HSBC Multi-Asset Style Factors

2018 Performance Review

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For professional clients only

Overview

In 2018, the HSBC Multi-Asset Style Factors strategy (MASF) has delivered a positive performance of 3.1% over cash, gross of fees, with an annualized volatility of 5.3%. This corresponds to a Sharpe ratio of 0.6, which is consistent with the strategy's expected return/risk profile – MASF targets a long-term Sharpe ratio of 0.7, gross of fees.

Stating the obvious, 2018 was a rather challenging year for traditional risky asset classes and alternatives:

Developed equities: -9% | Emerging equities: -13% | Commodities: -15% | High Yield bonds: -4% | Global HF: -9%

Even the usually more defensive assets and strategies suffered:

Government bonds: 0% | Gold: -3% | CTA HF: -7%

Alternative Risk Premia (ARP) strategies in which MASF belongs, have posted negative returns as well, with some experiencing drawdowns larger than 10%.

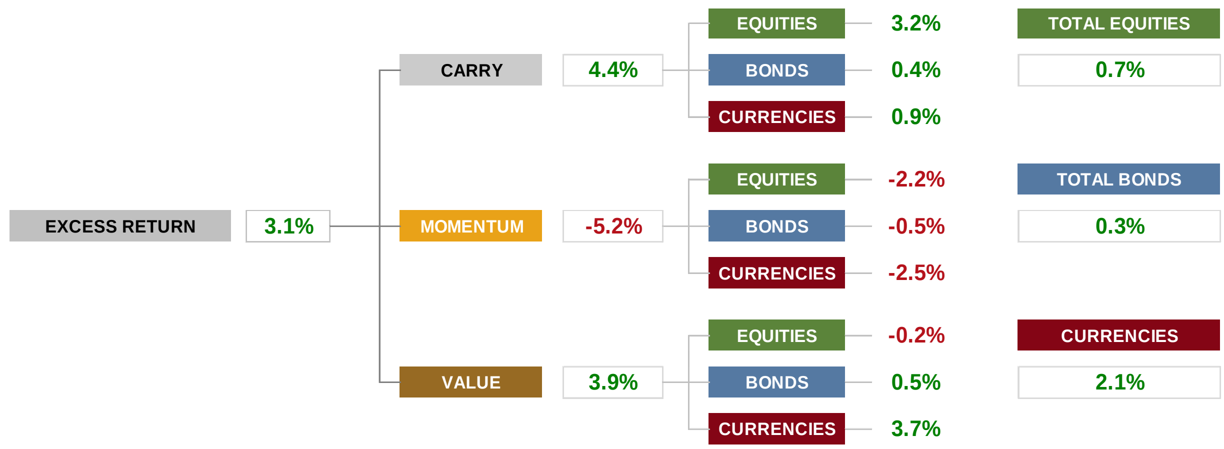
In our view, 2018 taught us that:

- Provided that they are carefully selected and combined, the so-called "alternative premia" can be truly diversifying i.e. have performance cycles of their own, different from that of traditional asset classes.
- Not all alternative premia are created equal hence premia selection clearly matters. Certain premia such as volatility are structurally correlated to equity markets and are all the more so during times of market turmoil. Besides, such premia have highly unstable risk profiles, making risk budgeting problematic. They should therefore be considered with great caution or even excluded by strategies aiming to diversify away from traditional betas.
- Alternative premia exhibit different performance cycles when implemented across different asset classes - equities, bonds, commodities, currencies, etc. Likewise, in a given asset class, performance cycles are different depending on the level of implementation – e.g. individual stock, sector or country. Hence, strategies whose risk budget is well diversified across premia, asset classes and investment universes tend to be less susceptible to individual premia potential drawdowns like the one experienced in 2018 by the value premium at the individual stock level.

Past performance is no guarantee of future results. All performance data is supplemental to the GIPS compliant report at the end of this document.
Source: HSBC Global Asset Management. Returns expressed in excess of cash. Data from 29/12/2017 to 31/12/2018. The performance are gross of fees. The application of the fees will have the effect of reducing the performance presented. Any differences are due to rounding. The commentary and analysis presented in this document reflect the opinion of HSBC Global Asset Management on the markets, according to the information available to date. They do not constitute any kind of commitment from HSBC Global Asset Management.

HSBC Global Asset Management

HSBC Multi-Asset Style Factors 2018 performance attribution



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In 2018, the HSBC Multi-Asset Style Factors strategy outperformed money markets by 3.1%, gross of fees and expenses.

In terms of factor contribution, carry and value made positive contributions while momentum underperformed. Within the value factor, both the long-term and short-term portfolios outperformed, with short-term portfolios being the main performance driver. Within the momentum factor, both the cross-section and time-series portfolios made negative contributions.

In terms of asset class contribution, all of the asset classes made positive contributions; currency portfolios were the main contributors to the strategy's performance last year. Within equities, country portfolios outperformed, led by developed portfolios, while sector portfolios underperformed. The positive contribution of the European sector portfolios being offset by that of the US sector portfolios.

- Currency portfolios mainly benefited from the average long exposures to the Japanese yen, the Norwegian Krone, the Mexican peso and the average short exposure to the Chilean peso. Conversely, the average long exposures to the Russian rubble, the Colombian peso and the Indian rupee as well as the average short exposure to the Swiss franc detracted from the positive performance.
- In equity portfolios, the average long exposures to the UK, the Japanese and the Brazilian markets as well as the average short exposure to the Mexican market added value, while the average long exposures to the German and the Korean markets and the average short exposures to the Indian and the Swiss markets weighed on performance. Sector portfolios mainly benefited from the average short exposures to the European Chemicals, the European Automobile and the US Materials sectors and were penalised by the average short exposures to the Healthcare sectors.
- In bond portfolios, the long exposure to the New Zealand market and the short exposure to the Canadian market contributed positively but performance was negatively impacted by the short exposure to the German market and the average long exposure to the US market.

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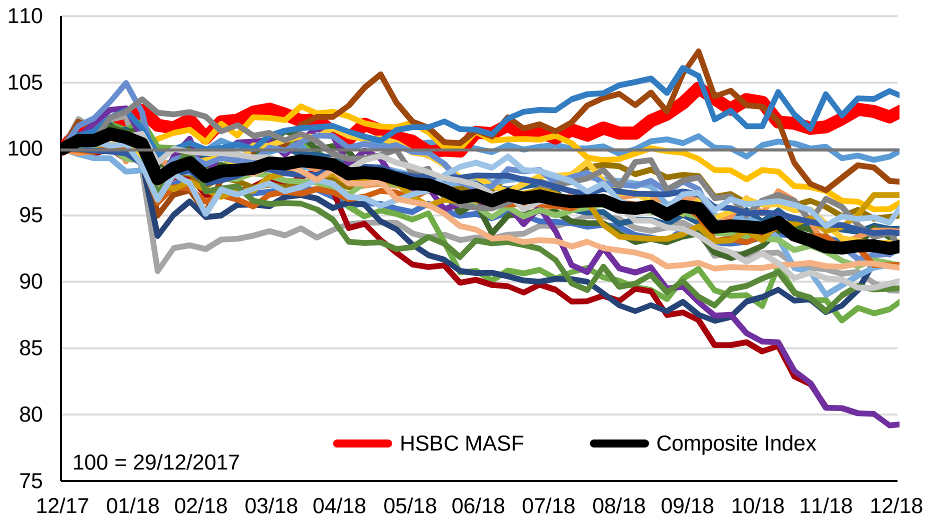
HSBC Multi-Asset Style Factors within the Alternative Risk Premia universe

Making use of public information retrieved from Bloomberg, we have built an Alternative Risk Premia (ARP) composite index that supposedly reflects ARP strategies' average behavior. The composite performance is weekly calculated as the average performance of all live ARP funds. Fund performances are considered in excess of cash and gross of management fees. In 2018, our composite universe consists of 26 ARP funds (3 more were included in the course of the year and one was liquidated).

Composite index return vs individual ARP strategies return (in excess of cash)



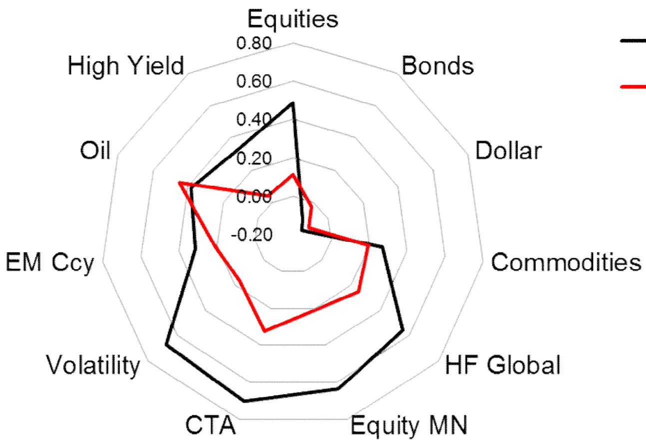
- Out of the 26 ARP funds, only 2 – including HSBC MASF - have delivered a positive excess return in 2018.

Return and risk indicators (2018)

	HSBC MASF	Composite Index
Excess return (ann.)	3.1%	-7.5%
Volatility (ann.)	5.3%	4.1%
Sharpe ratio	0.6	-1.8

- True resilience in 2018

Correlation to the main asset classes and alternative strategies (2018)



- The composite index showed significant correlations to equity, volatility, CTA, Equity Market-Neutral and Hedge-Fund indices whereas HSBC MASF was more diversifying.

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Source: HSBC Global Asset Management. Returns expressed in excess of cash. Weekly data from 29/12/2017 to 28/12/2018. The ARP « peer » group (Composite index) has been selected by HSBC Global Asset Management and may not reflect the market in its entirety. The details of the sample and the names of the strategies displayed are available on the next page. The commentary and analysis presented in this document reflect the opinion of HSBC Global Asset Management on the markets, according to the information available to date. They do not constitute any kind of commitment from HSBC Global Asset Management.

Constituents of the Composite index

ARP provider	ARP strategy	Inclusion date	Bloomberg code	Notes
Abderdeen	Aberdeen Alternative Risk Premia Enhanced	27/07/2017	SPRP2XE LX Equity	
AllianceBernstein	AB Alternative Risk Premia	11/12/2017	ABARIEH LX Equity	
AQR	AQR Style Premia	30/10/2013	AQRSPBE LX Equity	before 15/10/2014: QSPIX US Equity
AXA	AXA Chorus Multi Premia	18/07/2017	CHMPIEH LX Equity	
Blackrock	Blackrock Style Advantage	29/02/2016	BSSAI2E LX Equity	
CFM	R CFM Diversified	23/12/2014	RCFMIE1 ID Equity	
Darius	Darius Alternative Risk Premia	15/01/2018	PURDARP LX Equity	
ERAAM	ERAAM Premia	21/12/2015	ERPREMI FP Equity	
GAM	GAM Systematic Alternative Risk Premia	04/04/2012	GSBDMEA ID Equity	
Goldman	GS Alternative Risk Premia	30/12/2015	GSARPIU LX Equity	
HSBC	HSBC Multi Asset Style Factors	28/04/2015	HSBMAIC LX Equity	before 28/04/2015: HSBCMAS FP Equity
Janus	Janus Global Diversified Alternatives	31/07/2013	JANDAIE ID Equity	
JPM	JPM Systematic Alpha	04/04/2011	JPMSACE LX Equity	
LFIS	LFIS Vision Premia	27/12/2013	LFVRPIS LX Equity	before 31/12/2014: LFAISEU LX Equity
Lombard	LO Alternative Risk Premia	06/08/2014	LORPEMA LX Equity	
MAN	Man Alternative Style Risk Premia	17/10/2017	GMASIHE ID Equity	
Neuberger	NB Multi Asset Risk Premia	10/05/2017	NBRPEIA ID Equity	
NN	NN Multi Asset Factor Opportunities	29/03/2016	NNMAZCE LX Equity	
OldMutual	Old Mutual Style Premia Absolute Return	09/11/2017	OMSPFUA ID Equity	
Parametric	Parametric Syst. Alternative Risk Premia	08/01/2018	ESATX US Equity	
Pictet	Diversified Risk Premia - Low Vol	31/03/2017	DRPLVEH LX Equity	
Quoniam	Quoniam Alternative Risk Premia	04/10/2016	QFARPEI LX Equity	
Swisscanto	Swisscanto Alternative Risk Premia	02/11/2017	SWARNTH LX Equity	
SwissLife	Swiss Life Multi Asset Risk Premia	29/09/2017	SLMARPI LX Equity	
Systematica	Systematica Alternative Risk Premia	09/11/2017	SARPCUN ID Equity	
ThreadNeedle	Threadneedle Div. Alternative Risk Premia	19/07/2016	THDAIEH LX Equity	liquidated on 30/11/2018
TwoSigma	Schroder GAIA Two Sigma Diversified	24/08/2016	SCHTSCE LX Equity	
Unigestion	Uniglobal Alternative Risk Premia	12/12/2016	UGARPRE LX Equity	
Wellington	Wellington Alternative Risk Premia	31/07/2018	WEARPSE LX Equity	

Data sources

Traditional betas excess returns are based on the performance of the following reference indices:

- Equities: MSCI World TR Net Index USD hedged (WHANWHID)
- Bonds: JPMorgan GBI Broad Index USD Hedged (JHDCGBIB)
- Currencies: Dollar Index (DXY)
- Commodities: S&P GSCI TR Index USD (SPGSCITR)
- High Yield: Markit CDX North America High Yield (IBOXHYSE)
- EM currency: JP Morgan ELMI Plus Composite (JPPUELM)
- Oil: WTI Crude Oil (USCRWTIC)

Alternative strategies excess returns are based on the performance of the following reference indices:

- Global Hedge Fund: HFRX Global Hedge Fund Index (HFRXGL)
- Equity Market Neutral: HFRX Equity Market Neutral (HFRXEMN)
- CTA: HFRX Macro Systematic Diversified CTA Index (HFRXSDV)
- Volatility: SGI Vol Premium US Excess Return (SGIXVPUX)

Source: HSBC Global Asset Management. January 2019.

Key Risks

It is important to remember that the value of investments and any income from them can go down as well as up and is not guaranteed.

- **Equity risk:** portfolios that invest in securities listed on a stock exchange or market could be affected by general changes in the stock market. The value of investments can go down as well as up due to equity markets movements.
- **Interest rate risk:** as interest rates rise debt securities will fall in value. The value of debt securities is inversely proportional to interest rate movements.
- **Foreign exchange risk:** where overseas investments are held, the rate of exchange of the currency may cause the value to go down as well as up.
- **Emerging market risk:** Investments in emerging markets have by nature higher risk and are potentially more volatile than those made in developed countries. Markets are not always well regulated or efficient and investments can be affected by reduced liquidity.
- **Derivative risk:** the value of derivative contracts is dependent upon the performance of an underlying asset. A small movement in the value of the underlying can cause a large movement in the value of the derivative.
- **Counterparty risk:** The portfolio is exposed to Over the Counter (OTC) markets for all or part of its total assets. The portfolio will therefore be subject to the risk that its direct counterparty will not perform its obligations under the OTC transactions and that the strategy will sustain losses.

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Index returns assume reinvestment of all distributions and not reflect fees or expenses. You cannot invest directly in an index.

Portfolio characteristics, including position sizes and sector allocations, among others, are generally averages, are only for illustrative purposes, and do not reflect the investments of an actual portfolio unless otherwise noted. The investment guidelines of an actual portfolio may permit or restrict investments that are materially different in size, nature and risk from those shown.

There are important differences in how the strategy is carried out in each investment vehicle. A separately managed account may not be suitable for all investors and a minimum asset level is required. Please refer to the Form ADV Part 2A for important information about the investment adviser.

Methodology of hedging the simulated strategy. The USD hedged returns were obtained by using the following inputs; EUR hedged portfolio returns, EUR and USD 3-month swap rates. The relative difference between the USD hedged returns of the portfolio vs. the EUR hedged returns of the portfolio represent a close estimation of the return that can be achieved by hedging the Euro currency back to the US dollar by selling currency forwards at three-month forward rates.

Back-tested results have inherent limitations, some of which are described below. Back-tested returns do not represent the performance results of actual trading or portfolio asset allocations for any client assets or portfolios. Back-tested returns are calculated through the retroactive application of the proposed asset allocation to its relevant benchmark and are produced with the benefit of hindsight. Therefore, the performance results are not indicative of the skill of HSBC Global Asset Management or of future results. Since back-tested performance results do not represent actual trading or portfolio asset allocations they may not reflect the impact that material economic and market factors might have had on decisions made in actual trading or portfolio asset allocations. No representation is being made that any portfolio will or is likely to achieve profits or losses similar to those shown. In fact, there are frequently significant material differences between back-tested performance and performance results subsequently achieved by following a particular strategy.

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All decisions regarding the tax implications of your investment(s) should be made in connection with your independent tax advisor.

GIPS Report

Global MA – Alternative Risk Premia

Report to: December 31, 2018

Benchmark Name:	100% EONIA CAPI
Inception Date:	April 30, 2015
Reporting Currency	EUR
Return Type	Gross

	Returns		Accounts and dispersion			Risk, 3-year standard deviation		AUM		
Year	Composite returns (%)	Benchmark returns (%)	Accounts at end	90th percentile returns	10th percentile returns	Composite volatility	Benchmark volatility	Composite at end (m)	% firm assets	Total firm at end (m)
2018	2.77	(0.37)	≤5	2.77	2.77	5.29	0.01	463.26		
2017	2.65	(0.36)	≤5	2.65	2.65			224.70	0.09	254,328.94
2016	10.07	(0.32)	≤5	0.00	0.00			100.75	0.05	216,071.37
Apr-15 to Dec-15	(7.63)	(0.09)	≤5	(7.63)	(7.63)			91.84	0.05	200,322.10

HSBC Global Asset Management (the Firm) claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. The Firm has been independently verified for the periods 1 January 2006 through 31 December 2017. The resultant verification report is available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.

The composite creation date is 23/12/2015

A complete list and description of all Firm composites, as well as additional information regarding policies for calculating and reporting returns, is available on request from the contact shown on the document or presentation to which this report is attached.

Prior to 2011, HSBC Global Asset Management maintained eight distinct GIPS Firms. The Firms were defined by legal business entity. All existing group Firms were thereafter amalgamated into a single global Firm definition. Historical performance shown prior to January 1, 2006 reflects the performance of a legacy Firm GIPS composite.

HSBC Global Asset Management (the Firm) consists of discretionary accounts and sub-accounts managed as discrete mandates within specified local HSBC Global Asset Management entities. The Firm comprises the following: HSBC Global Asset Management (Deutschland) GmbH, HSBC Global Asset Management (Hong Kong) Limited, HSBC Global Asset Management (USA) Inc., HSBC Global Asset Management (France), HSBC Global Asset Management (Canada) Limited, and HSBC Global Asset Management (UK) Limited, and authorised mutual funds and mandates investing primarily in Asset Backed Securities (ABS) managed in these locations. The Firm excludes portfolios and funds managed by the Alternative Investments teams (with the exception of ABS funds referenced herein), LDI products, French regulated employee (FCPE) schemes, and private client accounts as these products operate under a materially different philosophy and process and/or regulatory environment.

The Global MA - Alternative Risk Premia, composite consists of fully Multi-Asset discretionary accounts that may hold long and short positions in equity, fixed income, currencies, and other financial instruments. The volatility range is 6 - 8%, Investments combine 3 style factors -value, carry and momentum- implemented across equity, bond and currency markets. The aim is to outperform a cash benchmark over the long term.

Actual management fees are negotiable at the discretion of HSBC.

Performance returns are calculated gross of investment management fees and other non-trading related expenses.

The performance presented in this composite report is calculated net of unreclaimable withholding taxes.

The minimum portfolio size for this composite is EUR 500,000.

Warnings: The historical performance presented in these reports should not be seen as an indication of future performance; The value of your investment and any income from it can go down as well as up. Where overseas securities are held the rate of exchange may cause the value of the investment to go down as well as up.Investors should also be aware that other performance calculation methods may produce different results, and that the results for specific portfolios and for different periods may vary from the returns presented in these reports; Comparisons of investment returns should consider qualitative circumstances and should be made only to portfolios with generally similar investment objectives. In the USA, this information is intended for use solely in one-on-one presentations.

The standard annual investment management fee schedule for separately managed institutional accounts is as follows: 0.50% of assets per annum for the first $100 million, 0.40% for $100-$250 million, 0.33% for $250-$500 million, and 0.25% for the balance over $500 million

The composite name changed from Global MA - Relative Value - Style Factors to Global MA - Alternative Risk Premia on 01 October 2017

The dispersion of the returns are measured by the spread of returns from individual portfolios within a composite. The dispersion of returns are measured by the percentiles of portfolio returns represented within the composite.

The GIPS Total Firm AUM is calculated and shown on a quarterly basis.

The strategy will have a constant exposure to derivatives as it is implemented on a long short basis. Therefore, there will be extensive use of these instruments, to include creating short positions. It should be noted that these shorts are part of a 'pair positioning', which is a core part of the portfolio construction technique. The instruments will include listed futures for bonds and equities, forward foreign exchange contracts , nondeliverable forwards and interest rate swaps. Therefore, investors will be exposed to the following risks: settlement , counterparty , liquidity and leverage inherent in this approach. Although the level of leverage will vary, the manager will aim to maintain -250%/+250% on average and -375%/+375% as a maximum. However, it should be noted that these are not hard limits but soft guidelines.