CAMRADATA

Factor Investing Roundtable

February 2020

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Welcome to CAMRADATA's Factor Investing Roundtable

FACTOR INVESTING has grown from a niche strategy to attract sizeable investment flows. This approach assumes that systematic factors – such as value or size – define the characteristics of a security's performance, providing the foundation for a consistent, rules-based approach to investment.

Building on its foundations in the capital asset pricing model, along with Fama and French's research into factor modelling in the early 1990s, factor investing explains the drivers of return in a portfolio in terms of the risks associated with its factor allocations and how investors are compensated for these risks (or 'risk premia').

Established risk premia for equities strategies include low volatility, momentum, value, size and quality. But, beyond this, asset managers are applying a wider range of alternative risk premia to enhance the risk-return profile of a multi-asset portfolio. The objective is that these should deliver diversification, through having low correlation with "traditional" risk premia, as well as enhanced return.

In doing so, risk premia investing may aim to capture the return benefits offered by alternative investment managers - but doing so at lower cost and through investment in more liquid instruments.

This may target structural opportunities open to hedge fund or infrastructure fund managers, for example, but without requiring the investor to lock up investments for long periods or into relatively illiquid markets.

Taking advantage of advances in computing power, data management and algorithmic trading models, quantitative investment managers have been driving innovation in factor investing techniques, seeking more creative ways of capturing risk premia from a widening spread of investment factors.

But how well do risk premia/factor investing strategies perform in current economic conditions? And which categories of investor are driving demand for this investment approach?

Do opportunities exist for applying 'new' risk premia and for deepening this approach across fixed income, currencies and other asset classes? If so, what implementation strategy is needed?

And do investors (and investment consultants) have access to the data and research they require to drive their factor investing strategies?

Factor Investing
Roundtable

The latest CAMRADATA roundtable on Factor Investing took place in London on 12 February 2020.

The take-up of Alternative Risk Premia strategies (ARPs) is on the rise. Consultants at this year's CAMRADATA ARP roundtable were positive on the diversifying attractions of these strategies. "New clients are still interested," said Tom Wake-Walker, senior vice president, manager research at Redington, an investment consultancy.

Beneath this trend, however, lie a host of concerns and revisions on the nature of ARPs within investment portfolios. In part this is a reaction to shock: some of the most renowned and popular strategies lost more than 10% in 2018. The average performance that same year for the entire universe of ARPs monitored by bfinance, a consultancy to asset owners, was -6%, according to Toby Goodworth, head of risk & diversifying strategies. Among the CAMRADATA panel, "disappointing" was the most common description for this performance. Dev Jadeja, deputy team head of manager research at Cardano, a pension fund consultancy and fiduciary manager, described the last three years as "unusual" and "challenging".

Goodworth himself preferred the word "dilutive", defending ARPs' diversifying properties and saying that -6% was not world-ending. Ajeet Manjrekar, co-head of River & Mercantile Solutions, an investment consultancy and fiduciary manager, disagreed. Their recent performance suggested to him that ARPs were not as diversifying as investment theory would suggest whilst remaining relatively expensive. He qualified that much of these strategies' reassessment needs to be done by clients and consultancies as part of their approach to the construction of growth portfolios and the risk management frameworks they use.

Brendan McLean, head of manager research at Spence & Partners, the only consultancy represented yet to recommend ARPs, said his imperative remains to find alternatives to Diversified Growth Funds - including those focused on Absolute Return - which he felt had been disappointing over an even longer period of time. "The likes of some DGF's within the Cash +5-7% universe haven't delivered. So if a client has an allocation to this kind of DGF, then ARP could sit in that space," he said.

This openness tallied with the perspective of Jeremy Bryant, senior vice president at MJ Hudson, an investment consultancy which publishes an annual survey of ARPs. "Among our client base, we see more interest from new adopters. Existing investors in ARPs are re-evaluating and rotating out of one or two names but not meaningfully exiting the class," he said.

" Clients and prospects need to understand that ARPs are not correlated with major asset classes, which is not the same as negatively correlated "

The three asset managers at the CAMRADATA roundtable were then asked whether they felt their ARPs retained their diversifying appeal.

Markus Ebner, head of multi-asset at Quoniam, began by noting that its ARP made money in February 2018, at a time when volatility wrong-footed a lot of strategies in this universe. He said that clients and prospects need to understand that ARPs are not correlated with major asset classes, which is not the same as negatively correlated. In other words, clients should not expect ARPs to provide inverse positive returns when major asset classes fall.

Rob Croce, senior portfolio manager at Mellon, an investment firm of BNY Mellon Investment Management, agreed. He said that the Mellon ARP strategy was designed to give clients the experience of market neutrality (the strategy in dollar terms may have biases, such as long in Low Vol, but practically that achieves a sense of neutrality). "Some clients have us in the bucket of Crisis Risk Offset; we need to maintain that balance," he said.

Alex Zweber, institutional portfolio manager for Eaton Vance affiliate, Parametric, who have

partnered with Research Affiliates on their ARP strategy, said that its three types of risk premia: carry, value, and trend are robust to various definitions and have an economic rationale. In classic ARP structure, these three premia are extracted from four major asset classes: equities, bonds, commodities and currencies. There is also a conditional short volatility factor, used tactically as an additional carry factor when its own value and trend signals are in alignment.

Even in these brief introductions, it became apparent how investment thesis and portfolio construction explain some of the wide diversity in ARPs' returns. For example, Quoniam and Parametric both focus on risk premia, as distinct from anomalies such as Low Volatility, but of the two managers only Quoniam builds portfolios from the bottom up, and thus trades individual names rather than index instruments. BNY Mellon Investment Management, meanwhile, also uses cash securities – Croce reckons equity value is best expressed thus – but incorporates anomalies alongside premia. Furthermore, he categorises contributing factors into 'true' risk premia, such as value and carry; 'neutral' risk premia, such as momentum; and 'defensive' risk premia, such as quality and trend.

Mellon does not hold that there are the same risk premia for every asset class. For example, Croce fervently rejected the efficacy of Commodity Value as a return contributor.

Zweber responded that premia contributions wax and wane over time – some going out of favour for very long cycles – but Commodity Value kept its place in the Parametric framework for diversifying purposes.

There is thus neither a fixed list of risk premia nor a single approach to accessing them. All roundtable participants agreed that deciding how to extract and combine risk premia was an evolutionary process. For clients, this can be confusing. The original appeal of risk premia investing, over a decade ago, was as a systematic alternative to fundamental active management. This roundtable was a reminder that systematic does not mean static. Quoniam, for example, adjusted its definition of volatility from Value-at-Risk to Conditional Value-at-Risk last summer.

Parametric evaluated cross-sectional momentum but ended up adopting time-series trend in its chosen framework, with time-varying net long/short exposures weighted by signal strength for each security.

Croce reckons that almost all his team's original ideas for identifying and aggregating risk premia have been refreshed or relegated. "We store all the old theses on the ranch," he said. "Asset management is an iterative process."

> *“ Ongoing research, monitoring and most likely incremental changes are what investors should expect from a strong fiduciary manager ”*

Jadeja added that ongoing research, monitoring and most likely incremental changes are what investors should expect from a strong fiduciary manager.

Manjrekar, who used to incorporate ARPs in product solutions for a large European bank, agreed that times change and with them signal strength and portfolio construction efficacy. He reckons that what was constructed in the economic regime post-Financial Crisis may not be as relevant today. As one reform to make portfolio construction more forward-looking, he suggested that correlation figures be dismissed. "Correlation is a blunt instrument when it comes to portfolio construction," he told the CAMRADATA panel. "Pitchbook examples that show how putting 10% of assets into an ARP improves on a 60/40 equity/bond allocation need to be thrown out of the window."

The reason he gave is because correlations are smoothed figures, which mask the variability of relationships through time and therefore give clients a false sense of diversification. Jadeja agreed that caution must be exercised when interpreting common statistics like correlation. For example, a Sharpe Ratio embeds assumptions that mean it may not be the best guide to how these strategies might perform at extremes.

But given the prevalence of correlations and Sharpe Ratios in the factsheets of Absolute Return strategies, these criticisms are profound. As a remedy, Manjrekar suggested that every element of an ARP needs to be evaluated in all conditions on its own merits. "Each component needs to be able to stand on its own two feet," he said.

Many ARP strategies incorporate a range of premia. The individual premia can diversify each other but not always. Understanding each building block as well as the combined package is crucial, according to Jadeja.

Intuitively, this ought to make for a fairly stable, low-return product. Quoniam ARP has realised cash plus 3% since inception.

But the disappointing returns of 2018 have raised questions about portfolio construction in ARPs and more profoundly whether some their managers failed to recognised that some premia have had their time and will fail in choppier markets ahead. Croce's take on the ARP sector is that conventional approaches fail to account for co-skewness among premia, or the likelihood that several premia experience left-tail events at the same time. Managing co-skewness is the primary job of portfolio construction in long-short space;

once one has fully scrubbed out the beta of the underlying asset classes, the big risk remaining is that several premia become highly correlated at bad times. Croce believes this is what happened in 2018.

"The big picture in 2018 was that when changes in risk appetite fluctuate, it is hard for ARP strategies to adapt," he said. "Trend didn't offer diversification at inflection points. When these managers went short, the actions of monetary authorities caused equities to rip in their faces just as they got short."

February 2018 saw extraordinary divergence between the move in implied volatility, manifest in option pricing, and the move in actual equities. Goodworth reminded the panel that shorting volatility is the classic risk premium: "It works really well… until it doesn't."

> *“ The policies of Central Banks have been a major influence here, and the related issue for trend-seeking strategies is how to profit from market movements before a summary change of direction”*

He added that he had researched ARP strategies that went long volatility systematically, a reminder that this sector is heterogeneous on many levels.

The warning from Croce, who has a track record in Risk Parity, is that investors need to refine their understanding of risk premia better, to reap diversification from more defensive elements such as Quality and the Low Vol anomaly when correlations between markets and ARPs in aggregate rise. He added that dispersion in asset classes has been shrinking, reducing the breadth of opportunities. The policies of Central Banks have been a major influence here, and the related issue for trend-seeking strategies is how to profit from market movements before a summary change of direction.

Ebner noted the fewer opportunities in value and carry in currencies. He said that in the past, it was typical to go long Emerging Markets currencies such as Mexico's peso to extract these risk premia. But now they are much reduced.

and reckoned that in extremis the entire portfolio could be turned over in ten days.

How trading gets done was the next moot point. Quoniam uses an inhouse team of six traders directly on the exchange, not via investment banks. Ebner was asked whether this approach was more expensive. “Our analysis suggests costs for single stocks used to be 80 bps but are now down to 10 bps,” he replied. “And we can better control exposure to premia such as value and momentum.”

Wake-Walker said that Redington preferred managers using their own algorithms rather than discretion. “Those with a hedge fund background have more nous in this area,” he said.

“ While the consultants were united on the need for more transparency on trading costs, they admitted that they are reliant on managers to supply data ”

This led to a wider point made around the table that risk premia are in practice differentiated by the breadth of the available market and trading costs. Going long Emerging currencies, for example, entails particular risks not sufficiently recognised in theory. As Risk Premia investing gains traction, so managers and clients are understanding these characteristics more and more. Nevertheless, Zweber claimed that clients could still have an animated debate about whether to pay 50 or 60 bps for the annual management fee when 150 bps in trading costs get “swept under the rug.”

Investment banks will exploit this myopia by offering ARPs packaged as a swap with a headline zero-fee.

Goodworth reckons that in currency trading alone, bfinance had uncovered some strategies with cost four times those of others. Bryant added that part of due diligence is how signals are implemented – that is where value is also added. “The three big themes of ARP for MJ Hudson are transparency, liquidity and lower fees,” he said.

“Implementation is a differentiator,” endorsed Manjrekar.

Zweber said that Parametric prides itself on its implementation expertise. While Research Affiliates conducts the academic research into risk premia on which the ARP is based, Parametric is laser focused on the efficiency of portfolio management and limiting “implementation drag”. For example, the strategy limits its investment universe to liquid exchange-traded futures, and their approach uses signal persistence and relative strength to separate signal from noise and limit unnecessary portfolio turnover.

Mellon has a different approach. Croce said that infrequent trading tends to generate higher trading costs, and Mellon strategies trade daily, albeit partially, toward a theoretically optimal portfolio. Regarding liquidity, he disqualifies premia that are not truly liquid as inappropriate for ARP strategies;

While the consultants were united on the need for more transparency on trading costs, they admitted that they are reliant on managers to supply data.

“When we ask them, there are often challenges in terms of the consistency or content of the data provided” revealed Goodworth.

Bryant noted, however, that the interests of managers and clients are aligned to reduce transaction costs. And McLean noted that the Statement of Investment Principles for UK pension schemes now directed them to acquire more understanding of their costs.

Roundtable Sponsors

Roberto M. Croce, PhD, Managing Director, Senior Portfolio Manager

Personal Profile

Rob is the senior portfolio manager for the Risk Parity and Managed Futures strategies at the firm. He is responsible for managing our suite of liquid alternative strategies and the development and maintenance of the underlying quantitative models. Prior to joining the firm in 2018, Rob was a managing director of quantitative strategies at Salient Partners. He was the lead portfolio manager on Salient’s risk parity and managed futures strategies and co-portfolio manager on several other funds.
In addition, Rob and his team built Salient’s quantitative software and hardware platform from the ground up and continue researching potential strategy improvements and new products. Prior to joining Salient in 2011, Rob taught macroeconomics and finance at Ohio State University, published academic research and served as a research assistant. In 2010, Rob interned in the Strategic Research group at the Teacher Retirement System of Texas.
Rob earned both a master’s and doctoral degrees in economics from Ohio State University and a Bachelor of Science in economics from Penn State University.

BNY Mellon Investment Management

Company Profile

BNY Mellon Investment Management is one of the world’s largest investment firms. We believe that the right results begin by being relevant to every client, whether that is engaging the way they want, offering diversified strategies or providing quality insights for better informed decisions.

That is why we have designed a model that is built around investors’ needs to offer the best of both worlds: bringing together world-class investment firms with best of breed talent and unique cultures combined with the global scale and strength of BNY Mellon Investment Management. We look to connect investors with opportunities across every major asset class, globally.

Today, we have eight investment firms: Alcentra, ARX, Dreyfus Cash Investment Strategies, Insight, Mellon.

Roundtable Sponsors

Alex Zweber, CFA Institutional Portfolio Manager

Personal Profile

Alex Zweber is an institutional portfolio manager for Eaton Vance Management (International) Limited. He is responsible for supporting the development and distribution of its strategies in Europe, with a focus on investment solutions from Parametric Portfolio Associates, an investment adviser and majority owned subsidiary of Eaton Vance. He joined Eaton Vance in 2018 from Parametric, which he joined in 2006.
Alex began his career in the investment management industry in 2006 with The Clifton Group (acquired by Parametric in 2012). Before joining Eaton Vance, he was a senior portfolio manager at Parametric, working on volatility risk premium solutions. He has over 10 years of experience with portfolio construction, trading and portfolio management across futures and options, and works closely with institutional clients and consultants to address their investment and risk management needs.

Eaton Vance Management (International) Limited

Company Profile

Eaton Vance provides advanced investment strategies and wealth management solutions to forward-thinking investors around the world. Through principal investment affiliates Eaton Vance Management, Parametric, Atlanta Capital, Hexavest and Calvert, it offers a diversity of investment approaches, encompassing bottom-up and top-down fundamental active management, responsible investing, systematic investing and customized implementation of client-specified portfolio exposures. Exemplary service, timely innovation and attractive returns across market cycles have been its hallmarks since 1924.

Dr Markus Ebner, Head of Multi-Asset

Personal Profile

Dr Markus Ebner, Head of Multi-Asset, has worked at Quoniam Asset Management since 2005, where he is responsible for the Multi-Asset Strategies group. He studied economics at Ruprecht-Karl University in Heidelberg and did his doctorate at Ludwig-Maximilian University (LMU) in Munich. Prior to starting at Quoniam, Dr Markus Ebner worked as a quantitative equities consultant at Deka Investment.

Quoniam Asset Management

Company Profile

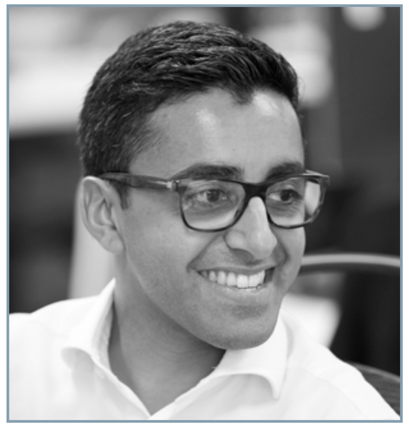
Quoniam is a partner-driven, active quantitative asset manager founded in Frankfurt am Main, Germany. We have successfully applied our investment philosophy for 20 years. Using modern investment engineering, we strive to deliver first-class performance results for our institutional investors. Quoniam offers equities, fixed income and multi-asset strategies, and client relations are managed from Frankfurt and London (UK) with direct access to key investment professionals. Based on our expertise, we manage more than €30 billion for investors worldwide. Quoniam is an independently operating asset manager with the freedom to devise creative solutions. As a member of Union Investment Group we benefit from a solid financial basis. With over 130 experienced people in Frankfurt and London, we are focused on providing our clients with successful investment solutions.

Roundtable Participants

Toby Goodworth

Managing Director, Head of Risk & Diversifying Strategies

Toby Goodworth is Head of Risk & Diversifying Strategies at bfinance, and a member of the firm's Senior Management Team. Previously Toby was Head of Risk Management at Key Asset Management, one of Europe's oldest fund of hedge funds, where he designed and ran the firm's bespoke risk models. Prior to that he was a risk analyst focusing on quantitative global equity strategies. Toby holds a Ph.D in Physics from University College London and a First Class honours degree in Physics, also from UCL.



Dev Jadeja

Manager Research Deputy Team Head

Dev is the deputy team head of the manager research team and is primarily responsible for a broad range of discretionary and quantitatively driven multi-asset strategies. Before joining Cardano, Dev held senior research and portfolio management roles at International Asset Management and Key Asset Management. He started his career at Old Mutual Asset Managers and is a Chartered Alternative Investment Analyst. Dev holds an MEng from the University of Cambridge.

Jeremy Bryant

Senior Vice President

Jeremy is a Senior Vice President and Team Leader in the Research team. His role includes investment research, manager selection, portfolio analytics, investment and operational due diligence of alternative investments, including hedge funds, private markets and alternative risk premia.

Before joining M.J. Hudson Allenbridge, he was an Investment Consultant at Willis Towers Watson in the Diversifying Strategies research team, leading research into Systematic strategies and covering Alternative beta funds within the fiduciary portfolios. Prior to that, he worked for 6 years as a Senior Analyst at Aberdeen Asset Management, in the Hedge Funds team, as strategy lead for quantitative strategies. Jeremy started as an Analyst at RBS Asset Management in the fund of hedge funds business.

Tom Wake-Walker

Senior Vice President, Manager Research

Tom works as a Senior Vice President in the Manager Research Team and sits within the liquid markets segment. He is responsible for manager research in multi-asset and liquid alternatives.

Tom joined Redington in June 2016 having previously worked at LyonRoss Capital and Novus Partners in New York and Zurich.

He is a CAIA charterholder and holds a BSc (Hons) in Economics and International Development from the University of Bath.

Roundtable Participants

Ajeet Manjrekar

FIA, Co-Head

Ajeet focusses on working with institutions to understand their specific investment and governance needs in order to design innovative solutions to achieve their funding and investment objectives.

As a qualified actuary with extensive experience in both investment consulting and asset management, Ajeet is part of the senior management team with responsibility for the quality and evolution of our client-driven services.

He re-joined us in 2016 having spent the last few years in Deutsche Bank's asset management businesses. Prior to that, he was a lead investment consultant advising several of our defined benefit and defined contribution clients.

Ajeet has a degree in Mathematics from Warwick University

RIVER AND MERCANTILE SOLUTIONS

Brendan McLean

Head of Manager Research

Brendan is Head of Manager Research and is responsible for recommending and monitoring investment managers across all asset classes. He joined Spence in 2017 and has gained many years of manager research experience by working at a variety of firms, including an investment consultant and a family office. Brendan is a CFA Charterholder, has the Investment Management Certificate (IMC) and a degree in Finance and Investment from the ICMA Centre, University of Reading.

SPENCE

Moderator

Brendan Maton

Freelance Journalist

A highly experienced financial journalist with an expansive network of contacts in the UK and across Europe. Brendan has written about pension schemes and national welfare systems from Finland to Greece for 18 years and understands the retirement savings industry in each European country.

Brendan has interviewed EU commissioners and national ministers; central bankers; pension scheme heads; insurance chief executives; chief investment officers; actuaries; union officials; professional and lay trustees.He worked at Financial Times Business for eight years, finally as editor-in-chief of all international pensions titles. Brendan has spent the last ten years as a freelancer for a number of publications, including Financial Times, Responsible Investor, Nordic region pensions news and IPE. He is also Chief webcast host for IPE.

Brendan has acted as conference chair for Financial News, the UK National Association of Pension Funds, Dutch Investment Professionals Association (VBA), Corestone, Insight Investment, Marcus Evans, Robeco Asset Management, Sustainable Asset Management (SAM), Towers Watson.

BNY MELLON
INVESTMENT MANAGEMENT

The long and short of Managing Market Volatility

More than a decade after the Global Financial Crisis, 2008 remains a focal point for investor discussions. The number one question clients ask us in meetings is how we contend with market volatility

"If we begin with the end objective in mind, and think first about longer-term volatility, our Risk Parity and Alternative Risk Premia solutions are set up in such a way that we believe they should outperform peers in most normal environments"

More than a decade after the Global Financial Crisis, 2008 remains a focal point for investor discussions. The number one question clients ask us in meetings is how we contend with market volatility.

Mellon's objective is always to meet our clients' performance targets, and as such we endeavour to build a robust portfolio capable of performing well in a multitude of market environments. We believe we are well prepared for longer term market outcomes through the portfolio framework which we employ – and we aim to address the day to day volatility in the detail of our portfolio construction.

If we begin with the end objective in mind, and think first about longer-term volatility, our Risk Parity and Alternative Risk Premia solutions are set up in such a way that we believe they should outperform peers in most normal environments.

For Risk Parity in particular, our portfolio can outperform when diversified exposure outperforms concentration within most asset classes, when credit outperforms equities on a risk adjusted basis, or when momentum generates positive return (specifically in our tactical strategy). We can also outperform in low or declining volatility environments. Our portfolios benefit from:

- Improved breadth within asset classes (equal risk within, not just across asset classes);
- Improved tracking of targeted level of risk;
- Faster responsiveness in changing risk environments. In short, we believe we are positioned for fast growth, slow growth, inflation, and disinflation.

Risk parity is a strategy where risk measurement, risk forecasting, and risk management are critical to success. For this reason, we have built risk management into every step of the investment process. This involves more than just avoiding unacceptable tail risk; we are also very careful in aiming to avoid under-delivering on our risk targets. One of the challenges for risk parity investors in recent years hasbeen the failure by many managers to deliver on their targeted levels of risk, and we have avoided this failure in this strategy.

In the case of Alternative Risk Premia, our main takeaway from 2018 is that the term "risk premia" is incorrectly applied to a heterogeneous set of strategies. Another set of strategies often termed "risk premia" are better defined as anomalies; these have different trading patterns and are effective diversifiers in a portfolio. A bias toward true risk premia relative to anomalies is a typical default position for portfolios, but this can leave investors exposed when risk appetite pulls ack sharply. As a consequence, portfolio construction can be out of line with investor preferences and expectations. Therefore, we recommend sufficient exposure to market anomalies such as momentum and trend in order to achieve proper diversification.

" We recommend sufficient exposure to market anomalies such as momentum and trend in order to achieve proper diversification"

Our portfolio construction takes into account the above but goes deeper to address the day to day volatility.

Mellon has been a systematic multi-asset Macro manager for over 30 years, and our team has a huge amount of institutional knowledge of risk measurement, risk forecasting, and risk management. We believe we have enhanced this depth of experience with best in class risk-based asset allocation experience across risk parity, managed futures, and alternative risk premia.

Our primary measure of risk comes from a rolling sample of daily data. We also decay the data but use a linear correlation measure. We augment this risk measurement in two ways. Firstly, we use a very long run sample of monthly data to estimate tail-risk adjusted VaR in each market, and this feeds into the portfolio construction. Secondly, we use a very fast-moving measurement of volatility that we derive from tick data which signals when we should take near term volatility into account for position sizing.

Specifically, our allocation engine uses our three-month volatility estimate, one-year correlation, and a numerical method to solve for portfolio weights that we expect to deliver the targeted risk contributions from each market. Our market beta varies with market risk and tactical positioning.

For instance, in our non-tactical Risk Parity strategy (called DRQ), if market volatility is low, that beta can be up to 1x, whereas when market volatility is high, we can have less than 0.5 beta.

We look to make decisions around our investment thesis and its execution with a long-term institutional investor's best interest in mind. We are fully systematic, with no scope for discretionary overlays. Given this, our fully systematic approach, our focus is on continual enhancement of our risk forecasting methods and implementation. This allows us to manage the short-term environment and to position our portfolios for long term performance in- line with the expectations of our investors. On a forward-looking basis we believe our strategies can be best in class.

Written by

Roberto Croce
Senior Portfolio Manager

Alternative Risk Premia

Harvesting Inherent Benefits While Addressing Potential Shortcomings

“ The Parametric Systematic Alternative Risk Premia (SARP) Strategy aims to avoid over-optimisation tendencies while addressing the negative side-effects of the factors that make up ARP strategies”

Systematic Alternative Risk Premia (SARP™)

Investors are increasingly seeking alternative sources of return to improve their portfolio prospects. Solutions categorised as “Alternative Risk Premia” (i.e. ARP) merit consideration given their potential to deliver attractive absolute returns and diversification, especially during major equity drawdowns.

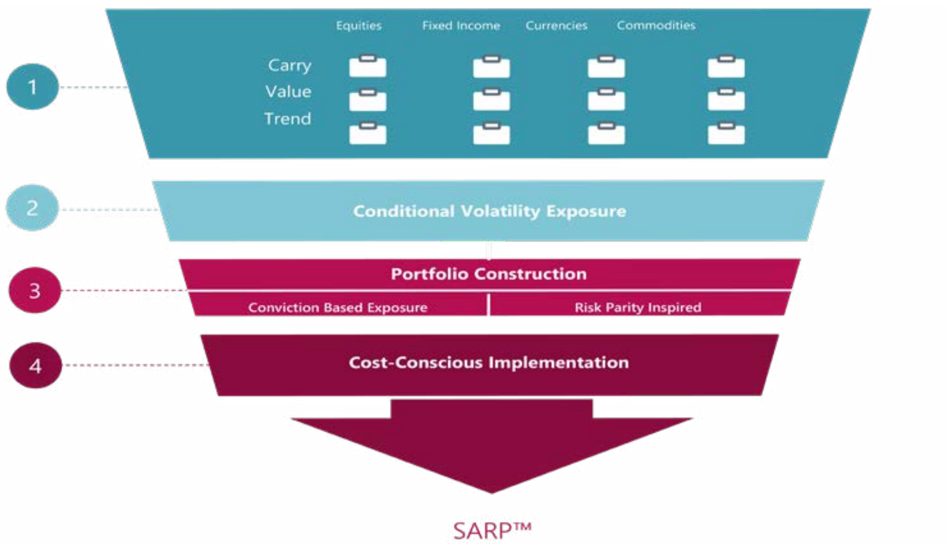
ARP solutions harvest return-generation strategies previously categorized as “alpha”, or unexplainable compensation for risk. Over the last decade, these strategies have been largely demystified and decomposed into various return drivers known as “factors”. These factors can provide uncorrelated excess returns across all major asset classes, and are increasingly packaged into low-fee, transparent, and easy-to-access ARP strategies.
While ARP solutions can offer a compelling value proposition, in our view, many could fail to deliver promised outcomes. The space is highly susceptible to over optimisation, and even the most robust factor premia come with a number of undesirable or unintended characteristics. For example, factors such as carry and value are vulnerable to unwanted equity beta and the trend factor tends to underperform around market turning points, which are occuring more frequently than in the past.

The Parametric Systematic Alternative Risk Premia (SARP) Strategy aims to avoid over-optimisation tendencies while addressing the negative side-effects of the factors that make up ARP strategies, all while leveraging decades of expertise in trading and implementation to deliver a cost-effective solution to investors.

SARP was born out of a collaboration between Parametric, a leading global asset manager, and Research Affiliates, a pioneer in factor investing. The strategy is based on ongoing quantitative research undertaken by Research Affiliates, and it combines the derivatives and implementation expertise that is a hallmark of Parametric’s investment strategies. Both firms share a proven track-record of thoughtfully designing and efficiently delivering investment strategies to the worldwide institutional marketplace.

SARP seeks to deliver competitive and uncorrelated absolute returns throughout most market environments within a highly transparent, liquid and cost-conscious approach to portfolio construction. The strategy is composed of 13 total factor portfolios: Carry, Value and Trend (3 factors) across Global Equities, Global Fixed Income, Commodity and Currency markets (4 asset classes) plus Equity Volatility, an additional carry risk premium conditionally incorporated into the strategy using value and trend signals on the level and term structure of the Volatility Index (“VIX”) curve.

Investment Process



Source: Parametric/Research Affiliates as at 28 February 2020. For illustrative purposes only.

Why SARP™?

SARP is based on five principals that serve as key differentiators versus its competitors:

1. **Factor Selection:** SARP includes only the most robust factors that meet our strict screening criteria. The factors chosen are economically intuitive, heavily represented in academic literature, robust to perturbations in factor definition or transformation, and continue to add value after discovery and trading costs. SARP’s chosen factors are naturally complementary to one another, and importantly, are not redundant to exposures already well-represented in most investor portfolios.

2. **Factor Enhancements:** While each factor has a long history of delivering positive risk-adjusted returns at low correlations to traditional exposures, each factor sleeve can be subject to unwanted shorter-term characteristics. In the creation and ongoing evolution of SARP, Research Affiliates’ alternatives team addresses many of these potential pitfalls through, among other actions, the incorporation of seasonality adjustments, clustering techniques, beta-hedging algorithms, and dynamic trend approaches. These factor construction considerations will allow SARP to preserve the long-term return and diversification benefits of each factor portfolio, all while improving shorter-term performance characteristics across market cycles.

“ Rather than target volatility, which leads to increased use of leverage during low-volatility regimes, SARP uses signal agreement to determine how much leverage is merited”

3. **Portfolio Construction:** Rather than target volatility, which leads to increased use of leverage during low-volatility regimes, SARP uses signal agreement to determine how much leverage is merited. When signal agreement (i.e. conviction) is high, gross leverage naturally increases. When signal agreement is low, gloss leverage drops. SARP distributes gross leverage among the factor sleeves through a risk-parity-inspired approach. Factors with lower volatility and improved diversification characteristics receive higher proportional allocations. That said, SARP avoids a pure risk-parity approach that tends to over-allocate to factors with more-attractive recent covariance characteristics at the expense of other factors that may be temporarily out-of-favor on such metrics. This unique approach helps SARP avoid over-engineering tendencies that lead to attractive backtests followed by lackluster out-of-sample results. Additional considerations used to determine appropriate allocations across the factor sleeves include an analysis of expected performance characteristics across market cycles and implementation considerations inclusive of factor turnover and margin requirements. The resulting portfolio is calibrated to exhibit smoother risk adjusted returns across market cycles, all with modest use of leverage and limited portfolio turnover.

4. **Efficient Implementation:** All too often, investment strategies are constructed with little thought given to implementation costs. SARP’s investment universe is limited to exchange traded futures and currency forwards which are all highly liquid, transparent and stable sources of leverage. Our systematic process is intended to reduce turnover, and to minimise transaction costs and trading expenses.

5. **Partnership:** Parametric and Research Affiliates have a shared mission to deliver value to investors through robust investment research and cost-efficient implementation. In combining Research Affiliates’ industry-leading research in the areas of asset allocation and factor investing, along with Parametric’s leadership in the areas of liquid alternatives and derivatives exposure management, SARP provides a “best of both worlds” solution to the end investor.

Performance and Outlook

SARP closed out 2019 returning +15.08% as the strategy's focus on diversification played a key role in translating sleeve-specific results into strategy-level success*. SARP's 13 factor sleeves tend to have low cross-correlations and the strategy typically performs well if a simple majority have positive results. During 2019, diversification worked well as 7 of 13 sleeves delivered positive excess returns*.

" While it can be tempting to think of the ARP industry as commoditised, the broad dispersion of results suggests that large differences in factor inclusion and portfolio implementation exist"

Meanwhile, the broader ARP universe showed a wide divergence of outcomes in 2019, which came on the heels of generally disappointing results in 2018. While it can be tempting to think of the ARP industry as commoditised, the broad dispersion of results suggests that large differences in factor inclusion and portfolio implementation exist. Subtle differences in the asset classes covered, the risk premia harvested and the signal definitions of those premia can add up to significantly different outcomes.

While the prospect of lackluster returns from traditional asset classes makes ARP strategies potentially more attractive on a forward-looking basis, the wide dispersion amongst ARP managers underscores the importance of manager selection in this space. Our design principles strive to make investing in ARP straightforward and intuitive and we believe we are uniquely positioned to harvest alternative risk premia and address key investor concerns in the periods ahead.

Investor Concerns	SARP's™ Characteristics
Low Return Environment	Attractive Absolute Returns
Data Mining & Over Fitting	Theoretically Sound Empirically Robust Factors
High Leveraged that rises in Low Volatility Environments	Moderate Leverage that rises with Conviction, not to meet volatility targets
High Management Fees	Competitive Flat Fee
Elevated Trading Costs	Highly Efficient Implementation and Cost-Conscious Design
Black Box	Transparent Investment Universe & Portfolio Positioning

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*Source: Eaton Vance as of December 31, 2019. Past performance is not a reliable indicator of future results.

Are Risk Premia Strategies
Market-Neutral?

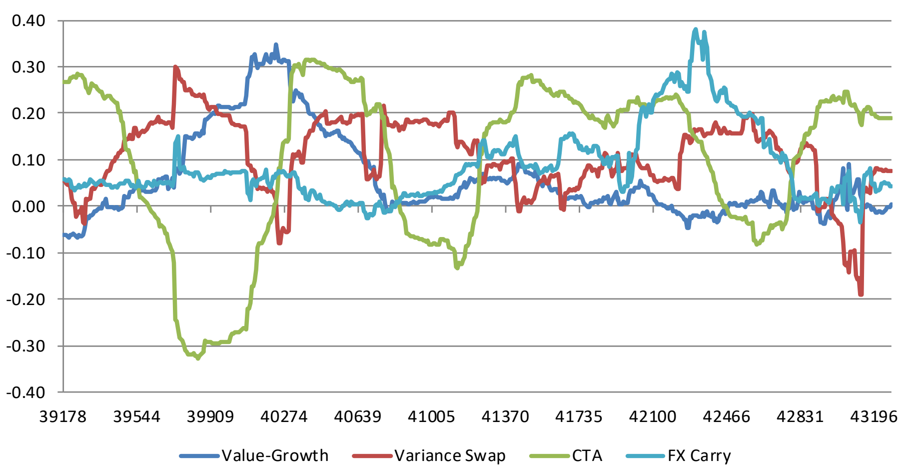
The long period of low interest rates made risk premia strategies popular, especially due to their promise of uncorrelated returns. February 2018 was a first stress test as equity markets lost up to 10% in a few days. The majority of strategies showed a strong link to equities and generated significantly negative returns. This was a reminder that picking the right risk premia strategy is crucial.

Most risk premia strategies were launched in 2016 or later, a period of mostly subdued market volatility. February 2018 was the first stress test for those funds, challenging their correlation attributes when equity markets lost 8%–10%. During that period risk premia strategies showed a large dispersion in returns and the performance of the majority suffered considerably. How did this beta exposure creep into portfolios despite most of them not having any explicit long equity exposure? The sources can be manifold and investors have to be aware of them.

“ February 2018 was the first stress test for those funds, challenging their correlation attributes when equity markets lost ”

Analysing different kinds of beta

To illustrate this, we calculated the sensitivity to equities for a variety of individual risk premia, all constructed with a target volatility of 5% to make them comparable. First of all, it is important to consider implicit beta. Most strategies entail long/short exposure in equities to implement the prominent value, size and momentum risk premia. Taking the value premium as an example, a standard dollar-neutral long/short portfolio can yield a significant residual beta. This is because value stocks often have a beta greater than 1 because of their additional cyclical risk.



By contrast, short positions in growth stocks often have a beta below 1. This effect is illustrated in Figure 1 (dark blue line), documenting a net beta range between –0.07 and +0.35 for a U.S. value vs growth equity portfolio.

Secondly, the so-called conditional beta is relevant. Short volatility strategies on equity indices typically show a long history of strong positive returns, combined with short periods of sharp drawdowns. From an economic perspective selling volatility is equivalent to acting as an insurer in capital markets. Doing this is attractive because taking the risk of negative returns during times when no one would like to have them, such as market crashes, is well rewarded in the long run. One of the most prominent short volatility strategies is selling variance swaps. The red line in Figure 1 shows the beta of a short variance swap on the S&P 500: implementing a short volatility strategy yields a high beta level which spiked to a maximum of 0.30 after the Lehman crisis.

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Strong beta dispersion possible

Another prominent investment strategy is time-series momentum, otherwise known as buying winners and selling losers. In this context the analysis of time-varying beta is important. Typically the strategy is implemented with derivatives based on holding long positions in assets with positive past returns, combined with short positions in assets with negative past returns. However, applied to equity markets, a positive economic regime tends to mean long positions in the majority of equity indices and vice versa for a negative economic regime. To show this effect we have created a momentum strategy based on an equal-weighted signal over 4 different time periods between one and six months on the 20 most liquid global equity indices. The result shows strong beta dispersions from –0.33 to +0.32. Therefore, during these high beta periods portfolio returns are strongly sensitive to the equity market.

“ Combining several beta- exposed premia in a strategy can easily sum up to a heavily exposed portfolio ”

Yet another source of equity beta is investments which are linked to the equity markets and therefore potentially contain significant hidden beta. The most prominent example is exposure to credit spreads. Other premia like FX Carry have a link to equities, too. This can easily be seen from the turquoise line in the chart showing the beta of a dollar-neutral FX Carry strategy based on 8 developed market and 8 emerging market currencies which has a maximum beta of 0.38. This is because countries with high interest rates are more sensitive to the global economy than countries with low interest rates. Long positions in high-yielding currencies combined with short positions in low-yielding currencies show this relationship and link the premia with equity markets–which are sensitive to the global economy by nature.

The combination is decisive

To summarise, there are many ways for beta exposure to get into a risk premia portfolio as many of the premia share common sources of risk with equity markets. Combining several beta- exposed premia in a strategy can easily sum up to a heavily exposed portfolio. An equally weighted portfolio with a target volatility of 10% based on the four premia mentioned above shows a beta range between 0.06 and 0.72 with a mean of 0.36. The sharp sell-off in equity markets in February 2018 has highlighted the importance of understanding which premia are implemented and how. This also implies that the choice of strategy should always be made in the context of the investor's existing asset allocation.

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CAMRADATA funds europe

Upcoming Roundtable Discussions

21st April 2020 - ABS & Securitised Credit
29th April 2020 - ESG in Fixed Income
3rd June 2020 - Private Debt
17th June 2020 - Impact Investing
25th June 2020 - Responsible Investing
1st July 2020 - MAC

Meet the Team!

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