly in the era after the global financial crisis. Beating a passive 60/40 portfolio has been quite challenging for many allocation strategies.

Some of the tailwinds that helped traditional asset classes won't prevail forever, though. The death of the 60/40 portfolio has been greatly exaggerated, but 40% of it yields close to nothing today, and it will be hard to wring more return or expect the same diversification benefits from it, especially with the specter of inflation looming.

In an inflationary environment, correlation across asset classes may increase, necessitating a truly differentiated source of returns. To cope with raising inflation, liquid alternatives have several additional levers to pull, from the flexibility to allocate assets to commodities, for instance, to their ability to hedge risks.

Not all liquid alternatives are created equal. Some adopt strategies designed to be distinct from the market, while others underwrite risks that are unique to the strategy. Others will have the leeway to benefit from rising and falling markets in an opportunistic fashion. We will address these differences in the next section as we aim to set expectations for liquid alternatives.

Setting Appropriate Expectations

A Solution to the Solution

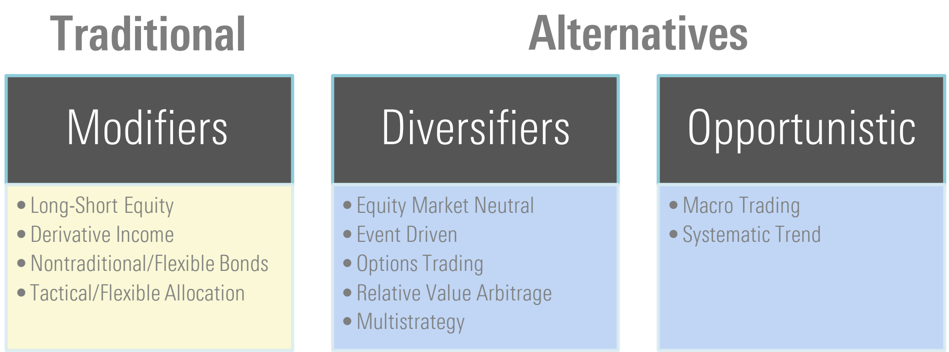
Morningstar considers liquid alternatives by their ability to modify, diversify, or eliminate traditional market risks. Enhancements to the Morningstar Category classifications in April 2021 were designed to assist investors' fund-picking and portfolio construction decisions. This framework also aligns categories between our U.S., EMEA, and Asia-Pacific practices. Category labels and definitions can be found in Appendix 1.

As part of these enhancements, we created new categories within the alternative category group and retired or moved others that have become more mainstream. Equity long-short, for instance, now sits in the broad equity category because long-short equity returns tend be closely correlated with equity markets. The strategies' short exposures may help temper losses while allowing for upside participation, but they modify equity market exposure rather than diversify it, so they should be considered as part of a portfolio's equity allocation.

In the U.S., the new framework also breaks larger categories into more narrow groups allowing for more meaningful strategy comparisons. For example, we split the multialternative category into multistrategy and macro-trading. Multistrategy funds allocate capital to a mix of alternative strategies (at least 30% combined) as defined by our alternative category classifications. Macro-trading strategies focus on trading a broad range of securities and instruments based on macroeconomic analysis. Similarly, the market-neutral category split into three categories—equity market neutral, event-driven, and relative value arbitrage, allowing for comparisons beyond a common level of equity beta.

Strategy Groupings

As investors think about liquid alternatives' role in their portfolios, strategies may be loosely grouped based on their objectives, volatility profiles, and targeted risk components. The following table offers a suggestion for grouping individual liquid alternative categories. The stated attributes are not mutually exclusive, and investors will find strategies across the three buckets that may meet their needs.



Source: Morningstar.

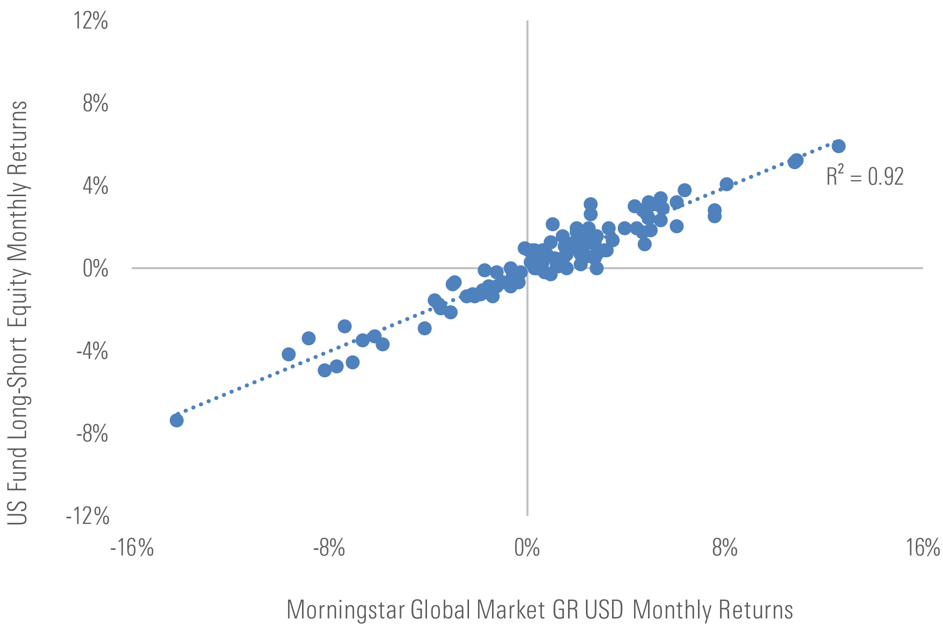
Modifiers

Modifiers are still correlated with common risk factors but use shorting and/or derivatives to temper losses in struggling markets. As a result, they tend to lag in bull markets. While no longer considered by allocators to be alternative in nature, investors seeking to maximize their risk-adjusted returns with a lower overall market exposure might consider funds from categories in the modifiers group.

Equity Long-Short

Long-short equity strategies are those with an equity beta, a measure of its sensitivity to the overall market, higher than 0.3, which means they still bear systematic equity market risk. These managers try to outperform the broad equity market on a risk-adjusted basis by picking winners and selling short losers. They may also vary their overall equity sensitivity, known as their net market exposure, to take advantage of booming or busting markets. Exhibit 12 shows that the average category three-year sensitivity (beta) to the Morningstar Global Market Index has ranged between 0.5 to 0.6 over the past 10 years, meaning that on average, more than half of their returns' variability can be explained by what the broader equity market is doing.

Exhibit 12 Average Monthly Return of Long-Short Equity Plotted Against Global Equity Markets



Source: Morningstar Direct. Data from June 2011 through May 2021. Monthly returns in USD. Oldest share class, live funds only

Flexible Allocation and Nontraditional Bond

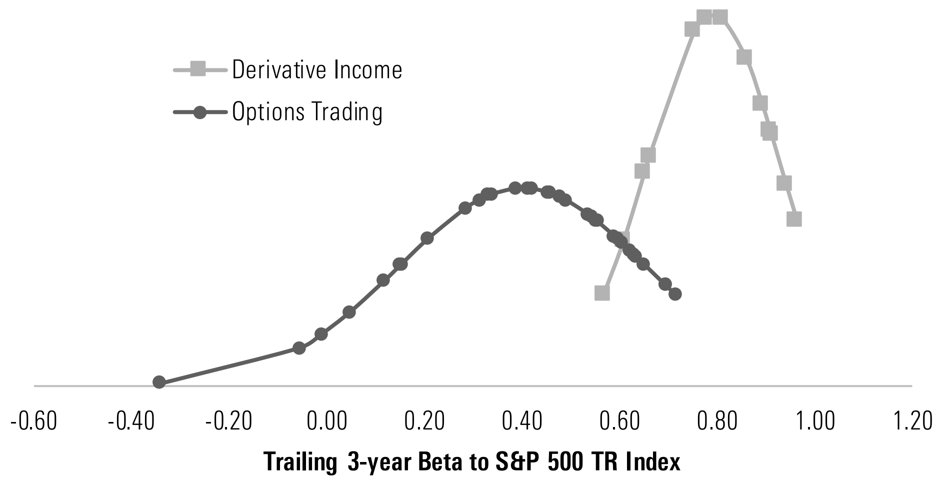
Like long-short equity strategies, which modify the common equity risk factors, there are other strategies that seek to modify exposure to common credit and interest-rate factors in bond funds. These strategies would typically sit in the nontraditional bond, flexible bond, and unconstrained bond categories in the U.S., EMEA, and Australia, respectively. There are also modifying strategies that can trade across asset classes, such as equities, bonds, commodities, and currencies without any fixed strategic asset-allocation limitations. In most cases, these strategies are in the tactical allocation or flexible allocation categories depending on the region of domicile. The common theme among these modifiers is they aim to mitigate or modify dominant risk factors within an asset class.

Derivative Income

Many managers in traditional asset classes, particularly in the fixed-income and asset-allocation categories, routinely short ETFs or derivative instruments for risk-management purposes or as an additional source of return. Such measures may modify the level of risk in a portfolio but still primarily provide investors with exposure to the traditional asset-class drivers over the medium to long term. As such, shorting and derivative use isn't enough to qualify a strategy as alternative.

In the U.S., we've divided one of the most heterogeneous alternative categories— options-based— to distinguish between strategies trading volatility as an asset and those trying to enhance income from long-term stock holdings. The former is an alternative approach; the latter, so-called buy-write strategies that buy stocks and write (or sell) call options on them to generate income, are not an alternative approach because these strategies remain highly correlated to equity markets. They're classified in a new derivative-income category, which is included in the nontraditional equity U.S. category group in a similar fashion to how derivative income is used in Australia. More-technical funds that trade volatility, such as the VIX index, are less market-sensitive and more relative-value-oriented. Thus, they're in our options-trading category within the alternative broad category group.

Exhibit 13 Distribution of Trailing 3-Year Beta to the S&P 500—June 2018 Through May 2021 (in USD)



Source: Morningstar Direct. Oldest share class, live funds only.

Sensitivity and Characteristics of Modifiers Versus Diversifiers

Exhibit 13 shows the marked difference in equity market sensitivity of these two strategy types. On average, the trailing equity sensitivity tends to be around 0.8 for derivative income strategies versus 0.3-0.4 for options-trading funds. The exhibit also illustrates the wide-ranging implementation styles of options-trading category and the more tightly grouped derivative income and explains the requirement to split this grouping.

The next section discusses diversifiers in more detail, but a quick examination of each category's participation in equity markets' up- and downsides is a worthwhile exercise in assessing high-level characteristics of the two groupings. The trailing three-year period ended May 31, 2021, included a roller coaster of up and down markets, such as the fourth-quarter 2018 and first-quarter 2020 sell-offs and subsequent rallies. Exhibit 14 clearly illustrates the impact of modifiers on a portfolio.

Exhibit 14 Equity Upside and Downside Capture June 30, 2018, to May 31, 2021

Morningstar Category	Upside Capture	Downside Capture	Max Drawdown	Correlation
US Fund Long-Short Equity	0.54	0.61	-12.8%	0.98
US Fund Equity Market Neutral	0.04	0.08	-6.0%	0.23
US Fund Derivative Income	0.70	0.79	-19.4%	0.98
US Fund Options Trading	0.45	0.40	-9.7%	0.99
Morningstar Global Markets GR USD	--	--	-22.1%	--

Source: Morningstar Direct.

Exhibit 14 shows that derivative income, on average, captured nearly 80% of equity market retreats. In a broader portfolio context this does very little to change a portfolio’s downside risk. Over that same period, the average fund in that category was close to the worst drawdown of the Morningstar Global Markets Index. Comparatively, the diversifiers grouping (equity market neutral and options trading) mitigated more downside but struggled to keep pace during the subsequent market rallies. For this reason, investors seeking some low to moderate portfolio diversification while maintaining equity exposure should choose a strategy from the modifiers group and fund it from their portfolios' equity allocations.

A long-short equity or derivative income strategy's ability to deliver alpha versus a relevant equity benchmark or to produce competitive risk-adjusted returns according to measures like the Sharpe ratio are good starting points to assess manager success among modifiers.

Diversifiers

This strategy grouping not only takes the common risks in equity and bond markets but uses a broader set of risk factors, also known as nontraditional or alternative risk factors/betas, to offer more diversified sources of long-term returns. Nontraditional betas go beyond the traditional drivers of market risk of equity, credit, or rates to target factors like volatility, carry, market-neutral value, or defensive factors—some of the risks commonly found in hedge fund portfolios—in a long-short, typically market-neutral fashion. In the short term, the benefits of this risk diversification may vary, and the strategies can lose money. Correlations between the nontraditional and common risk factors can be high, especially during periods of elevated uncertainty. In other words, they most likely won't protect capital during market crashes.

The Big Three: Event Driven, Relative Value Arbitrage, Equity Market Neutral

The three most common strategies in this group—equity market neutral, event driven, and relative value arbitrage—will usually have little or no market sensitivity and offer an equity beta of less than 0.3 at any given point in time. Instead, these strategies provide exposure to a variety of idiosyncratic risks—the risks of price changes owing to security-specific factors rather than the wider market. Event-driven strategies, which aim to profit from mergers, takeovers, and restructurings, amplify the risks of certain corporate actions, including mergers or bankruptcies. Relative value arbitrage is an absolute return strategy that tries to exploit discrepancies in value between two related securities by wagering that difference will narrow or close. Equity market-neutral strategies attempt to profit from long and short stock selection while eliminating equity market risk.

Options Trading

The options-trading strategies discussed earlier also fall into this group. Like relative value strategies, these funds attempt to limit downside risk and market sensitivity. Instead of exploiting the difference in value between two securities, they take advantage of the difference between past and expected future volatility levels. They should also produce favorable returns when expected future volatility is elevated, such as after a volatility spike when they are compensated for taking the risk, and equity markets are flat or rangebound. A common characteristic of diversifiers is that these strategies are often short volatility, which means they are betting against unexpected price swings. That should mean they offer small consistent returns with intermittent larger losses.

Multistrategy

Multistrategy funds round out the diversifiers group since they allocate capital to a combination of alternative strategies or risk factors and follow the characteristics of a diversifier—that is, low traditional market betas and the incorporation of nontraditional risk factors. According to Morningstar data, 36% of multistrategy funds utilize a multimanager approach. Increasingly, as more large investment management firms increase their liquid alternative programs, they are launching single-manager multistrategy options that aim to run all the different types of liquid alternative strategies under one corporate umbrella. This allows for tighter risk management and lower costs versus a multimanager offering.

There can be a fine line between strategies trading individual assets across multiple asset classes with multistrategy offerings and even macro trading, covered in our next section. At a very high level, our allocation categories retain an element of forecasting, and traditional risk factors tend to drive returns. Some strategies may include precious metals, liquid alternatives, or illiquid alternatives, but allocation funds are one-stop core portfolio holdings. Macro-trading strategies, as we will see, are much more opportunistic and will hold cash when there are no opportunities. Funds in the multistrategy category utilize a combination of other alternatives strategies or risk factors to build a lowly correlated noncore holding.

Opportunistic

Strategies within the opportunistic group tend to focus on absolute returns, meaning they aim for positive returns in all markets and focus more on capital preservation. These strategies move in and out of long and short positions as opportunities arise. They tend to lose less in drawdowns but also come with more complexity. Sometimes they bet the market will continue moving in the same direction, sometimes they wager it won't, and they often switch or hedge their bets. They can get caught out of step, so they often use sophisticated risk-management systems to manage their myriad exposures.

Macro-trading funds, for example, are strategies that trade a broad range of security types and whose investment decisions are based on a combination of macroeconomic indicators and fundamental data for security selection. These strategies can be long or short across all asset classes depending on where they see the most fruitful opportunities. They may invest across such disparate asset classes as global equities, bonds, currencies, and commodities, and make extensive use of leverage and derivatives.

Similarly, systematic trend strategies will vary exposure, both long and short, across all asset classes primary based on trend-following, price-momentum signals. Because both global macro-trading and systematic trend funds can take directional long and short bets across equity, fixed income, currency, and commodity markets, they can thrive even in bear markets and may help preserve capital in wide market drawdowns. The common characteristic here is that often, in contrast to diversifiers, opportunistic strategies may benefit from increased volatility in markets. With a default position of cash, return profiles may often appear middling but exhibit periodic flurries of outsize returns.

Portfolio Utilization of the Broad Category Groups

No framework is perfect because liquid alternatives are not uniform, but generally funds in the same groups can be used as reasonable substitutes for each other. For example, event-driven and equity market-neutral strategies, which are both diversifiers, likely will have similar effects on portfolios but with differing magnitudes over the long run.

Diversifiers

Investors who want to add nontraditional risk factors to their portfolios with strategies that offer low market betas and correlations should target diversifiers. While these strategies probably won't produce positive returns (or might even struggle in some cases) when traditional markets fall, they should help the overall portfolio generate more consistent returns by integrating diverse sources of alpha. Despite the diversifier moniker, these strategies can lose money at the same time as stocks in rare instances of market stress when all correlations break down. The nontraditional risks these strategies target may also fall when the broader market doesn't.

Exhibit 15 shows that as of June 30, 2021, there were 26 strategies across the diversifier categories—equity market neutral, event driven, relative value arbitrage, options trading, and multistrategy—with Morningstar Analyst Ratings, which are forward-looking, qualitative assessments of strategies' merits.

These strategies introduce a variety of different nontraditional risk exposures into an investor's portfolio. By expanding the opportunity set and generating returns that are less correlated to traditional markets, investors can construct more efficient portfolios, meaning a portfolio that provides the best expected return at a given level of risk. For example, event-driven strategies seek to add what is called merger-arbitrage risk premia to portfolios. Funds buy the shares of companies set to be acquired and sell those of the acquirer in order to capture the spread between the agreed-upon acquisition price and the company's current market price. Acquisition targets typically trade at a discount to their acquisition prices prior to the deal closing to compensate for the risk that the deal might fall through. This risk premium can be an attractive diversifier within a portfolio.

Exhibit 15 Morningstar Analyst Ratings for Diversifiers in Australia, EMEA, and the U.S.

						Pillar Rating		
Strategy	Morningstar Category	AUS	EMEA	US	Morningstar Analyst Rating	People	Process	Parent
AQR Equity Market Neutral	Equity Market Neutral			✓	Neutral	Above Average	Average	Average
BlackRock Global Long/Short Equity	Equity Market Neutral		✓	✓	Silver	High	Above Average	Above Average
BSF European Abs Return	Equity Market Neutral		✓		Neutral	Average	Average	Above Average
Vanguard Market Neutral	Equity Market Neutral			✓	Silver	Average	Average	High
Arbitrage	Event Driven			✓	Bronze	Above Average	Above Average	Average
BlackRock Event Driven Equity	Event Driven		✓	✓	Bronze	Above Average	Above Average	Above Average
Merger Investor	Event Driven			✓	Neutral	Above Average	Average	Average
Gateway	Options Trading			✓	Neutral	Above Average	Average	Average
JPMorgan Hedged Equity	Options Trading			✓	Silver	Above Average	Above Average	Above Average
Swan Defined Risk	Options Trading			✓	Neutral	Average	Average	Below Average
AQR Diversified Arbitrage	Relative Value Arbitrage			✓	Bronze	Above Average	Above Average	Average
Calamos Market Neutral Income	Relative Value Arbitrage			✓	Bronze	Above Average	Above Average	Average
AQR Alternative Risk Premia	Multistrategy			✓	Neutral	Above Average	Average	Average
AQR Style Premia Alternative	Multistrategy			✓	Neutral	Above Average	Average	Average
Aspect Absolute Return	Multistrategy	✓			Bronze	Above Average	Above Average	Average
BlackRock Systematic Multi-Strat	Multistrategy			✓	Bronze	Above Average	Above Average	Above Average
BlackRock Total Factor	Multistrategy			✓	Neutral	Average	Average	Above Average
Blackstone Alternative Multi-Strat	Multistrategy			✓	Bronze	High	Above Average	Above Average
Goldman Sachs Absolute Ret Trckr	Multistrategy			✓	Neutral	Average	Average	Average
IQ Hedge Multi-Strategy Tracker ETF	Multistrategy			✓	Neutral	Average	Below Average	Average
PartnerSelect Alt Strats	Multistrategy			✓	Neutral	Average	Average	Average
Winton Diversified UCITS	Multistrategy		✓		Neutral	Average	Average	Average
Ardea Real Outcome Fund	Alternative- Other	✓			Bronze	Above Average	Above Average	Average
Partners Group Global Value	Alternative- Other	✓			Neutral	High	Average	Above Average

Source: Morningstar Direct. Data as of June 30, 2021.

Other examples include relative value arbitrage strategies that try to take advantage of when convertible bonds are mispriced relative to the stocks that they're supposed to convert into at a set future price. They also include funds that only offer exposure to nontraditional risk factors, which ideally can help produce more balanced long-term returns when added to a portfolio dominated by traditional risk exposures.

Multistrategy funds adjust their allocations to different liquid alternative approaches as the opportunity set waxes and wanes, varying how much risk they take as they do so. There are drawbacks. Strategies run under one corporate umbrella by one manager might not have the same levels of expertise with various substrategies as dedicated outside managers do. Conversely, funds of funds that use outside managers pass those subadvisors' fees on to the investor. Finally, combining multiple substyles and exposures requires a large amount of data and reporting from strategies that may be reluctant to provide it. Aggregated exposures may not tell the true story of each individual strategy. Poor performance by one style can have a huge detrimental effect on a fund-of-funds portfolio. Blackstone Alternative Multi-

Strategy, for example, suffered a double-digit loss in 2020 partly because of a stumble by its structured credit managers.

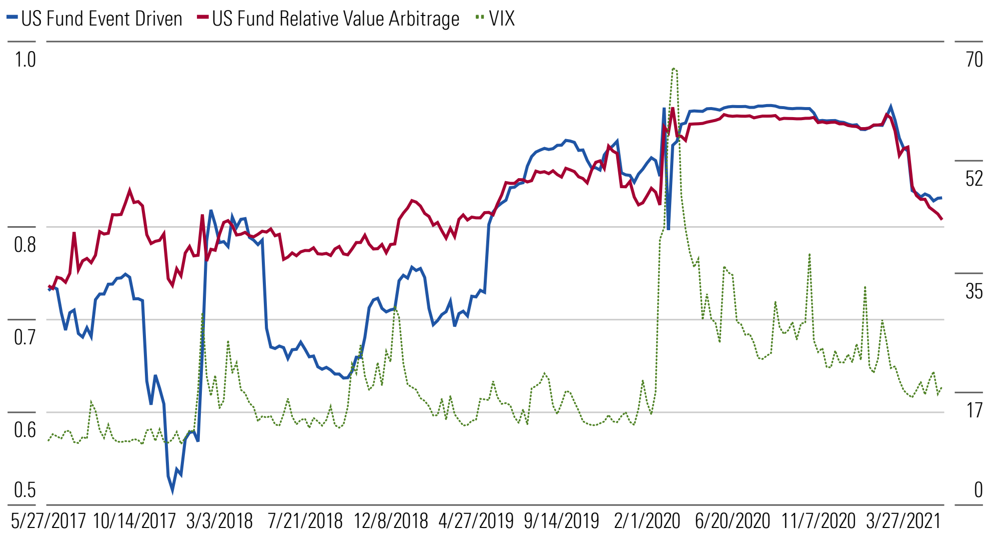
Risk Profile of Diversifiers

The risk profile of diversifying strategies differs from the core exposures of a 60/40 portfolio. They can be in or out of favor for long periods of time, and suffer big losses, especially if they employ leverage.

AQR Equity Market Neutral, for example, achieved early success, generating positive absolute returns with no correlation to equity markets by ranking the 2,000 most liquid global equities using factors such as value, momentum, and quality. Then starting in 2018, the strategy's exposure to the value factor (low security prices relative to their fundamental value) caused a near 39% drawdown over a three-year period, not in keeping with its label.

As seen in Exhibit 16, the correlations with traditional assets of strategies also can sometimes unexpectedly increase in distressed environments. This tends to coincide with times of indiscriminate selling or when investors scramble for liquidity. There were plenty of examples during the pandemic-related sell-off in the first quarter of 2020.

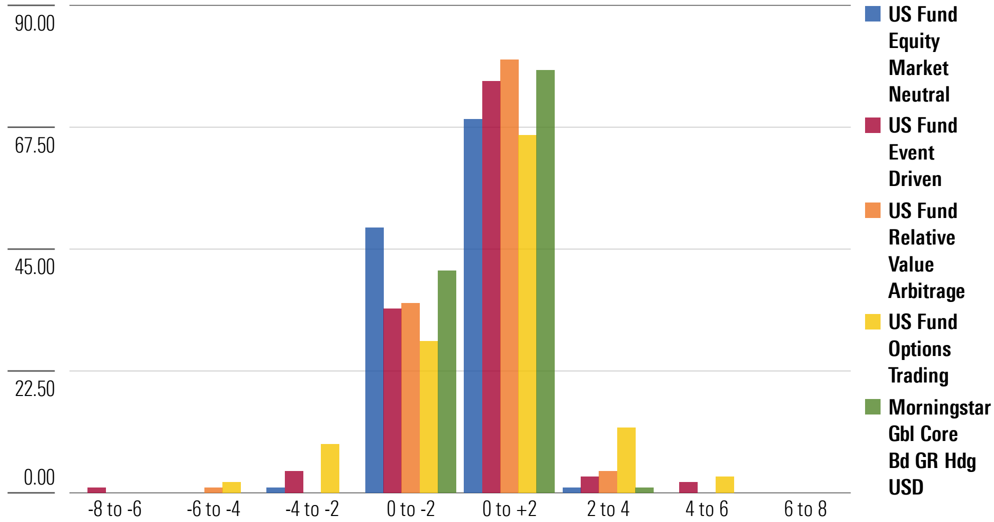
Exhibit 16 52-Week Rolling Correlations to the Morningstar Global Markets Index Plotted Against the VIX (Right Axis), May 29, 2016 Through May 29, 2021



Source: Morningstar Direct.

Diversifiers aim to take advantage of mispricing or provide liquidity to a market unwilling to hold the risks. Typically, they produce modest returns but also tend to experience more extreme moves, both positive and negative, compared with their average monthly returns. Options-based strategies are more susceptible to the chance of infrequent large losses. Like insurance companies, these strategies collect premiums in exchange for agreeing to protect against market losses. Over longer time frames, they tend to exhibit low volatility and can provide an uncorrelated source of return in many market environments. As such, when volatility spikes upward, as it tends to do, those managers will struggle and can rapidly give back the gains from collecting premiums when stocks quickly sell off. This is analogous to the insurer compensating the insured. When combined with leverage, these unexpected volatility spikes can result in some of these strategies blowing up (for example, LJM Preservation and Growth and Allianz Structured Alpha). As always, appropriate risk-management techniques that are mindful of the potential large losses are required.

Exhibit 17 Distribution of Monthly Return Frequency From June 2011 Through May 2021



Source: Morningstar Direct.

Notwithstanding some infrequent losses, investors looking for a long-term equity or credit substitute might consider a fund within the diversifiers group. These low-duration strategies come with diversification benefits and a steady return profile, suggesting a small allocation here could fit the bill. All the categories in the diversifiers group would benefit from rising interest rates either as a knock-on effect of the wider dispersion of security prices, which provides greater alpha opportunities, or implicit factors relating to specific strategies. That said, a suppressed interest-rate environment or a period with little merger activity or low levels of capital raisings by riskier companies may drag diversifiers' returns. The metrics in Exhibit 18 show that periods of rising interest rates tend not to have a negative impact on U.S. alternative categories. These characteristics are consistent across all regions.

Expectations and Measuring Success

Over the long run, the portfolio diversification benefit offered by this group of strategies may help a portfolio. With generally low equity sensitivity—the U.S. category average beta to the Morningstar Global Markets Index ranged from 0.04 to 0.44 over the trailing three-year period ended May 31, 2021—these strategies should still temper losses while adding value elsewhere in the portfolio. Some metrics to measure the success of these strategies include downside correlation and beta statistics along with the Information ratio and Treynor ratio, a measure of portfolio efficiency based on the excess returns of a strategy's market beta (or how much additional return it generates per unit of market risk).

Exhibit 18 Category Average Performance (%) During Periods of Rising Rates

	10/1/2010 - 1/31/2011: Whitney & IR Shock	5/1/2013 - 8/31/2013: Taper Tantrum	4/1/2015 - 6/30/215: Eurozone Stress	8/1/2016 - 12/31/2016: Trump Election	1/1/2018 - 10/31/2018: Powell Rate Hike	1/01/2021 - 3/31/2021: Post-Pandemic Reflation
US Fund Equity Market Neutral	-0.6	0.0	-0.3	0.9	0.2	2.9
US Fund Event Driven	2.9	1.2	-0.2	1.8	1.8	2.7
US Fund Relative Value Arbitrage	3.0	-0.2	0.1	1.8	0.9	1.4
US Fund Options Trading	7.2	0.0	0.1	0.9	-1.2	2.9
US Fund Multistrategy	3.6	-1.3	-1.2	0.3	-2.6	2.8
Morningstar Global Core Bond GR Hedged USD	*-1.9*	*-2.8*	*-2.2*	*-2.4*	*-0.2*	*-2.5*

Source: Morningstar Direct. Data as of May 31, 2021.

Opportunistic

These investors are most focused on capital preservation over long-term market cycles while still offering the potential for strong returns. Opportunistic strategies may be systematic or discretionary, generating positive returns in ugly markets by tilting into favorable asset classes and securities or shorting less attractive asset classes and securities. Some forms of these strategies have the ability to reverse the direction of market betas and can exhibit positive beta in up markets and negative beta in down markets. It is a hard act to deliver alpha consistently, and as of May 31, 24 strategies received Analyst Ratings within the macro-trading and systematic trend categories.

Over the long term, macro-trading and systematic trend strategies tend to have low correlations to broader markets, but since they also tend to be very directional over shorter periods of time, there is a high potential for significant drawdowns when a bet, or series of bets, works against them. We saw this with Bronze-rated John Hancock Diversified Macro, an all-weather quantitative macro strategy that trades across 55 different markets based on four components designed to work at different points in the economic cycle. The strategy, subadvised by Graham Capital Management, has a good track record, but it was caught out of step with its long equity positions heading into the pandemic-triggered drawdown in February 2020. These missteps are common across all macro-trading strategies, and the fund fared much better in March following the reversal of some signals that drove the original long position. The ability to pivot in the opposite direction is a strong drawcard for the opportunistic funds, as is the ability to aggressively remove risk following spikes in market volatility and correlation. When market volatility and correlations move higher, the models or managers running these portfolios will pare back risk to stay within a targeted level. Conversely, when volatility is low, these funds will run closer to the top end of their leverage levels, amplifying the impact of market moves.

Exhibit 19 Analyst Ratings for Opportunistic Strategies in Australia, EMEA, and the U.S.

Strategy	Morningstar Category	AUS	EMEA	US	Morningstar Analyst Rating	Pillar Rating: People	Pillar Rating: Process	Pillar Rating: Parent
Abrdn Global Absolute Return Strategy	Macro Trading	✓	✓		Neutral	Average	Average	Average
BlackRock Tactical Opportunities	Macro Trading			✓	Neutral	Average	Average	Above Average
Fulcrum Diversified Absolute Ret	Macro Trading	✓	✓		Neutral	Average	Average	Below Average
GMO SGM Major Markets	Macro Trading		✓	✓	Neutral	Average	Above Average	Above Average
H2O Allegro	Macro Trading		✓		Negative	Below Average	Below Average	Average
Invesco Global Targeted Ret	Macro Trading	✓	✓		Neutral	Average	Below Average	Average
JHancock Div Macro/Graham Quant Macro	Macro Trading	✓		✓	Bronze	Above Average	Above Average	Above Average
JPM Global Macro Opps	Macro Trading	✓	✓		Neutral	Average	Average	Above Average
Abbey Capital Futures Strategy	Systematic Trend			✓	Silver	High	High	Above Average
Alma Platinum IV Systematic Alpha	Systematic Trend		✓		Neutral	Average	Average	Average
AlphaSimplex Mgd Futs Strat	Systematic Trend			✓	Bronze	Above Average	Above Average	Average
American Beacon AHL Mgd Futs Strat	Systematic Trend			✓	Silver	High	Above Average	Above Average
AQR Managed Futures Strategy/UCITs	Systematic Trend		✓	✓	Neutral	Above Average	Average	Average
AQR Managed Futures Strategy HV	Systematic Trend			✓	Neutral	Above Average	Average	Average
Aspect Diversified Futures	Systematic Trend	✓			Bronze	Above Average	High	Average
Man AHL Alpha	Systematic Trend	✓			Bronze	High	Above Average	Average
Winton Global Alpha	Systematic Trend	✓			Neutral	Average	Average	Average

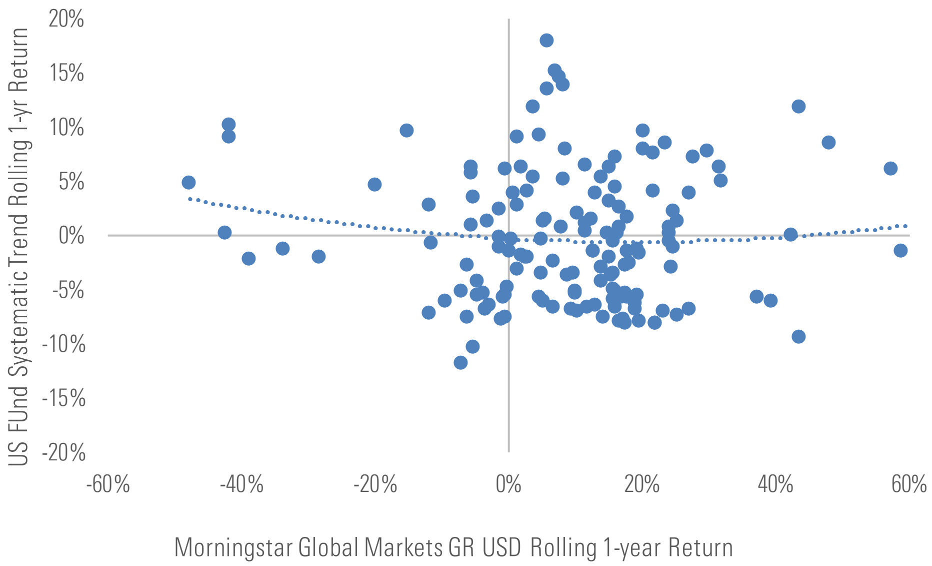
Source: Morningstar Direct. Data as of June 30, 2021.

Another common attribute of these strategies is how they struggle at inflection points in the market, or periods of large reversals. Trend-following strategies tend to be most impacted by this environment since their portfolios are based on price trends in different capital markets. A reversal in the direction of prices along with a spike in volatility or increase in correlations mean these strategies will be positioned poorly. Choppy markets that lack a steady trend, like periods in 2015-18, can cause drawdowns. For example, from April 2015 through December 2019, the average strategy in the systematic trend category strategy returned an annualized negative 3.6%.

To that end, systematic trend funds will also prosper in markets with long and pronounced trends, in either direction. This was the case in 2008 when trend-followers posted strong double-digit returns while the equity market melted down and bonds rallied. Conditions are again proving to be strong for trend-followers through 2021 with long positions in equities, energy commodities, and precious metals and short bond positions providing a boon for the group. If inflation materializes, this flexibility can help a portfolio. Strong returns in either direction may result in a convex (U-shaped) return profile if market conditions allow—an attractive feature for a diversified portfolio.

Exhibit 20 plots the average returns of the systematic trend category versus the Morningstar Global Markets Index illustrating how manager selection is a vital component.

Exhibit 20 Average Rolling 12-Month Return of the Systematic Trend Plotted Against Global Equity Markets From January 2008 Through May 2021



Source: Morningstar Direct.

The category produced some its best returns when the market was most challenging. For investors seeking potential for some positive returns in a negative-trending market environment, macro-trading and systematic trend strategies could provide some reprieve. Given the opportunistic nature of this category and the chances of selecting a manager that can offer positive returns across all environments, there are multimanager options, such as Silver-rated Abbey Capital Futures Strategy, that select a mix of trend-following and macro-trading managers in order to limit the negative selection effect.

Beyond capital preservation, some of the higher-risk strategies within these categories could provide an alternative to the return-seeking portion of some investor portfolios. Higher-return-targeting strategies in the opportunistic space introduce a plethora of additional active risk to broad investment portfolios, and investors should be careful when going down this route. Macro-trading strategies are especially sensitive to the unconventional monetary policy witnessed over the past decade. As central banks engage in bond buying and implement negative and zero interest-rate programs, the signals that typically guide macro-trading managers' decisions become less predictive, resulting in underwhelming performance.

Expectations and Measuring Success

Considering that capital protection is one of the key features of these strategies, some useful return statistics for measuring opportunistic strategies include maximum drawdown, downside capture ratio, and the Calmar ratio, which looks at a strategy's return versus its maximum drawdown. Beta and correlations are typically unstable and should be relied on sparingly.

Are Liquid Alternatives Worth the Trouble?

It depends. As usual, a well-diversified portfolio across asset classes is the best approach. Even when constructing an alternative sleeve, it is best to combine a mix of different liquid alternative strategies that will excel in different market environments. Further, a combination of specific measures of success for the modifiers, diversifiers, and opportunists is better than relying on just one statistic when selecting funds or determining if an alternative sleeve has met its expectations.

That said, the absence of passive options means manager selection is even more important. Liquid alternatives, much more so than traditional asset classes, tend to have exceedingly high levels of performance dispersion, where the best-performing managers tend to significantly outperform average and below-average funds. Even in a small allocation, this can make a material difference.

For illustrative purposes, in Exhibit 21 we compare a simple broadly diversified portfolio (60% Vanguard Global Equity VHGEX, 40% Vanguard Total Bond Market Index VBTLX) with a 10% pro-rata allocation to the typical strategies in the diversifier and opportunistic groups. We measure its results against liquid alternative managers with appraisal ratios (a measure that risk-adjusts alpha and beta-adjusted returns) ranking in their categories' top quintile over the trailing five years ended May 2021.

Survivorship bias, a limited track record, and unrealistic implementation criteria aside, it is clear manager selection makes a big difference in results. As the allocation to top-ranked managers increases, the portfolio's Sharpe ratio improves.

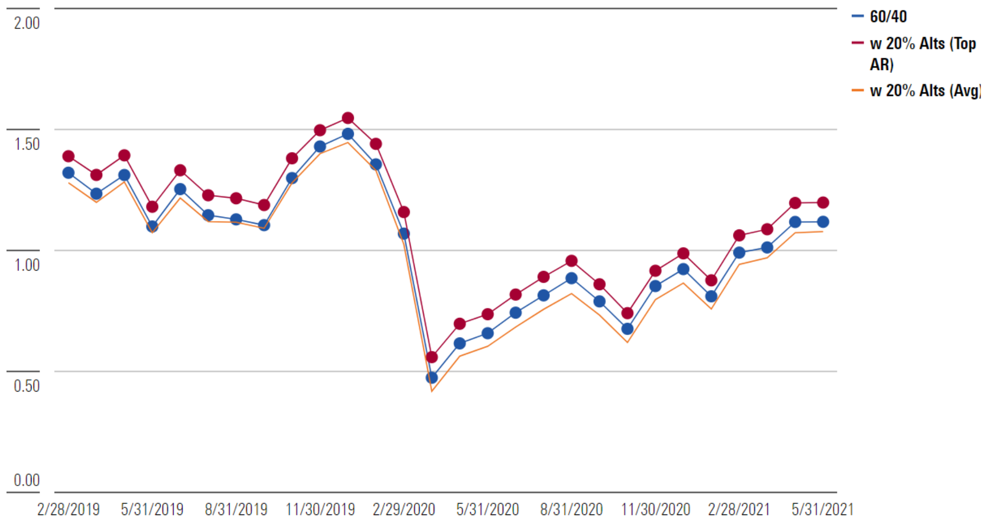
Exhibit 21 Comparison of a 60/40 Portfolio Without an Alternative Allocation to Those With an Average Alternative or Top-Performing Alternative Allocation for the 5 Years Ended May 31, 2021

	Annualized Return	**Annualized Standard Dev.**	**Sharpe Ratio**	**Max Drawdown**
No Alts (60/40)	11.5	9.1	1.12	-11.52
Portfolio with 10% Avg Alts	10.5	8.6	1.07	-11.37
Portfolio with 10% Top AR	10.8	8.4	1.12	-10.67
Portfolio with 15% Top AR	10.5	8.0	1.14	-10.03
Portfolio with 20% Top AR	10.3	7.6	1.16	-9.42

Source: Morningstar Direct. Base portfolio (60% VHGEX, 40% VBTLX). Data from June 2016 through May 2021. Monthly returns in USD. Alts: Oldest share class, live funds only.

Exhibit 22 shows that a 20% allocation to the top quintile of liquid alternative managers sorted by the appraisal ratio improves the portfolio's return/risk efficiency and results in shallower drawdowns. On the other hand, an allocation to the mean liquid alternative fund lowers the portfolio's standard deviation but produces weaker absolute and risk-adjusted returns than the portfolio without liquid alternatives.

Exhibit 22 3-Year Rolling Return Over Risk



Source: Morningstar Direct. Base portfolio (60% VHGEX, 40% VBTLX). Data from June 2016 through May 2021. Monthly returns in USD. Alts: Oldest share class, live funds only

Conclusion

A Better Opportunity Set for Liquid Alternative Managers

Asset managers and investors have learned some hard lessons in recent years, but this is, after all, a segment of the mutual fund market with significant product innovation. Although the pace of new fund launches has slowed, the U.S. and EMEA regions saw over 400 launches in liquid alternatives in 2019-21. For example, alternative risk-premia strategies, which today represent a well-established concept with dozens of different options available, were only a niche concept in the liquid space a decade ago. The explosion of so-called alternative data and increasing computing power have ignited competition in the systematic space— an area where competition for talent runs beyond financial firms. It is here that scale matters, as firms require more and more infrastructure, from data and systems to execution and risk management. Liquid alternative offerings have shown flexibility in adapting to changing market conditions and exploiting new opportunities. Event-driven and relative value arbitrage strategies have capitalized on the SPACs boom, or exploited less-developed market inefficiencies. This flexibility allows many liquid alternatives to ride— at their own peril—new fashions and voguish trends. Many large discretionary macro-trading strategies, including those run by Amundi, J.P. Morgan, and Fulcrum, adopt a thematic mindset to equity investing, an area described by our Global Thematic Funds Landscape report. Lastly, there are large structural trends underneath the entire financial-services industry forcing managers' hands. Sustainable investing is a good example, as fund companies either carve out a more environmental, social, and governance-friendly version of their strategies or use the theme to seek alpha by buying "the saints" and shorting "the sinners."

Better Portfolio Outcomes for the Investor

An investor's objectives and risk tolerance dictate the most appropriate strategy. Desired outcomes may range from capital preservation in an uncertain market environment impacted by inflationary pressures to diversifying away risk-mitigating exposures, like cash and bonds, in a rising-rate environment. While objectives may overlap across various category types, a big-picture consideration of the modifier, diversifier, and opportunistic strategy groups may help narrow down the options. This is just the starting point, and generating successful results goes beyond identifying which strategies to use.

Successful manager selection can prove to be even more difficult. With a wider dispersion of potential outcomes possible in liquid alternatives, and given the challenges and complexities, retail investors should consider whether they are equipped for the task. It entails a research-intensive selection process—among other things— to succeed. Even after finding and understanding a strategy, high fees such as those found in Europe or Asia can negate the whole exercise.

Picking strong alternative managers is hard. Choosing an average manager with median risk-adjusted returns may still have a negative impact on a portfolio. That is why it is necessary to look beyond a quantitative assessment to a broader set of criteria when considering liquid alternatives:

- Significant co-investment among key professionals
- Experience managing alternative assets
- Well-resourced (front and back office) with a large and stable asset base of investors
- Sound philosophy and process
- Robust risk-management capabilities and operational infrastructure
- Liquidity and leverage consistent with strategy
- Compelling track record of strong risk-adjusted returns

Liquid alternatives have been out of favor for several years, but the market environment could finally be ripe for these strategies to show their worth. Like all investment styles and approaches whose time in the sun comes and goes, liquid alternatives likely won't remain out of favor as more dramatic market moves provide bigger advantages to those with nimbler tool kits. Additionally, purveyors have learned some important lessons as the recent generation of alternative strategies could be easier to hold in or out of season. For investors considering dipping their toes into liquid alternatives, Morningstar's revamped categories and three-bucket framework for fitting them in portfolios can help them choose good long-term holdings and use them responsibly.

Thinking in terms of modifiers, diversifiers, and opportunistic strategies is just the starting point for narrowing down liquid alternative options—manager selection matters, too. We'll explore this area more in coming months.

Appendix 1

Morningstar Category Classifications

Event Driven
Event-driven strategies attempt to profit when security prices change in response to certain corporate actions, such as bankruptcies, mergers and acquisitions, the emergence from bankruptcy, shifts in corporate strategy, and other atypical events. Activist shareholder and distressed investment strategies also fall into this category. These portfolios typically focus on equity securities but can invest across the capital structure. They typically have low to moderate equity market sensitivity since company-specific developments tend to drive security prices.

Equity Market Neutral
Equity market-neutral strategies attempt to profit from long and short stock selection decisions while minimizing systematic risk created by exposure to factors such as overall equity market beta, sectors, market-cap ranges, investment styles, or countries. They try to achieve this by matching long positions within each area against offsetting short positions, though they may vary their exposure to market risk factors modestly. These funds' investment strategies may be discretionary or systematic, and they keep at least 75% of their gross assets in equities or equity-related instruments such as derivatives. They typically have beta values to a relevant benchmark of less than 0.3.

Relative Value Arbitrage
Relative value strategies seek out pricing discrepancies between pairs or combinations of securities regardless of asset class. They often employ one or a combination of debt, equity, and convertible arbitrage strategies, among others. They can use significant leverage and typically seek to profit from the convergence of values between securities. Funds in this category typically have low beta exposures to major market indexes because of their offsetting long and short exposures.

Options Trading
Options-trading strategies use a variety of options trades, including put-writing, options spreads, options-based hedged equity, and collar strategies, among others. In addition, strategies in this group that engage in options-writing may seek to generate a portion of their returns, either indirectly or directly, from the volatility risk premium associated with options-trading strategies. Funds in the category will typically have beta values to relevant benchmarks of less than 0.6.

Multistrategy
Multistrategy portfolios offer investors exposure to two or more alternative investment strategies, as defined by Morningstar's alternative category classifications, through either a single-manager or multimanager approach. Funds in this category typically have most of their assets exposed to alternative strategies, but at a minimum, alternatives must constitute greater than 30% of the strategy's gross exposure. The category includes funds with static allocations to alternative strategies as well as those that tactically adjust their exposures to different alternative strategies and asset classes. Multistrategy funds typically aim to have low to modest sensitivity to traditional market indexes, although that may not be the case for strategies with lower alternative allocations.

Macro Trading

Macro-trading strategies, using either systematic or discretionary methods, look for investment opportunities by studying such factors as the global economy, government policies, interest rates, inflation, and market trends. As opportunists, these funds are not restricted by asset class and may invest across such disparate assets as global equities, bonds, currencies, and commodities, and make extensive use of derivatives. Although these strategies aim to provide returns that are not correlated to traditional market indexes over a full market cycle, they can take significant directional long or short positions on any asset class over short periods and may have relatively high portfolio turnover.

Systematic Trend

Systematic trend strategies primarily implement trend-following, price-momentum strategies by trading long and short liquid global futures, options, swaps, and foreign-exchange contracts. The remaining exposure may be invested in a mix of other complementary nontraditional risk premiums. These portfolios typically obtain exposure referencing a mix of diversified global markets, including commodities, currencies, government bonds, interest rates, and equity indexes.

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People

The overall quality of a fund's investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a fund's investment team requires that analysts assess several relevant items including how key decisions are made.

Parent

We believe the parent organization is of utmost importance in evaluating funds. The fund's management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

Process

We look for funds with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

Performance

We do not believe past performance is necessarily predictive of future results, and this factor accordingly receives a relatively small weighting in our evaluation process. In particular, we strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a fund is delivering to our expectations.

Price

To reflect actual investor experience, price is evaluated within the context of the relevant market or cross-border region—for example, the United States, Australia, Canada, or Europe. In recognition of differences in scale and distribution costs in various markets, the level at which a fund is penalised for high fees or rewarded for low fees can vary with region. In Europe, for example, funds are penalised if they land in the most expensive quintile of their Morningstar category and are rewarded if they land in the cheapest quintile. The assessment is made using annual expense ratios, but in the case of funds with performance fees, expenses are evaluated excluding any performance fees and then the structure of the performance fee is evaluated separately.

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Gold

Represents funds that our analyst has the highest conviction in for that given investment mandate. By giving a fund a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a fund must distinguish itself across the five pillars that are the basis for our analysis.

Silver

Represents funds our analyst has high conviction in, but not in all the five pillars. With those fundamental strengths, we expect these funds will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

Bronze

Represents funds that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these funds to beat their relevant performance benchmark and/ or peer group within the context of the level of risk taken over a full market cycle (or at least five years).

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