

Benchmarking Alternative Risk Premia

September 2020



Contents

03	Why read on?
04	Understanding the ARP landscape
04	The factors
06	The funds
07	Premia specification and portfolio construction (Bloomberg)
08	Towards better benchmarking
09	Pros and cons of different ARP benchmarks
10	The first “true” benchmark?
11	Client demand and commercial drivers (Goldman Sachs Asset Management)
12	A clearer picture on performance
12	1: ARP manager composite performance
14	2: ARP benchmark ‘performance’
16	3: Analysing an ARP manager’s performance
18	Key takeaways

bfinance is an award-winning specialist consultant that provides investment implementation advice to pension funds and other institutional investors around the globe. Founded in 1999, the London-headquartered firm has conducted engagements for more than 370 clients in 38 countries and now has eight offices in seven countries. Services include manager search and selection, fee analysis, performance monitoring, risk analytics and other portfolio solutions. With customised processes tailored to each individual client, the firm seeks to empower investors with the resources and information to take key decisions. The team is drawn from portfolio management, research, consultancy and academia, combining deep sector-specific expertise with global perspective.

This commentary is for institutional investors classified as Professional Clients as per FCA handbook rules COBS 3.5R. It does not constitute investment research, a financial promotion or a recommendation of any instrument, strategy or provider.

Contact details

Toby Goodworth, Managing Director and Head of Liquid Markets, tgoodworth@bfinance.com
Chris Stevens, Director – Diversifying Strategies, cstevens@bfinance.com
Pravir Sharma, Associate – Diversifying Strategies, psharma@bfinance.com

With thanks to the teams at Goldman Sachs Asset Management and Bloomberg for their kind contributions to this report.

Why read on?

A challenging period for factor investing has left investors scrutinising the performance of Alternative Risk Premia strategies and managers. In a sector where benchmarking has generally been problematic, this evaluation is now helped by the emergence of a the first fundamentally constructed, comprehensive ARP index.

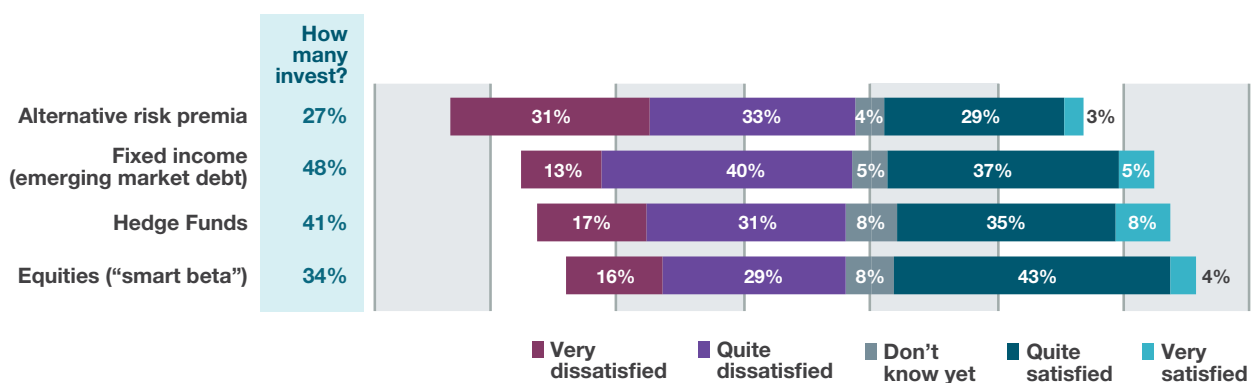
The latest bfinance Asset Owner Survey (July 2020) indicated that, of the 27% of investors that use Alternative Risk Premia, nearly **two thirds (64%) were dissatisfied** with 2020 YTD performance “relative to benchmarks or targets” – the worst feedback among all sixteen asset classes assessed. Not coincidentally, Hedge Funds and Smart Beta also sat in the bottom four (Figure 1). Examination of performance to end-Q2 showed the average ARP manager **losing 11.35% through H1** and losing 4.14% per year over the last three years (see page 12). Although there has been considerable dispersion and most cases of poor performance are clearly attributable to difficulties in certain factors, these headline figures are problematic.

As with hedge funds, there is a burden of expectation that ARP will deliver in challenging periods – an expectation that can be disappointed.

Yet how can investors gain a robust understanding of performance? Both hedge funds and ARP undoubtedly struggle with the core premise of assessing performance relative to appropriate targets or benchmarks: as a rule they are judged against **absolute return objectives**, supplemented by **peer comparisons** of varying relevance and **indirectly relevant benchmarks**. To some extent this is unavoidable for hedge funds, in that they typically aim to be idiosyncratic. In contrast, ARP seeks to derive its returns from exposures to known factors or investment styles; it is not unreasonable to want to compare ARP investments against a canonical set of premia.

Enter the **newly launched suite of ARP benchmarks** from Bloomberg and Goldman Sachs Asset Management, which are profiled in this brief report¹. While absolute returns will likely continue to be the mainstay for judging the ‘success’ of a set of strategies whose explicit intention is to provide portfolio diversification, these promising new yardsticks will help to add clarity as investors seek to understand returns, evaluate managers and reassess strategies.

FIGURE 1: HOW SATISFIED ARE INVESTORS WITH THE PERFORMANCE OF ACTIVE STRATEGIES IN THEIR PORTFOLIO IN 2020 YTD, RELATIVE TO THEIR BENCHMARKS OR TARGETS? [THE BOTTOM FOUR]



Source: bfinance Asset Owner Survey ‘Managing Through Uncertainty’, July 2020, data from 368 investors

¹ Note: bfinance’s Diversifying Strategies team is on the Advisory Panel for the development of these indices. bfinance has no commercial involvement in their launch or usage.

Understanding the ARP landscape

Jargon buster: alternative risk premia (ARP)

ARP are return streams which (1) can be generated using a systematic, rules-based process, (2) are largely uncorrelated from the underlying market from which they are generated (due to use of shorting, leverage, derivatives et al) and (3) can be explained by an underlying economic or behavioural rationale. They are present across different asset classes (equities, bonds, currencies, commodities) and geographies.

The term is sometimes mis-used as a substitute for 'smart beta'; smart beta is highly correlated with the underlying market and predominantly equity-focused whereas ARP are absolute return focused in their construct and tend to have little or no market directionality in the long run. The term "Alternative Beta" has also previously been used synonymously with ARP but has become less common more recently.

The factors

When looking at the universe of ARP strategies and the factors employed, it may be helpful to categorise them into two groups. The first are **'academic'** risk premia whose existence is supported and validated by a substantial body of research. The second are **'practitioner'** premia, which aim to benefit from some of the empirically recognised behavioural anomalies and structural biases that have traditionally been exploited by hedge funds and bank trading desks.

This categorisation is intuitive for a number of reasons. Firstly, it reflects two ways in which investors have approached this asset class intellectually – one being an existing commitment to academically supported risk premia, the other a desire to rethink the hedge fund investment concept. Secondly, it reflects a natural divide in the manager universe, with one group focusing on academic premia while the other group also uses practitioner premia (see bfinance manager composites on page 12).

FIGURE 2: EXAMPLES OF 'ACADEMIC' AND 'PRACTITIONER' PREMIA

Family	Factor	Asset class				
		Single Name Equity	Equity Index	Bonds	FX	Comm
Academic factors	Carry: higher yielding assets expected to outperform lower yielding assets.		✓	✓	✓	✓
	Momentum: tendency for recent (relative) price behaviour to persist in the future.	✓				
	Value: expectation that cheaper assets will outperform expensive assets.	✓	✓	✓	✓	✓
	'Defensive' or 'low vol': lower risk assets expected to outperform	✓		✓	✓	
	'Quality' or 'profitability': higher quality assets expected to outperform	✓				
	'Size': Smaller stocks expected to outperform	✓				
Practitioner factors	Trend-following: directional momentum		✓	✓	✓	✓
	Systematic Macro: E.g. Cross asset class effects, macroeconomic data driven		✓	✓	✓	✓
	Merger arbitrage / other event-driven: Trading strategies based on idiosyncratic corporate changes	✓				
	Volatility Strategies: Short volatility (implied vs. realised) or other trading style		✓			
	Seasonality/flow: Trading recurring calendar patterns, liquidity provision-style effects		✓	✓	✓	✓

Source: bfinance

Understanding the ARP landscape continued

‘Macro’ versus ‘micro’

Another helpful way of thinking about the universe is to differentiate between ‘micro’ factors, which are accessed by taking long and short positions on single-name stocks or credits (although the latter are not widely used by ARP strategies at present), and ‘macro’ factors accessed using broader index level futures and forwards in various markets (e.g. long Italian bonds, short German as a Bond Carry trade).

The macro/micro categorisation is also consistent with the way that many ARP managers think about portfolios, with overall ARP strategies often comprising an equity market neutral book (micro) and a macro book. Unlike the academic/practitioner classification, the micro/macro split is not visible in peer group data unless all managers provide sub-portfolio return time series. The new benchmark does use this classification – a helpful contribution to the ARP analysis toolkit.

Defining premia

The eleven factors listed in Figure 2 mask a broad range of complexity, with thousands of potential premia definitions using different signals and spanning different markets. Premia specificity has been central to investor conversations around performance during the last couple of years, with clients seeking to understand the choices managers have made and whether they were appropriately robust. Some factors are simpler to define, with more consensus over the appropriate signals (e.g. FX Carry); others are more complex and controversial (e.g. Equity Value).

One interesting implication of the launch of the new Bloomberg/GSAM benchmarks is that the industry will, for the first time, have an **independent arbiter of which signals and portfolio construction approaches may be considered ‘standard’** for each factor. This means that practitioners will be under more scrutiny to justify how and why they differ from that comparator, and may well support homogenisation. On page 7, Bloomberg’s Kartik Ghia and Anthony Lazanas discuss premia specification and portfolio construction in more detail.

FIGURE 3: FACTOR SPECIFICATIONS, BLOOMBERG GSAM US EQUITY VALUE L/S INDEX

Investment universe	500 largest stocks traded in US, defined by two liquidity filters: (Market cap > \$1bn, 90-day ADV > \$10m).
Signal	Equal weight combination of 6 signals: Book to Price, Sales to Price, Earnings to Price, Cashflow to Price, Forward Earnings to Price, Divided to Price (all specified in benchmark information)
Portfolio construction	Rank all stocks in descending order. Long positions in top third. Short Bloomberg ES Tracker Futures. Short the risk-free funding rate. (all parameters specified)
Rebalancing	Quarterly

Source: Goldman Sachs Asset Management

Understanding the ARP landscape continued

The funds

The period of dramatic expansion in the ARP manager universe has given way to a phase of consolidation.

The last decade has seen the rise of multi-asset ARP strategies as standalone products – a relatively new development, although the underlying trading styles and mechanisms to capture these risk factors have been around for many years. A rich manager universe evolved, rising from just a few pioneers in 2012 to 55 in 2018 and subsequently declining: there are now **47 funds** available to investors with an estimated AuM of nearly \$70 billion. The consolidation and fund closures of 2019-20 were partly influenced by a period of weak performance in 2018; we anticipate that weak results in H1 2020 may similarly push some investors from the asset class, although our clients broadly appear to be re-evaluating specific managers and approaches rather than pulling out of the space.

Manager and strategy types

ARP managers' strategies differ substantially in terms of the types of premia being used, the degree of diversification, premia definitions and portfolio construction. We see a dividing line between managers with a focus on academic premia and those that also have a substantial exposure to practitioner premia. The practitioner models have often been used in the relevant firm's alpha products.

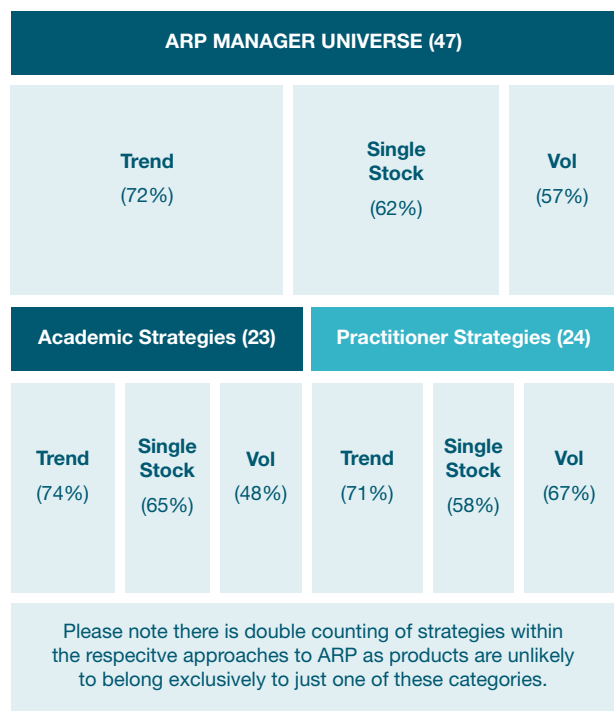
It is worth noting the prevalence of particular factors in the manager universe. The vast majority of ARP managers use the **Carry** factor. **Value** is a core risk premium for most; 'academic' strategies are typically more exposed to the equity value factor than 'practitioner' strategies. Use of **Trend** is a key dividing line, with managers taking very different views, due in part to the correlation between Trend and market beta. Other popular factors include **Momentum, Defensive** and **Volatility**. Other commonly featured practitioner premia include merger arbitrage, flow-based strategies, seasonality-based models and convertible arbitrage.

FIGURE 4: ARP MANAGER UNIVERSE



Source: bfinance

FIGURE 5: PREVALENCE OF STRATEGY TYPES AMONG ARP MANAGERS



Source: bfinance

Premia specification and portfolio construction (Bloomberg)



Kartik Ghia

Head of Portfolio Analytics Research
Bloomberg



Anthony Lazanas

Head of Portfolio and Index Research
Bloomberg

ARP performance is strongly affected by choices made when selecting which signals to use for particular premia and defining how the portfolio is to be constructed. In the case of the newly launched indices we have sought to make these choices as robust as possible, basing them on what we believe are the most appropriate representations of the premia styles as opposed to what would deliver the best back-tests. Our objectives were simplicity, consistency, tradability and alignment with broad-based market consensus.

The decisions for some premia are more straightforward than for others. **FX Carry**, for example, involves a small investment universe, strong consensus on signal selection and relatively few degrees of freedom in portfolio construction. **Equity Value** - a factor whose recent underperformance is mentioned several times in this paper – is more complex. There are many different ‘value’ signals that have been shown to generate quite different performance outcomes, the potential universe is very large and portfolio construction involves a greater number of active choices.

KEY DECISIONS FOR EQUITY VALUE INCLUDE:

- **Signal composition.** There is no clear market consensus, so all six descriptors specified by the Bloomberg Risk Model are used (see Figure 6) rather than just the ones with the best historic Sharpe ratios. We normalise the descriptors using the z-score transformation and take a simple average. Once the value factor has been defined as above, each of the constituents in the equity universe can be ranked in descending order.
- **Rebalancing frequency.** We opted for quarterly rebalancing, since the signal stability for equity value is quite strong (the equity momentum benchmark, where stability is lower, is rebalanced monthly).
- **Portfolio construction.** Key questions include the number of constituents in the long portfolio (top tercile? top quartile?), how to represent the short portfolio (equity index futures or individual stocks?), how to weight the constituents (equal weight or market cap?) and whether/how to ensure that the strategy is close to being market-neutral. We have taken care to ensure that these decisions are not based on maximising Sharpe ratios. For example, the weighting scheme uses the square root of market cap: an equally weighted approach would have maximised the Sharpe ratio but decreased tradability.

FIGURE 6: PERFORMANCE OF DIFFERENT VALUE SIGNALS (1999 – 2018), LARGEST 500 US STOCKS

	Metric/Price					
	Earnings	Book Value	Sales	Cashflow	Dividend	Forecast earning
Ann return	3.18%	1.56%	3.20%	3.27%	3.52%	2.04%
Volatility	6.58%	6.97%	6.98%	6.26%	7.25%	6.57%
Sharpe ratio	0.48	0.22	0.46	0.52	0.49	0.31

Source: Bloomberg

Towards better benchmarking

ARP investors have typically relied on absolute return yardsticks and risk parameters to assess the outcomes of their ARP strategies, supplemented by manager composites and benchmarks of varying relevance.

To some extent, the focus on **absolute return** is intuitively ‘right’ from an investor standpoint. The fundamental purpose of these strategies, after all, is to provide diversification to existing portfolios. If they are not providing this characteristic over the long term then, irrespective of their performance against any other chosen benchmark, they are not delivering what is needed.

However, this simplicity is not sufficient for the task of properly assessing strategies and managers. We observe significant institutional investor demand for better benchmarking of ARP. There are other helpful supplements: investors can use ARP or hedge fund manager peer groups (such as SG MARP Index, HFRI/HFRX Indices or bfinance’s composite), reference portfolios (such as 60/40) and blended bank premia indices, either accessed directly or structured by a provider such as HFR or Eurekahedge.

None, however, fulfils the CFA’s hallmark ‘SAMURAI’ criteria for determining whether a benchmark is appropriate (Figure 7). The new Bloomberg/GSAM index comes close to meeting these standards: the key exceptions are “Specified in advance” and “Accountable”, since this benchmark is new and it remains to be seen whether it will be widely adopted by investors and managers in an already-established space.

There are, of course, many asset classes with no benchmark that fulfils the ‘SAMURAI’ conditions. Putting these standards to one side, perhaps it is more helpful to think about a range of potential approaches in terms of their advantages and disadvantages (Figure 8).

FIGURE 7: WHAT MAKES A GOOD BENCHMARK? THE CFA ‘SAMURAI’ CRITERIA

Specified in advance	The benchmark is known to all before the start of the evaluation period
Appropriate	The benchmark is consistent with the manager’s investment style and area of focus
Measurable	The benchmark’s return is straightforward to calculate on a reasonably frequent basis
Unambiguous	Components and weights are clearly defined and transparent
Reflective	The benchmark reflects the manager’s current investment expertise
Accountable	The manager is aware of and accepts the benchmark
Investable	It is possible to invest in a way that matches or closely approximates the benchmark (either directly or via swaps)

Source: bfinance

Towards better benchmarking continued

Pros and cons of different ARP benchmarks

FIGURE 8: ADVANTAGES AND DISADVANTAGES OF DIFFERENT BENCHMARKING APPROACHES IN ARP

	Pros	Cons
Performance objectives (e.g. 'cash+4% p.a., max vol 8% p.a. and beta <0.3 to equity')	<ul style="list-style-type: none"> >Clearly defined and objective >Widely accepted among investor and manager communities >Easily measurable 	<ul style="list-style-type: none"> >No comparison to the universe >Not reflective of prevailing environment >No structural insight into under- or out-performance
Manager composites (e.g. SG MARP and bfinance for ARP, HFRX/ HFR1 for hedge funds)	<ul style="list-style-type: none"> >Data net of fees and costs >Permits peer group comparison >Visibility on manager dispersion >Can be made more representative (e.g. by selection of sub-group of closer peers) though not specifically customisable 	<ul style="list-style-type: none"> >Delayed data availability >Survivorship bias >Non-transparent (manager constituents are not disclosed, overall premia weightings not visible) >Aggregation of multiple styles: managers use different investment universes, premia, premia definitions and portfolio construction approaches >Not realistically investible >Inconsistent over time e.g. no target vol level, managers continually update approaches
Bank ARP indices (Individual indices from Goldman Sachs, Barclays, Morgan Stanley etc. Combinations of bank premia indices offered by Eurekahedge, HFR.)	<ul style="list-style-type: none"> >Transparency – clearly defined index rules using fundamental data >Investible >Customisable, asset owners can tailor to their needs with a modular approach (though lack of coherence in provision). Some providers (Eurekahedge, HFR) offer indices that are essentially composites of multiple bank premia indices. 	<ul style="list-style-type: none"> >Huge range, thousands of premia indices >Hindsight bias >Lack of data integrity (less consistency, lack of quality control) >Premia designed for return generation rather than unbiased representation of the premia/factors >Survivor bias >Specification Risk: Inconsistent detail around construction approaches >Premia are often granular and sporadic in coverage; inability to over full coverage of required premia in a coherent manner. >Longevity concerns, long-term provision of data not guaranteed
ARP index / benchmark (e.g. Bloomberg Goldman Sachs)	<ul style="list-style-type: none"> >Transparency - clearly defined index rules using fundamental data. >Timely availability of data >Consistency of investment approach >Customisable – modular construction gives ability select/deselect premia/ asset classes >Not technically 'investible' but performance can be delivered via swaps >Heritage of providers makes continuity likely 	<ul style="list-style-type: none"> >Limited to premia defined by the index (may exclude desired premia) >Premia choice and premia construction rules may be affected by hindsight bias >Data is back-tested rather than live (live data since November 2019) >Doesn't account for fees/costs of implementation

Source: bfinance

Towards better benchmarking continued

The first “true” benchmark?

As is evident from the analysis above, the new Bloomberg Goldman Sachs Cross Asset Risk Premia index and its component indices represent a positive addition to the ARP analysis toolbox: transparent, simple, replicable indices composed of widely-accepted ARP styles, employing liquid instruments. We welcome the launch and have been glad to advise GSAM during the development phase.

It remains to be seen, of course, whether these indices will be widely adopted. This is not a benchmark in the sense that the MSCI World is a benchmark: no investor is likely to view this index as a ‘risk neutral’ exposure; we do not expect managers to take explicit overweight or underweight positions with respect to it. However, it is currently best placed to become the canonical yardstick for what a given premium or set of premia ‘should’ be doing in terms of performance.

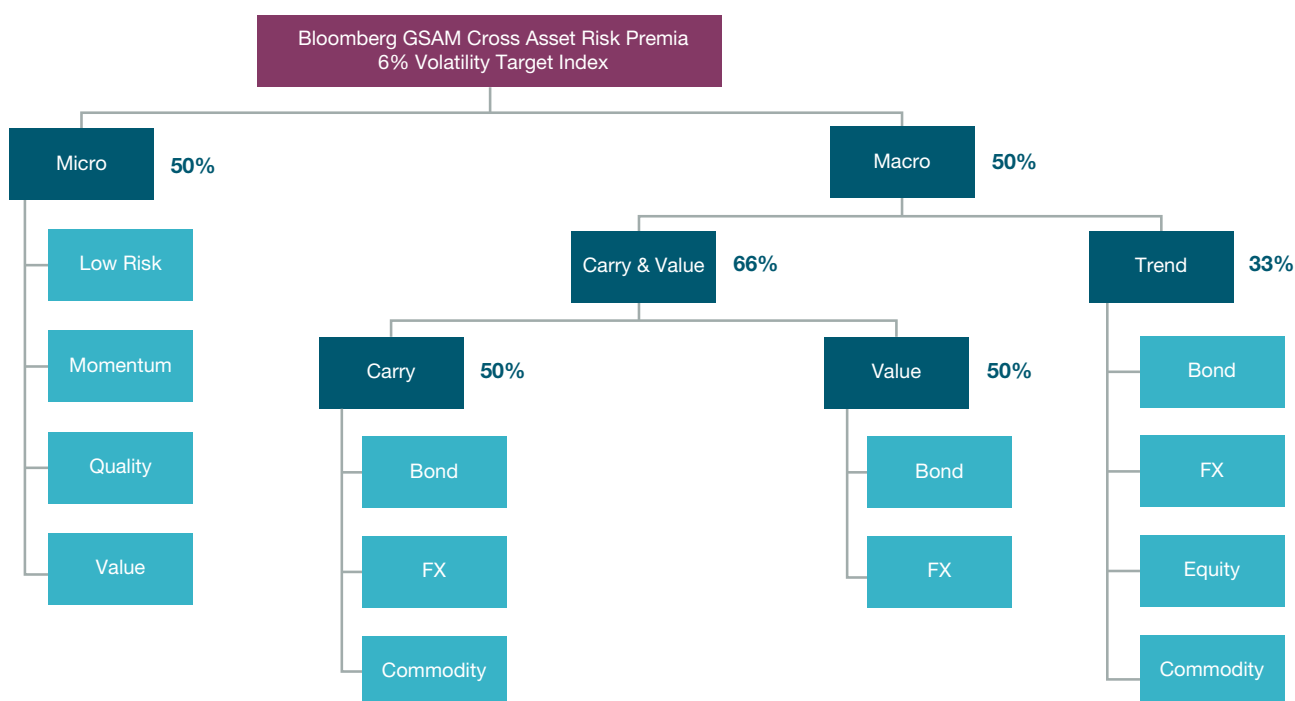
This index family comprises a top-level (“Cross Asset”) index and a range of constituent indices – a modular menu that gives the flexibility to construct

tailored benchmarks (e.g. exclude Trend, exclude Commodities). As illustrated in Figure 9, the indices are grouped into ‘micro’ and ‘macro’ factors (page 5) and that this distinction drives the portfolio construction of the ‘Cross Asset’ benchmark (50% risk weight to ‘micro’, 50% to ‘macro’).

No index, of course, is perfect. There is some premia specification risk: although the index creators have sought to use robust definitions rather than those with the strongest back-tests, one can never fully avoid discretion and hindsight bias. Investors can observe a number of important choices in action. For instance, ‘micro’ factors are only applied to US equities (top 500 most large and liquid) and there are no ‘practitioner’ premia aside from Trend (“Directional”).

We do not view this benchmark as necessarily ‘better’ than a manager composite, or vice versa. Rather, the combination of multiple yardsticks should allow superior risk and performance analysis enabling investors to obtain a thorough understanding of managers and strategies.

FIGURE 9: RISK WEIGHTS FOR THE BLOOMBERG GSAM CROSS ASSET RISK PREMIA 6% VOLATILITY TARGET INDEX



Source: Goldman Sachs Asset Management. The Bloomberg GSAM Cross Asset Risk Premia 6% Volatility Index is a volatility targeted version of the base GSAM Cross Asset Risk Premia Index, scaled to meet the volatility target subject to a leverage cap of 10x.

Client demand and commercial drivers (Goldman Sachs Asset Management)



Javier Rodriguez-Alarcon

Head of Quantitative Investment Strategies, EMEA
Goldman Sachs Asset Management



Michael Rhodes

Vice President
Goldman Sachs Asset Management

The lack of an appropriate benchmark for ARP has presented the industry with a number of challenges. Investors seeking to **select ARP managers** find it difficult to compare products effectively due to significant differences in construction and the resulting risks and returns. Investors seeking to **assess the performance of their ARP strategies** face similar questions. ARP investors, including GSAM's clients in this space, have typically opted for the aspirational return target of a cash+ benchmark and looked to peer group indices for comparison. Cash+ benchmarks also do little to help an investor understand the kinds of risks an ARP portfolio takes and how they relate to the returns they generate, which makes it difficult to determine portfolio sizing in a **Strategic Asset Allocation** framework.

In other asset classes, these difficulties can be addressed by the existence of a transparent benchmark administered by an independent third party. However, our team felt strongly that the ARP indices currently in the market do not generally meet the appropriate set of criteria. As a result, we decided to partner with Bloomberg in order to develop a suite of indices based on consensus definitions. Importantly, **maximising returns was not an objective** in the development of these indices. Although these benchmarks are investible and can be used to deliver passive low-cost exposure, the primary goal was to create a clear and comprehensible benchmark applicable to the broad ARP asset class.

We firmly believe that there is a strong future for this asset class, notwithstanding some of the recent negative sentiment referred to in this paper. The Alternative Investment Strategies team in GSAM's Quantitative Investment Strategies platform has been researching ARP and their use by hedge funds since 2004; our quantitative analysis of decades of returns for thousands of hedge funds has shown clear evidence of stable, definable alternative risk premia exposures. Investors have been attracted to ARP in addition to (or instead of) Hedge Funds due to their greater transparency, lower fees and more favourable liquidity terms. Investors have become increasingly aware of the dominance of equity risk in portfolios, as well as the limitations of fixed income to serve as a hedge in all market environments, leading to continued client conversations on the potentially attractive diversifying return streams offered by ARP.

A clearer picture on performance

How, then, shall we judge alternative risk premia returns?

This final section looks firstly at the performance of the **bfinance manager composite**, secondly at the performance (albeit largely post hoc) of the Bloomberg/Goldman Sachs **benchmark and sub-benchmarks** as the most representative available benchmark, and thirdly at how one might examine **an ARP manager's performance** with a now-enhanced toolkit in hand.

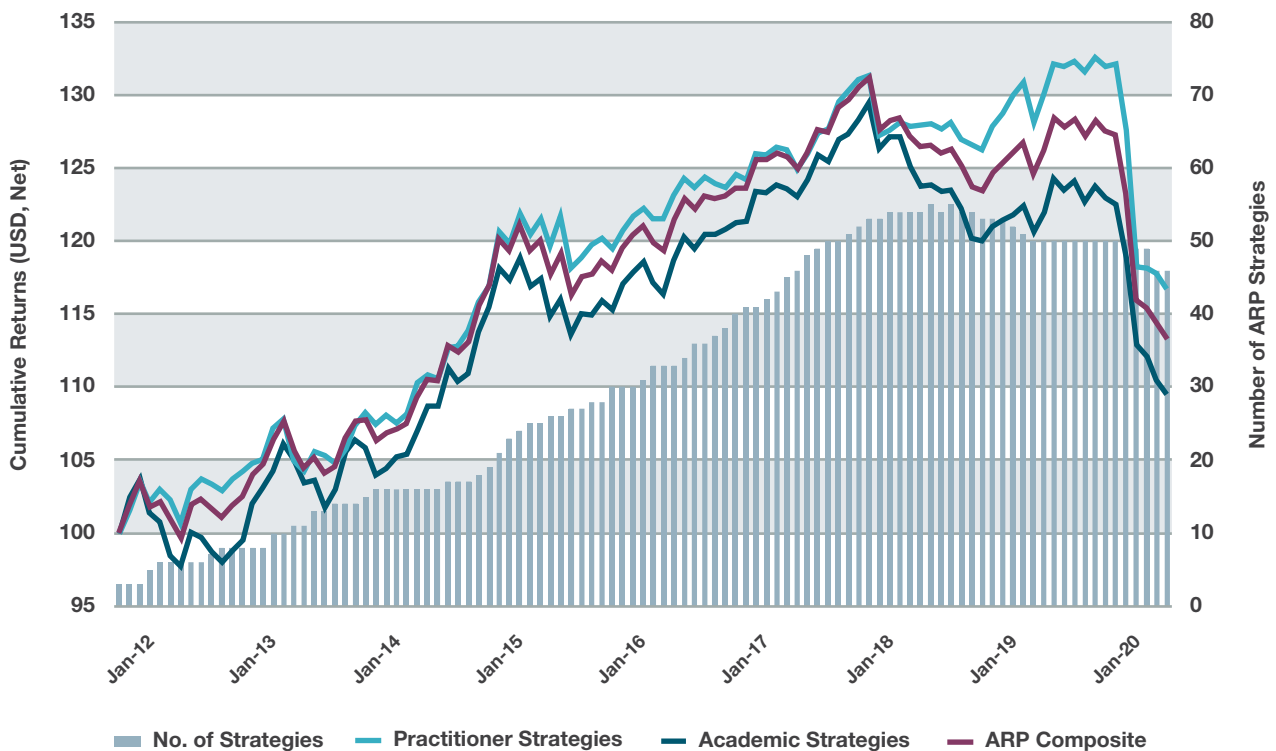
1: ARP MANAGER COMPOSITE PERFORMANCE

The bfinance ARP manager composite reflects the performance that an investor would have obtained by investing an equal amount (at any given point in time) with each available manager, minus fees.

2012-2017: the rising tide. From January 2012 until end-2017 – a period of low volatility and benign market conditions – the performance of both ‘Academic’ and more complex ‘Practitioner’ strategies followed a broadly similar (positive) trajectory, although the latter outpaced the former.

2018: a rollercoaster year. In February 2018, a sharp equity reversal and the resulting spike in equity volatility drove notable losses in some strategies. This was not the case for all managers that traded volatility, with some more active or less directionally driven approaches managing to weather the storm quite well. *Equity Value* was another source of underperformance; this is a core risk premium for almost all managers but typically forms a larger portion of the ‘Academic’ strategies.

FIGURE 10: AVERAGE PERFORMANCE OF ARP MANAGERS SINCE JANUARY 2012



Source: bfinance. The full ARP Composite takes the average monthly returns of all multi-premia strategies. Sub-groups of ‘Academic’ strategies (predominantly Academic factors) and Practitioner strategies (additional ‘Practitioner’ premia). Returns are all in USD and are net of the product’s headline institutional fee. Non-USD returns are hedged to USD via interest rate differentials. In order to avoid survivorship bias, the data retains the historic performance of strategies that have subsequently closed.

A clearer picture on performance continued

The divergence of these two groups continued in 2019, when ‘Practitioner’ strategies outpaced their ‘Academic’ counterparts. Both strands were positive on average for the year as equities rebounded, a low volatility regime returned and central bank policy remained accommodative.

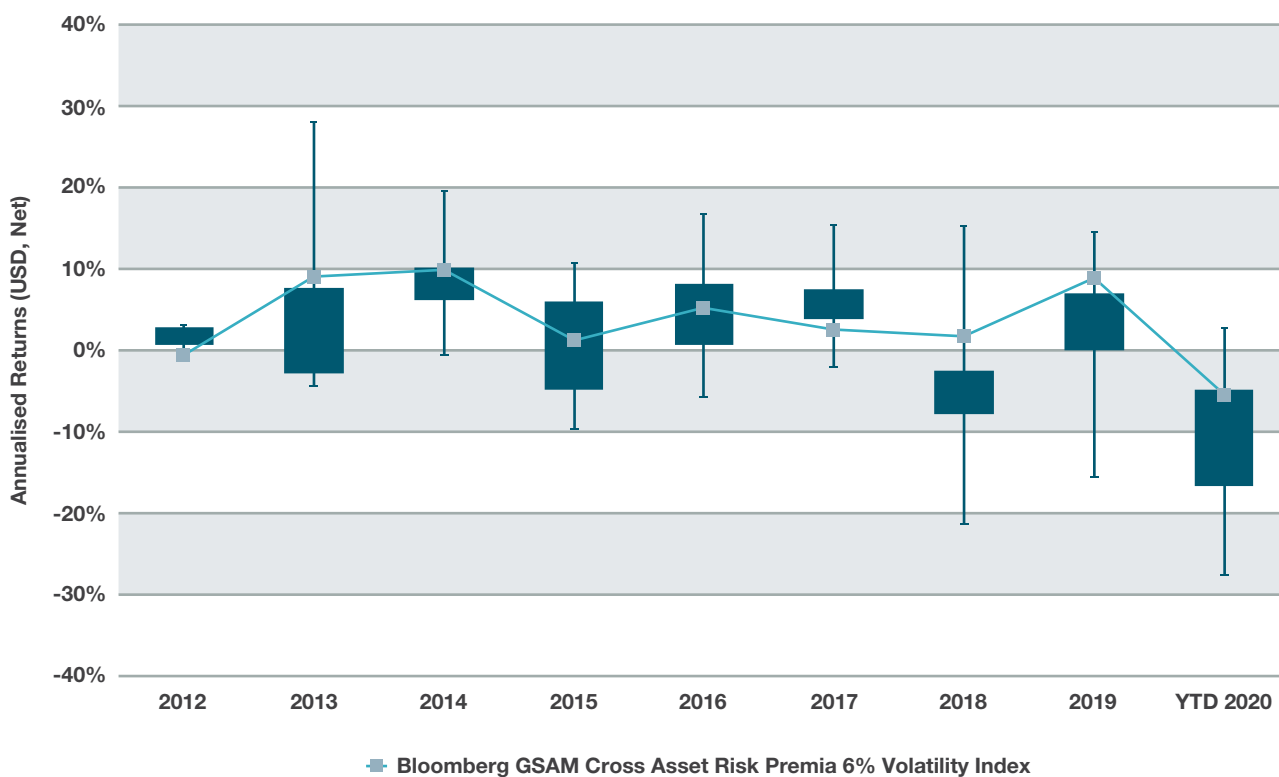
2020: pandemic pain

The average ARP manager suffered losses of around 9% in Q1, with key detractors including Equity Value, FX Carry, Short Volatility and Merger Arbitrage. In contrast to 2018, ‘Practitioner’ strategies were affected more severely than their ‘Academic’ counterparts in Q1 2020 as the more esoteric premia – particularly merger arbitrage and dividend futures arbitrage – unwound more aggressively. The incorporation of trend-following premia was generally a positive contributor in Q1, but trend-following signals that were unable to adapt quickly enough

to the equity market collapse were initially caught off-guard. Some of the better performers not only reduced their equity exposures but were able to transition into a net short position going into March.

Whereas equity markets rebounded in Q2, ARP losses continued. From a premia standpoint, Equity Value continued to be a pain point while Trend – a bright spark in Q1 – was typically a detractor. Commodity strategies performed well early in Q2 as most generally had a net short position in the energy sector. Short Volatility was another premium that benefited from a small respite in April before resuming its role as a detractor from returns. We saw some managers removing models that were no longer performing well or bringing forward new strategy enhancements.

FIGURE 11: PERFORMANCE DISPERSION OF ARP MANAGERS (RANGE AND QUARTILES), SUPERIMPOSED ON PERFORMANCE OF BENCHMARK (6% VOLATILITY)



Source: bfinance, Goldman Sachs Asset Management. All in USD. Assumed execution costs of 50bps applied to the index (based on leverage, turnover and realised costs of existing ARP products and 6% vol constraint, though costs do vary widely depending on strategy). Manager composite performance data is net of all fees.

A clearer picture on performance continued

2: ARP BENCHMARK ‘PERFORMANCE’

As we have seen in the previous section, \$100 invested in the ARP manager composite on December 31st 2011 would, net of all fees, have been worth approximately \$127 in late-2019 and \$113 in mid-2020. By way of comparison, \$100 theoretically invested in the Bloomberg/Goldman Cross Asset Risk Premia benchmark at the same time would have been worth \$INSERT in late-2019 and \$INSERT in mid-2020, without taking any execution costs or fees into account.

Both the benchmark and the manager composite have been hit by the COVID-19 pandemic, but the benchmark does not mirror the significant dip shown by ARP managers in 2018 since – as shown in Figure 9 – it does not include volatility premia.

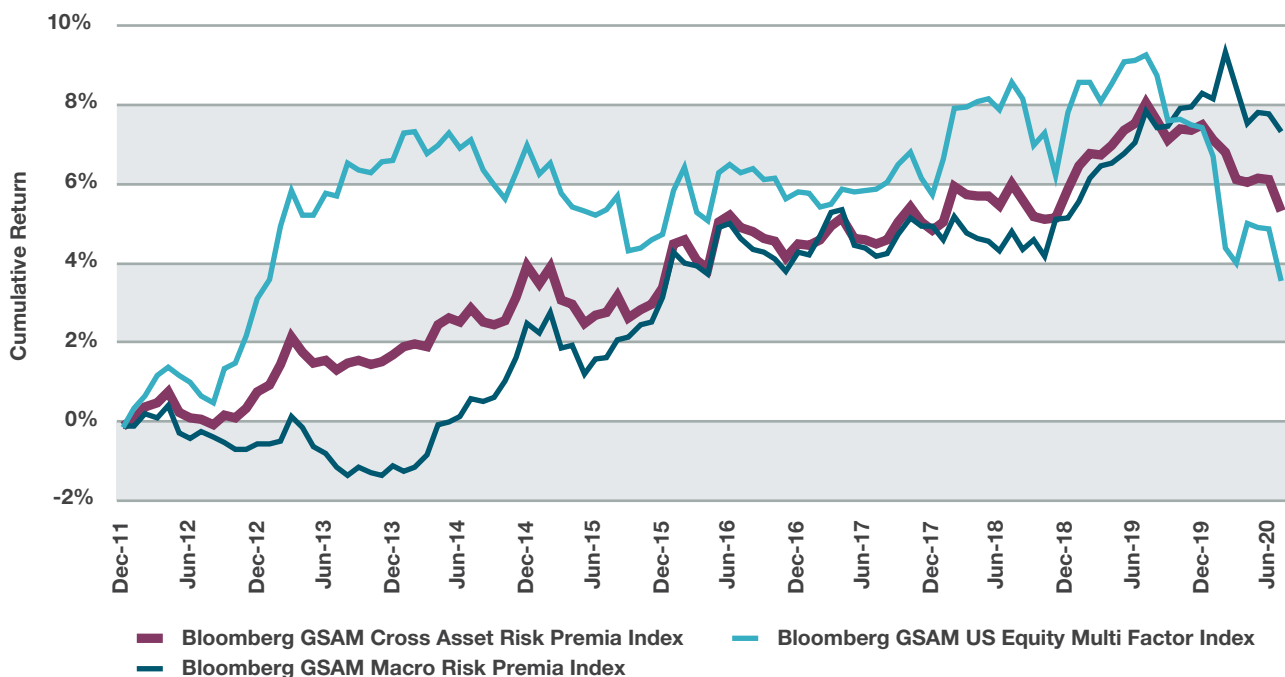
Different lenses

While a manager composite provides an accurate reflection of real-life performance dispersion and allows investors to distinguish between what we term “academic” and “practitioner” strategies, the new indices can provide clarity by asset class, individual premia styles and premia groups. For example, we can see from Figure 12 that **‘macro’ factors (Carry and Trend) have delivered relatively consistent positive performance** through the 2012-2020 period, whereas equity ‘micro’ factors have experienced middling performance after a 2012-13 surge and substantial losses in 2020.

“ It’s important to note that this is an unfunded benchmark – especially if you are going to compare a manager’s returns to this benchmark. In due course, we might expand the current family to included funded benchmarks. It’s also worth noting that we sought to apply relatively little leverage in this benchmark; real-life strategies would tend to use significantly more leverage than this. ”

Kartik Ghia, Bloomberg

FIGURE 12: PERFORMANCE OF BLOOMBERG ARP BENCHMARK AND ITS MACRO/MICRO COMPONENTS



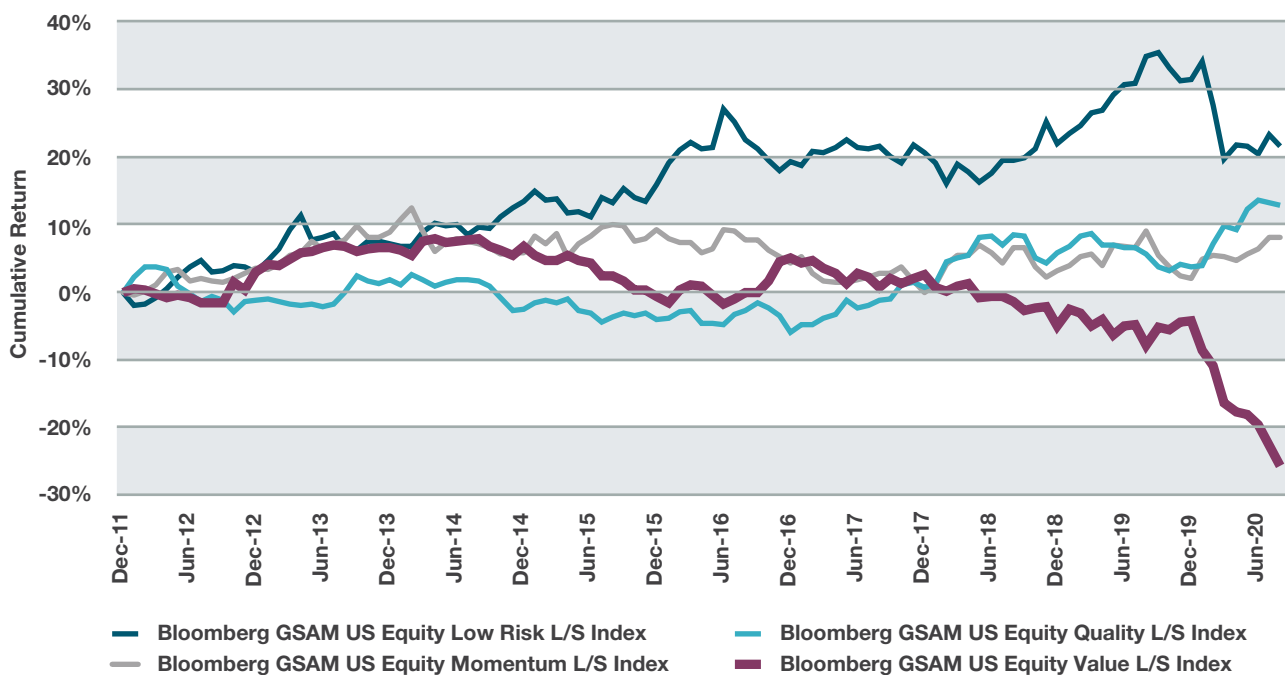
Source: Goldman Sachs Asset Management, Bloomberg. This is the base GSAM Cross Asset Risk Premia Index, so returns differ from the 6% Volatility index shown in Figure 11 (a volatility targeted version of the base scaled to meet the volatility target subject to a leverage cap of 10x).

A clearer picture on performance continued

Looking at a more granular level, examination of the four equity premia sub-indices allows us to note performance drivers more clearly. As was shown in Figure 9, these four are: Low Risk (defensive), Quality, Momentum and Value. Figure 13 illustrates that Quality and Low Vol have been broadly positive contributors over the relevant period, based on standard premia definitions, while Momentum was broadly flat and Value was a material detractor.

As we move into 2020 we can see that Value has continued to decline, while Low Risk premia also became a material detractor as more defensive names were hit by the COVID-19 fallout whilst higher volatility areas (principally tech) outperformed.

FIGURE 13: PERFORMANCE OF EQUITY ARP INDICES



Source: Goldman Sachs Asset Management, Bloomberg

A clearer picture on performance continued

3: ANALYSING AN ARP MANAGER'S PERFORMANCE

The key question that many of our clients now want to answer is: do I have a good manager exposed to underperforming premia (such as equity value, short volatility or trend following), or do I have a weak manager who has chosen a better-performing premia mix?

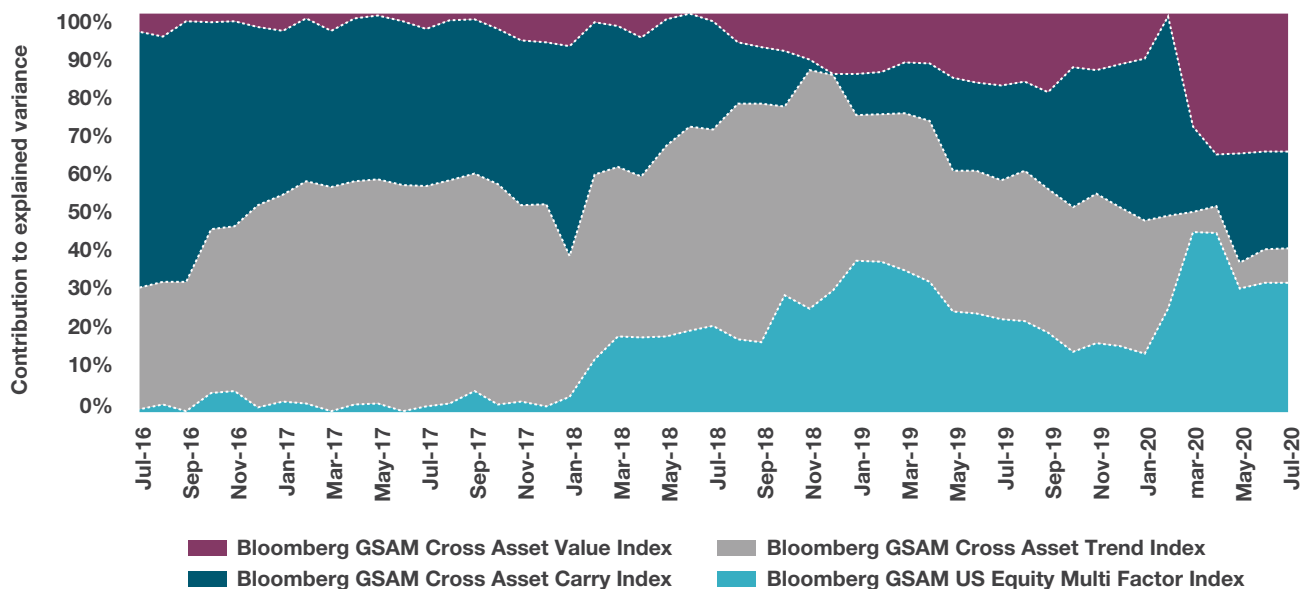
While ARP manager reporting is generally transparent and many managers provide asset class or premia-level performance decomposition, the lack of an independent yardstick has made it hard to get independent validation of these assessments. Manager composites, even tailored composites, are of limited use due to the rich tapestry of strategy types.

In contrast to the top-down classification-driven analysis seen in the previous section, the new ARP indices can also be employed as regressors within a multi-variate analysis framework, allowing us to perform risk-weighted attribution.

While this is not materially dissimilar to other factor-based risk systems such as Barra, Venn or StyleAnalytics, it does have the advantage of using native factors in the ARP indices rather than principally unconnected factor definitions.

To illustrate this, we have employed selected Bloomberg Goldman Sachs indices as multi-factor regressors within bfinance's risk model in order to understand the relative importance of each of the premia groups in explaining the **variance** (rather than performance) of a hypothetical ARP manager (based on an aggregation of returns data from two real-life ARP managers)

FIGURE 14: ANALYSIS OF THE RETURNS OF A HYPOTHETICAL ARP MANAGER



Source: bfinance, Bloomberg, Goldman Sachs

A clearer picture on performance continued

This four-factor example has an explained variance fraction of around just 40%, meaning that those four factors explain 40% of the variance of returns. That figure is not high compared to more traditional long only strategies. However, such levels of explained variance with a four-factor model are comparatively high versus equivalent market-independent alternative strategies, as one would anticipate given the nature of ARP – systematic exposure to alternative risk premia.

As shown in the above manager analysis, exposure to the core premia groups shows a degree of consistency over time, but there are some clear shifts evident over a four-year period: we see increasing relative contributions from cross-asset value and equity micro factors recently, at the expense of cross-asset trend.

For an investor seeking an ARP manager with a material trend component, which might be desirable in order to assist with potential diversification of a long only equity component, allocation to this manager might be less suitable proposition currently than its exposure profile would have suggested through 2017-18.

This approach has obvious benefits in manager selection, with investors able to get greater clarity on whether they are getting exposure to the types of factors they're seeking at the required levels: such analysis is part of thorough due diligence and helps to paint a picture of manager suitability, facilitating more informed decisions within a highly heterogeneous ARP universe. It is also valuable for manager return analysis, giving independent corroboration (or otherwise) of the manager's interpretation of performance.

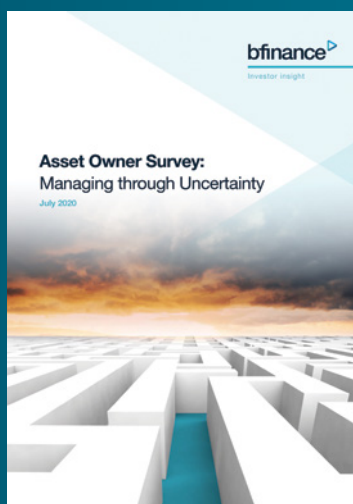
Key takeaways

As is the case with all absolute return strategies, Alternative Risk Premia strategies present a benchmarking challenge. There is now a pressing need to understand recent challenging performance and either re-underwrite or rethink existing allocations to the space.

Conventional approaches to benchmarking include absolute return and risk parameters, reference portfolios, hedge fund manager benchmarks, ARP manager benchmarks and bank premia indices (either compiled by investors or by a third party). All have distinct pros and cons.

This toolkit has now been enhanced by the newly launched Bloomberg GSAM Cross Asset Risk Premia index – the first fundamentally constructed, comprehensive ARP index – and its family of sub-indices. These have been specifically designed to represent the most widely accepted premia definitions, rather than being performance-oriented in their construct, making this the closest thing the ARP space has to a true benchmark. They also open a realistic potential channel for passive ARP investing.

Recent publications available at www.bfinance.com



**Asset Owner Survey:
Managing Through
Uncertainty**
(July 2020)



**Manager Intelligence
and Market trends**
(August 2020)



**Market Update:
Liquid Alternatives**
(April 2020)

IMPORTANT NOTICES

PROPRIETARY AND CONFIDENTIAL

This document contains confidential and proprietary information of bfinance and is intended for the exclusive use of the parties to whom it was provided by bfinance. Its content may not be modified, sold, or otherwise provided, in whole or in part, to any other person or entity without bfinance's prior written permission.

OPINIONS NOT GUARANTEES

The findings, ratings, and/or opinions expressed herein are the intellectual property of bfinance and are subject to change without notice. They are not intended to convey any guarantees as to the future performance of the investment products, asset classes, or capital markets discussed. Past performance does not guarantee future results. The value of investments can go down as well as up.

NOT INVESTMENT ADVICE

This report does not contain investment advice relating to your particular circumstances. No investment decision should be made based on the information contained herein without first obtaining appropriate professional advice and considering your own circumstances.

INFORMATION OBTAINED FROM THIRD PARTIES

Information contained herein has been obtained from a range of third-party sources, unless otherwise stated. While the information is believed to be reliable, bfinance has not sought to verify it independently. As such, bfinance makes no representations or warranties as to the accuracy of the information presented and takes no responsibility or liability (including for indirect, consequential, or incidental damages) for any error, omission, or inaccuracy in the data supplied by any third party.

Office locations

Amsterdam

Symphony building-26th Floor
Gustav Mahlerplein 109-115
1082 MS Amsterdam
The Netherlands

T +31(0)20 794 61 00

www.bfinance.nl

Chicago

220 N. Green Street
Chicago IL 60607
USA

T +1 (312) 829-4353

www.bfinance.com

London

36 Queen Street
London
EC4R 1BN
England

T +44 20 7747 8600

www.bfinance.co.uk

Montréal

1250 René Lévesque Blvd. W
Suite 2200, Montréal QC
Canada H3B 4W8

T +1 514 393 4899

www.bfinance.ca

Munich

Promenadeplatz, 8
D-80333 München
Germany

T +49 89 55 29 59 00

www.bfinance.de

Paris

49, avenue d'Iéna
75116 Paris
France

T +33 1 45 02 64 00

www.bfinance.fr

Sydney

Level 8
99 Elizabeth Street
Sydney NSW 2000
Australia

T +61 2 8973 7503

www.bfinance.com

Toronto

88 Queens Quay West
Suite 2500, Toronto
Ontario M5J 0B8
Canada

T +1 (416) 560-7275

www.bfinance.ca

This document is purely for information purposes and does not constitute investment advice.
It is intended for professional clients in approved jurisdictions only. Information has been obtained
from sources believed to be reliable, however we do not guarantee accuracy.

bfinance UK Limited is authorised and regulated by the Financial Conduct Authority.

[bfinance.com](http://www.bfinance.com)