



PROGRESSIVE CAPITAL  
PARTNERS LTD

# DIVERSIFY YOUR ALTERNATIVE RISK PREMIA

WHAT ANCIENT CROP ROTATION  
CAN TEACH TODAY'S INVESTORS



DIVERSIFY LIKE AN EGYPTIAN FARMER 3

ALTERNATIVE RISK PREMIA:  
A TIME-HONORED CONCEPT  
REPACKAGED FOR INVESTORS 4

HOW CAN INVESTORS BEST  
ACCESS ALTERNATIVE RISK  
PREMIA? 8

HOW TO ASSEMBLE A  
PORTFOLIO OF ALTERNATIVE  
RISK PREMIA 12

## ALTERNATIVE RISK PREMIA AT A GLANCE:

Alternative risk premia (ARP) are a small but growing segment of the alternative investment industry. While such strategies have long been the subject of academic research and debate, products for investors have only started appearing a few years ago, driven by increasing demand for cost efficient and market neutral alternative investment solutions. Today, such products are for the most part transparent, intuitive, and can be traded at a weekly basis or more often.

There are hundreds of ARP strategies available today, but established ones such as Value, Momentum, Carry, and Defensive should be the core of well-diversified ARP portfolios. These are managed by experts with a strong quantitative background and deep industry knowledge who rely on computer-aided trading.

If executed correctly, ARP strategies can deliver superb diversification results.

## DIVERSIFY LIKE AN EGYPTIAN FARMER

### What ancient crop rotation can teach today's investors

Alternative investments can be compared to the ancient art of crop rotation. In biblical times, Egyptian fellahin realized that planting the same crop in the same place has unpleasant consequences. In the Middle Ages, farmers established the three-field process to improve yields. Sadly, modern industrial-scale agriculture has consigned some of these old practices to oblivion.

Now think of yourself as an Egyptian farmer in pre-crop rotation times. You diligently work your plot of land, planting barley for beer making since time immemorial, relying on periodic Nile floods – until your field's slow degradation gives you nightmares of seven starving cows. Fortunately, you follow a far-flung guy's advice to embrace alternatives such as lentils or onions.

Fast-forward several millennia, and you are a New York-, Tokyo-, or Zurich-based investor comfortably settled in your ways. Your old-school portfolio of stocks or bonds has steadily gained in value, effortlessly benefiting from frequent liquidity injections by the large central banks. But lately, strange visions of turned-off water taps have started troubling your sleep. Short-term, you can drown such worries with a glass of a different kind of uplifting liquidity. Deep down, however, you know you need a different approach.

What does that mean? You have switched between various asset classes before to diversify your portfolio, perhaps with mixed results. Are you ready, like the Egyptian farmer, to try an alternative solution? If you are, alternative risk premia (ARP) may just be the thing for you. They do belong in the alternatives corner, but some of them have long gone mainstream. Value, Momentum, Carry, and Defensive (VMCD) are as present on trading floors as in university halls. Lately, products with a focus on alternative risk premia have sprung up.

We believe their liquidity and transparency could prove attractive to investors – even to those burnt by previous forays into alternative territory. Unlike some other alternative strategies, ARP are for the most part transparent, liquid, easy to understand, and inexpensive relative to other alternative products.

Today, there is a wide range of ARP available. They cover concentrated products focusing on one alternative risk premium within one asset class (e.g. Carry in foreign exchange markets) as well as diversified products harnessing multiple alternative risk premia across asset classes (e.g. VMCD in equities, bonds, and currencies). Filtering out the most promising ones is an art in its own right. You cannot be too wrong in sticking with the established and proven strategies, and pick additional ones if need be. Only make sure that you take a hard look at them first.

## ALTERNATIVE RISK PREMIA – A TIME-HONORED CONCEPT REPACKAGED FOR INVESTORS

Today's letters to investors are full of expressions such as Value, Momentum, Carry, and Defensive. They are prominent examples of alternative risk premia, a concept both old and new. On the one hand, investors have implemented well-known and well-researched ARP strategies for decades. On the other hand, offering products with a focus on alternative risk premia is a relatively recent trend. We believe they can prove attractive to investors – even to those burnt by previous forays into alternative territory. Unlike some other alternative strategies, ARP are for the most part transparent, liquid, easy to understand, and inexpensive relative to other alternative products.

### WHAT ARE ALTERNATIVE RISK PREMIA?

Investing means you expect to be rewarded for the risk of losing money. This so-called risk premium – i.e. the excess return over a risk-free investment<sup>1</sup> – should in the long run more than offset losses stemming from periods of downturns.

If you are a multi-asset investor, you typically rely on three sources of return: traditional risk premia, alternative risk premia and alpha. Your traditional risk premium will be the reward of bearing the risk of traditional investments like equities (risk: market downturn) and bonds (risk: rising interest rates or issuers defaulting on their debt), and you can achieve this easily via “passive” index-linked products.

No decisions regarding securities selection<sup>2</sup> or market timing<sup>3</sup> are needed. If you want to beat the market, you enter the world of alternative risk premia and alpha – two types of excess returns that are sometimes considered one category. They result from more complex, partly computer-aided strategies involving selection, timing, derivatives trading, as well as long and short<sup>4</sup> positions.

<sup>1</sup> We consider short-term government bonds of financially stable countries a risk-free investments while acknowledging they contain a small amount of credit risk.

<sup>2</sup> Security selection means that investors only buy a subset of the whole investment universe.

<sup>3</sup> Market timing means market entry at a low price level and exit at a high level.

<sup>4</sup> A long position benefits from rising prices of the underlying security, whereas a short position benefits from falling prices.

Because achieving alpha usually requires a lot of effort tied to information gathering and analysis, it can come at a steep price. Costs come down, however, if a product is based on relatively simple systematic strategies with a clear economic rationale, and employs liquid market instruments. This is the case for many ARP products (see following table).

#### ALPHA AND ALTERNATIVE RISK PREMIA ARE MPORTANT PARTS OF AN INVESTMENT’S TOTAL RETURN

TOTAL RETURN	<b>ALPHA</b> (high effort and high cost)	The portion of the excess return generated by better information or better interpretation of generally known information.	Excess return over traditional risk premia through security selection or market timing.
	<b>ALTERNATIVE RISK PREMIA</b> (moderate effort and moderate cost)	The excess return stemming from relatively more simple, systematic strategies that are generally known and accepted, and have a clear economic reason why they exist (once considered part of alpha).	Uncorrelated to traditional risk premia.
	<b>TRADITIONAL RISK PREMIA</b> (low effort and low cost)	Compensates for the risk of investing in traditional asset classes like stocks or bonds, often found in “passive” strategies replicating market moves, i.e. beta.	

SOURCE: PROGRESSIVE CAPITAL PARTNERS

#### WHO LAID THE GROUNDWORK?

In 1993, U.S. economists Eugene Fama and Kenneth French laid the groundwork for the concept of alternative risk premia. They showed that market beta alone – i.e. the general development of the market – was not enough to explain stock returns,<sup>5</sup> discovering that value<sup>6</sup> and smallcap<sup>7</sup> stocks tended to generate excess returns. Consequently, Fama and French determined that a stock’s return depends on three factors – market beta, size, and value. In 1997, Mark Carhart extended Fama and French’s work by adding momentum.<sup>8,9</sup> Additional strategies have since taken the total to more than 300.<sup>10</sup> Today, there are around 20 well-established and widely applied alternative risk premia such as Value, Momentum, Carry, and Defensive.<sup>11</sup> These strategies cut across different asset classes – mostly equities, fixed income, and currencies, but also commodities and credit (see following table).<sup>12</sup>

#### SOME WELL-ESTABLISHED ALTERNATIVE RISK PREMIA AND THE ASSET CLASSES IN WHICH THEY OCCUR

ARP	DESCRIPTION	SINGLE EQUITIES	EQUITY INDICES	FIXED INCOME	CURRENCIES
Value	The tendency that relatively cheap assets outperform relatively expensive ones.	●	●	●	●
Momentum	The tendency that assets with a recent relative outperformance continue to outperform assets with a relative underperformance.	●	●	●	●
Carry	The tendency that assets generating a high income outperform assets generating a relatively low income.	●	●	●	●
Defensive	The tendency that lower-risk and higher-quality assets outperform higher-risk and lower-quality assets.	●	●	●	
Trend	The tendency of an asset price trend continuing in the near future.		●	●	●
Short Volatility	The tendency of investors paying a premium for portfolio insurance.		●	●	●

SOURCE: PROGRESSIVE CAPITAL PARTNERS

<sup>5</sup> Fama, E. and French, K. (1993).

<sup>6</sup> Stocks with a low book-value-to-price ratio.

<sup>7</sup> Stocks with a low market capitalization.

<sup>8</sup> Carhart, M. (1997).

<sup>9</sup> Stocks that outperformed during the last 12 months also tend to outperform over the next 12 months.

<sup>10</sup> See e.g. Harvey, C. R., Liu, Y., and Zhu, H. (2016); Levi, Y. and Welch, I. (2014); Hou, K., Xue, C., and Zhang, L. (2017).

<sup>11</sup> We classify Trend as a sub-strategy of Momentum and Short Volatility as a sub-strategy of Carry.

<sup>12</sup> Here we focus on the main markets equities, equity indices, fixed income, and currencies.

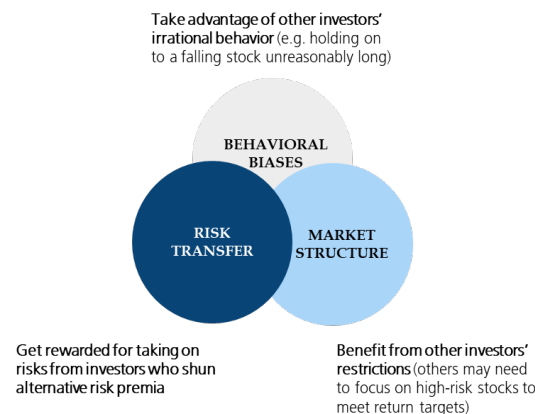
### WHEN DID ALTERNATIVE RISK PREMIA BECOME PROMINENT?

Around 2009, some asset managers launched dedicated products based on highly liquid and competitively priced alternative risk premia.<sup>13</sup> This was also a reaction to hedge funds' mediocre returns during the financial crisis. Nevertheless, investors were slow to engage. The year of 2012 was another milestone with pension plans starting to invest significant amounts in alternative risk premia, swelling their ranks to more than 100 funds and more than 2,800<sup>14</sup> investable indices at present.

### THREE REASONS FOR INVESTORS TO ENGAGE IN ALTERNATIVE RISK PREMIA

There are three simple economic reasons why investors engage in alternative risk premia. They are compensated for taking on risks from investors avoiding such strategies, they can take advantage of other market participants' irrational behavior, and they can benefit from restrictions other investors face (see following chart).

### ARP INVESTORS SEE OPPORTUNITIES WHERE OTHERS DO NOT CARE TO LOOK



SOURCE: PROGRESSIVE CAPITAL PARTNERS

One or several of these reasons (or other factors) drive demand for specific ARP strategies. For example, institutional investors often have leverage restrictions and, therefore, have to overweight higher-risk stocks to meet their return targets (market structure). In doing so, they overlook low-risk equities, which are also often considered boring (behavioral bias). Therefore, Equities Defensive is a viable strategy. For the Currency Carry strategy, the return driver is tied to risk transfer. Here investors engage in lower-yielding currencies (via short positions) to invest in higher-yielding ones (via long positions). This strategy pays off if the exchange rate remains unchanged, taking advantage of investors' reluctance to bear currency risk. However, it backfires if the higher-yielding currency devaluates.

<sup>13</sup> Those strategies were called Systematic Alpha but did actually apply well-known ARP strategies.

<sup>14</sup> Source: Clear Alpha Limited, as of December 31, 2018.

## WHAT MAKES ALTERNATIVE RISK PREMIA UNIQUE?

ARP have many advantages, but there are pitfalls as well.

### PLUSES

- + Long history of producing attractive risk-adjusted returns, successfully applied by hedge funds over decades.
- + Low correlation with traditional asset classes (e.g. equities and fixed income) making these strategies a solid building block within a multi-asset portfolio.
- + Low correlation across single alternative risk premia, leading to a high diversification effect.
- + Unlike other alternative strategies, ARP are intuitive and easy to understand.
- + Cost efficiency due to the strategies' generic nature and access to liquid markets.
- + Can be bought or sold on a weekly basis or more often.
- + Straightforward and transparent investment rules and portfolio construction.
- + High capacity, unlike many other alternative strategies.

### MINUSES

- Track records of products are short, most products have not been tested in a market downturn.
- Individual strategies can have long and sharp drawdowns<sup>15</sup> (for example, Equity Value is in a drawdown since May 2010, having lost around 20% since).<sup>16</sup>
- ARP are primarily diversifiers, not hedging strategies - in case of a sell-off in equities or bonds, their performance can be positive, flat, or negative.
- Some managers are not fully transparent regarding their definition of risk premia or their portfolio positioning, or both.
- Investors need a deep understanding of ARP strategies to avoid overfitted products.

SOURCE: PROGRESSIVE CAPITAL PARTNERS

<sup>15</sup> A drawdown is the peak-to-trough decline during a specific investment period.

<sup>16</sup> HML (high minus low) data series of Fama / French Global 3 Research Factors from Ken French Data Library; [http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html#Developed](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html#Developed), as of November 30, 2018.

## HOW CAN INVESTORS BEST ACCESS ALTERNATIVE RISK PREMIA?

ARP investors can choose from a range of flexible strategies and access them via different channels. There are concentrated products focusing on one alternative risk premium within one asset class (e.g. carry in foreign exchange markets) as well as diversified products covering multiple alternative risk premia across asset classes (e.g. Value, Momentum, Carry, and Defensive in equities, bonds, and currencies).

Such strategies are sold by financial institutions like investment banks and asset managers (e.g. traditional asset managers and hedge funds). We will concentrate on asset management companies, which generally offer the full range of premia selection, premia and portfolio construction, risk management, and execution. Their research-driven strategies evolve over time, and react to market changes. They rely on management fees but some of them also charge performance fees. Although asset managers usually are transparent regarding buy and sell signals as well as exposure levels, they are sometimes reluctant to fully disclose the exact portfolio positioning.

Traditional asset managers can become expert at managing strategies involving long and short positions or derivatives. However, their core competence is managing systematic long-only strategies. Hedge funds, which often market ARP products as less complex and cheaper versions of their alpha strategies, often have a competitive edge in risk management, portfolio construction with long and short positions, and derivatives trading. At the same time, they sometimes offset such advantages by charging higher fees (including performance fees) and/or offering below-average liquidity. Moreover, some of them lack transparency.

### DIVERSE MARKETS, DIVERSE RETURNS

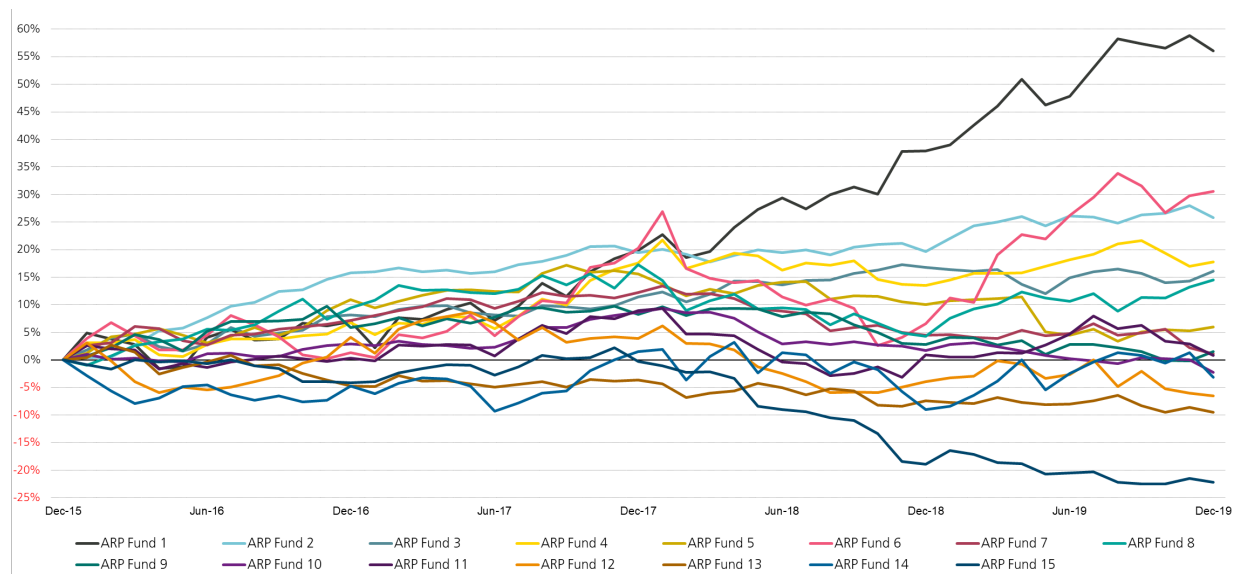
Alternative risk premia play an important role in investing – this is accepted in the world of academia and on the world's trading floors. However, there are differing views on their implementation and their role in portfolio construction. With each provider following their own approach, and with more ARP products coming to market, it is hardly surprising that returns are increasingly dispersed.

The chart on the next page shows the performance of 15 randomly selected alternative risk premia managers mandated with the construction of a multiasset multi-risk premia portfolio from December 31, 2015, to December 31, 2019. The annualized returns range from +11.6% to -6.1%, with an average correlation between the funds of +0.33.

The reasons for the dispersion are manifold. They include portfolio construction, ARP construction, and portfolio implementation. For instance, one manager may employ Value in currencies while another may decide against this strategy. Likewise, two managers engaging in Equity Value may have different weightings. Moreover, one manager's ARP definition may differ from that of his peer, and consequently, results often differ as well. Putting together an ARP portfolio involves a host of decisions. Managers of Equity Value ARP strategies, for example, start out by choosing and weighting long-established value metrics such as price-earnings (P/E), price-to-book (P/B), and cashflow-to-price (CF/P) ratios.



## WIDE DISPERSION OF RETURNS\* OF 15 RANDOMLY SELECTED MULTI-ASSET MULTI-RISK MANAGERS DESPITE COMMON MANDATE



THE AVERAGE CORRELATION BETWEEN THE FUNDS IS + 0.33.

\* IN USD. CUMULATIVE NET PERFORMANCE SINCE 31.12.2015. DATA AS OF 31.12.2019. ALL FUNDS HAVE A COMMON MANDATE, NAMELY MULTI-ASSET MULTIRISK PREMIA. FEE RANGE OF THE FUNDS LIES BETWEEN 0.5 % AND 1.5 %. INFORMATION IS PARTIALLY BASED ON CONFIDENTIAL DATA PROVIDED BY FUND MANAGERS. FURTHER INFORMATION ON THE FUND MANAGERS CAN BE PROVIDED ON REQUEST. PAST PERFORMANCE IS NOT A RELIABLE INDICATOR OF CURRENT OR FUTURE PERFORMANCE.

SOURCE: PROGRESSIVE CAPITAL PARTNERS, BLOOMBERG, EUREKAHEDGE, HFR

After determining the equity universe (a broad reference index such as MSCI World or a more limited one such as the S&P 500), and possibly excluding certain sectors, managers focus on selection and weighting. At this point, they have to decide whether to go long or short, and whether to eliminate certain biases (e.g. should the portfolio be sector or country neutral, or both). Furthermore, they need to determine how often the portfolio should be rebalanced (see comprehensive summary of reasons for return dispersion in table below).

## MULTIPLE DECISIONS ON THE WAY TO AN ARP PORTFOLIO EXPLAIN THE LARGE DISPERSION OF RETURNS

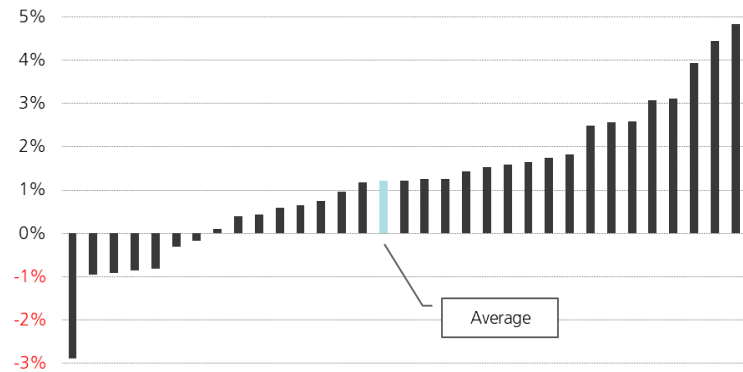
PORTFOLIO CONSTRUCTION	ARP CONSTRUCTION	PORTFOLIO IMPLEMENTATION
<b>Asset class universe</b> Which asset classes should be included in the portfolio? Apart from investing in equities, fixed income and currencies, the ARP managers have to decide whether to include other asset classes like commodities and credit.	<b>Input signals for premia</b> Which and how many input signals should the ARP managers use to construct the premia (several signals possible, e.g. more than 20 measures like price-earnings ratio for Equity Value alone)?	<b>Fees</b> What are the management and service fees of the fund (management fees range between 30 and 130 basis points)? Do the ARP managers charge an additional performance fee?
<b>ARP selection</b> Which ARP should be included in the portfolio?	<b>Input signal weighting</b> If they use different signals or calculation time horizons, the managers have to decide how to weight the different input signals.	<b>Transaction costs</b> How high are transaction costs to implement the strategy?
<b>ARP weighting</b> How to weight the different ARP (e.g. fund 1 has a weighting of 10% in Equity Value, fund 2 a weighting of 5%)?	<b>Asset weighting</b> In how many assets (e.g. single stocks) do the managers go long or short, and how do they weight the assets (equal weighted, capital weighted, signal weighted)?	<b>Risk management</b> What are the exposure restrictions of the fund (e.g. gross/net exposure, liquidity, etc.), and how strictly must they be adhered to?
<b>ARP timing</b> Is the allocation to the various ARP static or do weightings change over time?	<b>Investment universe</b> What is the investment universe (e.g. global or U.S. equities), and are certain sectors like financials excluded? What is the focus in currencies (industrial countries only versus inclusion of emerging markets)?	<b>Drawdown management</b> Is there a drawdown management framework, and how is it implemented?
<b>Rebalancing ARP frequency</b> How often is the portfolio rebalanced?	<b>Market neutral</b> Is the portfolio market neutral, and if so, is it beta neutral or capital neutral?	<b>Transparency</b> How transparent are the managers regarding portfolio construction and positioning?
<b>Risk targets</b> What are the risk target levels of the portfolio and how strictly must they be adhered to?	<b>Neutralization of sector, geography, and market capitalization</b> Are the premia neutral towards sectors, geographies, and market capitalization, or are there any biases?	<b>Capacity</b> Are there capacity limits and, if yes, how flexibly can the managers handle them?
<b>Portfolio evolution</b> Is the portfolio constructed to be static or does it evolve over time (e.g. inclusion or exclusion of ARP based on new data)?	<b>Rebalancing periods</b> How often is the individual ARP portfolio recalculated?	
	<b>Implementation of shorts</b> Are short positions implemented via indices or single names?	

SOURCE: PROGRESSIVE CAPITAL PARTNERS

### WHY ONE MANAGER IS NOT ENOUGH

Choosing alternative risk premia is the first step towards portfolio diversification. The second step is picking not one, but a handful of managers for a diversified portfolio of alternative risk premia. We think this is important because most ARP managers typically focus on a limited number of asset classes and ARP strategies. Given the high performance dispersion and the low correlations across strategies, investors relying on just one manager can witness protracted periods of relative outperformance or underperformance. In the worst case, they incur losses at a time when solid ARP performance would be most welcome (e.g. in a market downturn). Moreover, if investors forgo the opportunity of engaging with a number of managers, they risk losing benefits stemming from multiple ARP construction and implementation techniques. Therefore, relying on several providers increases the possibility of greater risk-adjusted returns, and lowers the risk of underperformance at a critical time, in our view. In January 2016, for example, equity indices contracted with the MSCI World losing 6%, while multi-asset multi-risk premia managers were up 1.2% on average. Nevertheless, some were in the red (see following chart).

### THE AVERAGE PERFORMANCE\* OF MULTI-ASSET MULTI-RISK ARP MANAGERS HELD UP IN JANUARY 2016 EQUITY MARKET CONTRACTION\*\*

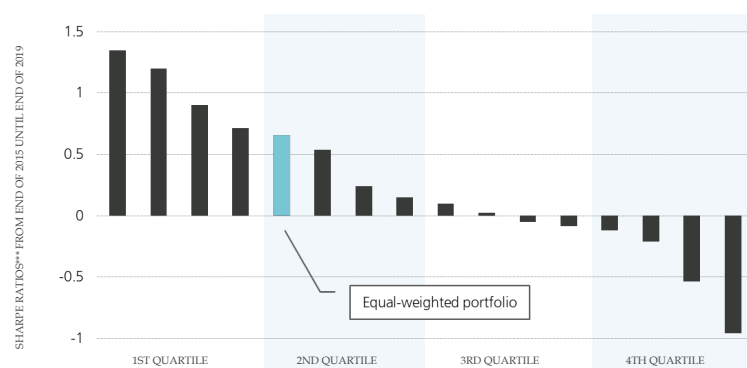


\* IN USD. NET PERFORMANCE DURING JANUARY 2016, DATA AS OF 31.01.2016. ALL FUNDS HAVE A COMMON MANDATE, NAMELY MULTI-ASSET AND MULTI-RISK PREMIA. FEE RANGE OF THE FUNDS LIES BETWEEN 0.5% AND 1.5%. INFORMATION IS PARTIALLY BASED ON CONFIDENTIAL DATA PROVIDED BY FUND MANAGERS. FURTHER INFORMATION ON THE FUND MANAGERS CAN BE PROVIDED ON REQUEST. PAST PERFORMANCE IS NOT A RELIABLE INDICATOR OF CURRENT OR FUTURE PERFORMANCE. \*\* THE MSCI WORLD INDEX LOST 6% IN JANUARY 2016.

SOURCE: PROGRESSIVE CAPITAL PARTNERS, BLOOMBERG, EUREKAHEDGE, HFR

A portfolio of several ARP managers leads to better diversification and increases the probability of achieving higher risk-adjusted returns. Assemble, for example, an equal-weighted portfolio of 15 randomly selected ARP managers, and you already get a favorable result – mind you, without picking your favorites (see chart below). If this is topped off by successful manager selection, the outcome can improve even further.

### A SIMPLE EQUAL WEIGHTING OF 15 RANDOMLY SELECTED ARP MANAGERS\* LEADS TO FAVORABLE RESULTS\*\*



\* THE SAME MANAGERS AS IN THE PREVIOUS CHART ON THIS PAGE. \*\* IN USD. CUMULATIVE NET PERFORMANCE SINCE 31.12.2015. DATA AS OF 31.12.2019. ALL FUNDS HAVE A COMMON MANDATE, NAMELY MULTI-ASSET MULTI-RISK PREMIA. FEE RANGE OF THE FUNDS LIES BETWEEN 0.5% AND 1.5%. INFORMATION IS PARTIALLY BASED ON CONFIDENTIAL DATA PROVIDED BY FUND MANAGERS. FURTHER INFORMATION ON THE FUND MANAGERS CAN BE PROVIDED ON REQUEST. PAST PERFORMANCE IS NOT A RELIABLE INDICATOR OF CURRENT OR FUTURE PERFORMANCE. \*\*\* THE AVERAGE RETURN ABOVE THE RISK-FREE RATE IN RELATION TO VOLATILITY.

SOURCE: PROGRESSIVE CAPITAL PARTNERS, BLOOMBERG, EUREKAHEDGE, HFR

### THE IMPORTANCE OF MANAGER SELECTION

Given the variety, the return dispersion, and the short track records of alternative risk premia, selecting the right ARP product is paramount. Obviously, you need to carefully evaluate the strategy, its manager, the performance drivers, and the risks. In the due diligence process, there will be a quantitative (focus on understanding and assessing return and risk metrics) as well as a qualitative analysis (addresses questions about strategy construction and implementation, the use of markets and instruments, risk and leverage constraints, or monitoring). In light of the short track records of many products, the qualitative analysis is a crucial element during due diligence. Furthermore, you will need to take a hard look at the products' legal and operational aspects to mitigate potential non-investment risks. After these checks, you should have a clear view on whether a manager suits your needs.

### HOW TO ASSEMBLE A PORTFOLIO OF ALTERNATIVE RISK PREMIA

There are hundreds of alternative risk premia, and filtering out the most promising ones is an art in its own right. The rule of thumb is to stick with the established and proven ones.

### THE HOTTEST SHOW IN TOWN MAY DISAPPOINT

The growing number of ARP strategies – Levi and Welch listed around 600 in 2014 already – has inspired comments such as “zoo of new factors” (Cochrane 2011). However, few stand the test of time. Of the 447 strategies (or factors) that Hou, Xue, and Zhang evaluated in 2017, 64% to 85%<sup>17</sup> were not statistically significant in terms of consistent positive returns.

While there is no magic formula to select promising ARP strategies, it helps to remember three basic rules.

1. Consider the experts: ARP derived from an economic theory,<sup>18</sup> or underpinned by academic research, deliver more reliable returns than “experimental” ones.
2. Consider the market: ARP widely used by investment managers for a longer period of time stand a higher chance of being successful than untested ones.
3. Consider the robustness: ARP with robust returns despite small changes to their definition and construction are a good base to build on.

Following these rules will help you avoid fancy backtested products whose yields look good on paper, but will probably fall short in the real world.

### THE BASE: VALUE, MOMENTUM, CARRY, AND DEFENSIVE

In our opinion, a diversified portfolio of alternative risk premia should include the core ingredients Value (low-cost investment), Momentum (awareness of market trends), Carry (benefit from higher-yielding securities), and Defensive (focus on companies with a non-cyclical business model). Newer strategies can complement the portfolio as satellite positions. From this base, you can venture deeper into ARP territory, addressing questions such as the product's market neutrality.

<sup>17</sup> Depending on the observed significance level.

<sup>18</sup> C.R. Harvey, Y. Liu, and H. Zhu (2016), page 7.



### THE NEXT LEVEL: MARKET NEUTRALITY

Whether a strategy is fully market neutral<sup>19</sup> or partly directional<sup>20</sup> can make a huge difference. It is also important to decide whether market neutrality must exist at all times (e.g. in a Cross-Sectional Momentum strategy) or if an average score is enough (e.g. a Time Series Momentum strategy<sup>21</sup>). For instance, “on average” market neutral ARP can generate large returns in falling markets – but can also cause losses, depending on the positioning. By contrast, “all-time” market neutral ARP should be able to provide positive results in various market environments.

### ANOTHER LEVEL: MARKET CORRELATION AND RISK-REWARD

Further questions revolve around correlation and risk/reward metrics. Sometimes, a close look is required. For instance, strategies like Forex Carry theoretically move independently of equity markets – nevertheless, there is a degree of historical correlation. By contrast, directional strategies like Long-Term Trend Following, which are “part-time” market neutral, have very low historical correlations with equity markets. There is also the question whether investors accept ARP that tend to underperform when equity markets fall (positive market correlation). Strategies like short volatility can perform very well in scenarios when equities are flat or rising, but can lose a lot in a downturn.

Regarding risk and return characteristics, metrics such as drawdowns and behavior in stress periods are valid for ARP as for every other product. However, given that we are in the long-short world, additional aspects to consider include the leverage needed to reach the targeted returns.

### HOW TO WEIGHT INDIVIDUAL PREMIA?

Once you have identified the suitable ARP, you will need to deal with the weighting – in other words, how much money you want to allocate to what strategy. There are simple ways of going about this such as equal allocation<sup>22</sup> and risk parity allocation.<sup>23</sup> However, they are also simplistic, possibly leading to undiversified portfolios during periods of market stress.

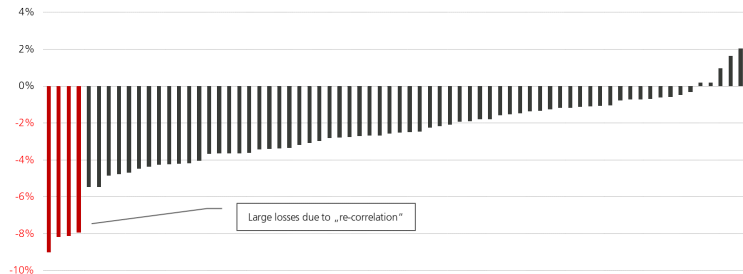
The problem of these straightforward approaches is that they are primarily backward-looking. An ARP portfolio based on historical volatility, for instance, is fine when things are quiet on financial markets – but would not work in periods of protracted risk aversion. Moreover, the premise of the historical volatility method is that returns are distributed on a Gaussian curve<sup>24</sup> – which is not the case for most ARP. Therefore, it is important to consider higher statistical properties like skew during portfolio construction.

Similarly, allocation decisions based on historically low correlations can be favorable in “normal” times. However, we may be entering a period where markets are unpredictable. Therefore, your weighting method should take into account the possibility of unusual correlation patterns.<sup>25</sup> Such a “re-correlation” between two alternative risk premia, Trend Following and Short Volatility, occurred in early 2018. Their long-term correlation is around - 0.1, i.e. they do not normally move in parallel. In February 2018, however, both strategies tanked simultaneously. This translated into heavy losses for managers that had relied too much on low correlation numbers during portfolio construction (see following chart).

<sup>19</sup> When the capital-weighted long and short positions are roughly the same, a strategy is market neutral and can benefit from upward as well as downward moves in financial markets.  
<sup>20</sup> A directional strategy has a strong long or short bias in terms of capital weight.

<sup>21</sup> Also known as Long-Term Trend Following strategy.  
<sup>22</sup> Allocating the same amount across different strategies.  
<sup>23</sup> Allocating funds based on the strategy's risk.  
<sup>24</sup> Also called “normal distribution”.  
<sup>25</sup> See also Dumontier, L. (2016).

**IN FEBRUARY 2018, THE PEER GROUP OF 70 MULTI-ASSET MULTI-RISK MANAGERS LOST 2.6% ON AVERAGE, BUT SOME LOST MORE THAN 8%\***



\* IN USD. NET PERFORMANCE DURING FEBRUARY 2018. DATA AS OF 28.02.2018. ALL FUNDS HAVE A COMMON MANDATE, NAMELY MULTI-ASSET AND MULTI-RISK PREMIA. FEE RANGE OF THE FUNDS LIES BETWEEN 0.5% AND 1.5%. INFORMATION IS PARTIALLY BASED ON CONFIDENTIAL DATA PROVIDED BY FUND MANAGERS. FURTHER INFORMATION ON THE FUND MANAGERS CAN BE PROVIDED ON REQUEST. PAST PERFORMANCE IS NOT A RELIABLE INDICATOR OF CURRENT OR FUTURE PERFORMANCE.

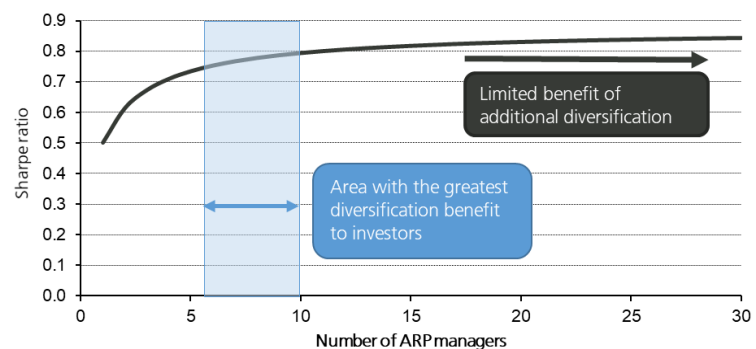
SOURCE: PROGRESSIVE CAPITAL PARTNERS, BLOOMBERG, EUREKAHEDGE, HFR

Moreover, historical correlations fail to consider the occurrence of “co-drawdowns” – a situation where two alternative risk premia simultaneously register sizable losses. Therefore, you are well advised to overweight ARP that are typically less prone to co-drawdowns.

### BEFORE PICKING ARP MANAGERS, LOOK AT DIVERSITY ...

If several high-quality ARP managers within a given investment universe appeal to you, how many should you choose? The rule of thumb is as follows: the greater the number of top managers in the investment universe, and the greater the difference between them, the better the rationale for including a large number. Let us assume each of the top-rated managers for a particular strategy has a correlation of 0.3 and a Sharpe ratio of 0.5.<sup>26,27</sup> In this case, you should pick between six and ten managers with that figure being the “sweet spot” of diversification effects. Going below this range would significantly reduce the expected Sharpe ratio because of a lack of diversification. Going above it would not significantly improve the diversification, and there would be a higher probability of including lower-quality managers (see following chart).

### THERE IS A “SWEET SPOT” OF SIX TO TEN ARP MANAGERS



SOURCE: PROGRESSIVE CAPITAL PARTNERS, BLOOMBERG, EUREKAHEDGE, HFR

<sup>26</sup> A correlation of 0.3 is the average figure for the alternative risk premia peer group.

<sup>27</sup> A Sharpe ratio of at least 0.5 should be expected from a higher-quality broad ARP manager over the long term.

### ... AND DISTINCT APPROACHES

Besides correlation and Sharpe ratio metrics, it is your ARP managers' individual approach that can make a difference. Employing five Equity Value managers that pass the initial test may seem like a good start. However, if all of them have the same investment universe, use the same signals (e.g. the price-earnings ratio), and apply the same construction technique (e.g. targeting stocks in the top quintile of a given list of characteristics), this lowers diversification effects at best. At worse, investors suffer losses because their supposedly well-diversified portfolio turns out to be dangerously concentrated. To prevent this from happening, you need to take a hard look at the processes, and only hire managers whose approaches differ from others you may be considering.

### DIVERSIFY AND YOU WILL BE REWARDED

The fields of old Egypt can still teach us a lesson or two. First, relying solely on periodic flooding is not sustainable. Second, diversify and you will be rewarded. These perennial truths have been somewhat forgotten in the last decade. There was no need for investors to bother as both equity and bond markets enjoyed a long sugar rush. This is now bound to change with central bank liquidity drying up slowly and U.S. interest rates moving higher gradually.

We believe alternative risk premia can be superb portfolio diversifiers. Yes, such products are relatively new, but the concepts behind them are well established and well researched. And yes, they are technical, but liquid and mostly transparent. Therefore, if handled with care and diversified across managers, alternative risk premia could have the same beneficial effect that crop rotation had in the Nile valley.

### REFERENCE LIST:

- Carhart, M. (1997), "On Persistence in Mutual Fund Performance", *Journal of Finance*, 52(1), pp. 57-82.
- Cochrane, J. H. (2011) "Presidential Address: Discount Rates", *Journal of Finance*, 66(4), pp. 1047-1108.
- Dumontier, L. (2016), "Why re-correlation matters in alternative premia investing", *Risk.net*.
- Fama, E. and French, K. (1993) "Common Risk Factors in the Returns on Stocks and Bonds", *Journal of Financial Economics*, 33, pp. 3-56.
- Harvey, C. R., Liu, Y., and Zhu, H. (2016). "... and the cross-section of expected returns", *Review of Financial Studies*, 29(1). pp. 5-68.
- Hou, K., Xue, C., and Zhang, L. (2017), "Replicating anomalies", Technical report, National Bureau of Economic Research.
- Levi, Y. and Welch, I. (2014), "Long-Term Capital Budgeting", *SSRN Electronic Journal*.

## THE AUTHORS



Ilario Scasascia joined Progressive Capital Partners in December 2019. Before that, he was Head of Alternatives & Multi Manager Solutions, Chairman of the Alternative Investments Committee and Executive Director at Vontobel Asset Management. He led the efforts in research, manager selection, portfolio investments including alternative risk premia and hedge funds. As a member of the senior management of Vontobel Asset Management he was also responsible for alternative investments within the Vontobel Group.

Prior to joining Vontobel Asset Management in 2010 as Portfolio Manager and Hedge Fund Analyst, Ilario worked at Quadriga Wealth Management, a Swiss-based alternative investment management firm. In his position as Portfolio Manager and Hedge Fund Analyst, he was in charge of the manager selection and portfolio management of CTA funds of hedge funds.

Before joining Quadriga Wealth Management, Ilario worked at BearingPoint as Management Consultant in the department Risk & Finance Management.

Ilario graduated from the University of Zurich with a Masters in Finance and attended an Executive Education Program at the Yale School of Management in New Haven (USA). He is a Chartered Alternative Investment Analyst (CAIA).



Daniel Irion joined Progressive Capital Partners in December 2019 after having worked for Vontobel Asset Management. Within the Vontobel Alternatives & Multi Manager Solutions team he was focused on Quantitative and Systematic strategies. He was a member of the Alternative Investment Committee and was working on both discretionary and advisory alternative investment mandates.

Prior to joining Vontobel, Daniel was fund and quantitative analyst at Rothschild Bank AG from 2011 to 2017. In his most recent role as fund analyst, he analysed and monitored long-only funds as well as hedge funds and was responsible of generating investment ideas and peer group analysis. Prior, as quantitative analyst, he developed strategic asset allocation models and conducted analysis on hedging, derivatives, smart beta and risk factors.

Daniel holds a Master's degree in Mathematical Finance from the University of Konstanz. He is a CFA charterholder.



We at Progressive Capital Partners would be delighted to be your partner on your journey into the world of Alternative Risk Premia. We would be honoured to be able to contribute to the quality of your overall asset allocation.

## GET IN TOUCH

Progressive Capital Partners Ltd  
Haldenstrasse 3  
CH-6340 Baar  
Switzerland

[www.progressivecapital.com](http://www.progressivecapital.com)  
[info@progressivecapital.com](mailto:info@progressivecapital.com)  
+41 41 561 40 80 phone  
+41 41 561 40 88 fax

## DISCLAIMER

NO INFORMATION IN THIS DOCUMENT IS INTENDED AS AN INVITATION, OFFER OR SOLICITATION TO INVEST IN ANY INVESTMENT, INVESTMENT FUND(S) OR PRODUCT(S) MENTIONED HEREIN. THE VALUE OF YOUR INVESTMENT MAY FLUCTUATE. PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RETURNS. CHANGES IN EXCHANGE RATES MAY HAVE AN ADVERSE EFFECT ON THE VALUE, PRICE OR INCOME OF AN INVESTMENT.

The information contained herein is for educational purposes only and is not intended to and shall not in any way constitute an invitation or recommendation to buy or sell any investment(s). This document has been furnished to you for information purposes only.

The entire content of this document including any returns, statistics, charts and general information in this document have been prepared by Progressive Capital Partners Ltd ("Progressive").

Information contained herein has been obtained from sources believed to be reliable but Progressive does not guarantee its accuracy or completeness. Data might partially reflect unaudited and provisional estimates. Historic returns of any indices used are sourced from the respective index providers.

The MSCI data is for internal use only and may not be redistributed or used in connection with creating or offering any securities, financial products or indices. Neither MSCI nor any other third party involved in or related to compiling, computing or creating the MSCI data (the "MSCI Parties") makes any express or implied warranties or representations with respect to such data (or the results to be obtained by the use thereof), and the MSCI Parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to such data. Without limiting any of the foregoing, in no event shall any of the MSCI Parties have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

This document does not purport to contain all of the information that an interested party may desire and this disclaimer cannot disclose all risks. In all cases, interested parties should conduct their own investigation and analysis of any information described and of any data set forth in this document. In particular, it is recommended for interested parties to check that the information provided is in line with his/her own circumstances with regard to any legal, regulatory, tax or other consequences, if necessary with the help of a professional advisor.

Progressive is an Asset Manager of Collective Investment Schemes and a Representative of Foreign Collective Investment Schemes, authorised and supervised by the Swiss Financial Market Supervisory Authority FINMA. Progressive is a member of the Alternative Investment Management Association (AIMA). For further information about Progressive please visit [www.progressivecapital.com](http://www.progressivecapital.com).

Page intentionally left blank.



