



Alternatives & Innovation Quarterly

June 2015



Alternatives & Innovation Quarterly

Welcome to the third edition of Alt IQ. Alt IQ provides Frontier's up-to-date thinking on opportunities and innovations in alternative and emerging asset classes, strategies and markets.

With the increasing emphasis on lowering investment management costs, particularly in alternatives, we review the case for alternative beta and the role it can play within portfolios. An allocation to alternative beta strategies can be additive to portfolios but requires careful selection of risk premia and a risk controlled portfolio construction approach to maximise the benefits. Alternative beta has been an area of consideration by Frontier for some time, and we are currently focused on identifying skilled managers in this area, noting the challenges this presents given the limited track record of many product offerings.

Since the drop in the oil price in 2014, we have considered a number of potential investment opportunities to capitalise on this dislocation. These include high yield debt, emerging market debt and more recently, energy-specific illiquid strategies. In this section we discuss our views on each of these opportunities and conclude that there are specific risks around each but more broadly, the timing of a price recovery and the current search for yield means that any significant distressed opportunity set may be some time away.

In this edition, our Market in Focus discussion centres on recent bouts of bond market volatility and declining liquidity in traditionally highly liquid government bond markets. We consider the possible impact on longer-term investors and whether these issues are indicative of a possible broader systemic market risk.

We hope AltIQ provides you with some food for thought.

As always, we're keen to find ways to differentiate our clients "from the pack", and enhance portfolio outcomes. If you would like to discuss any of these topics further, please contact your Consultant – we would be pleased to provide further detail on these views and other alternative or new investment strategies in the context of your investment strategy and fund objectives.

The case for alternative beta

Background

With record low bond yields and a lower Australian dollar, traditional sources of diversification for Australian investors are less certain. In this article, we re-visit alternative beta as a non-traditional source of generating returns and diversification for portfolios. We discuss some of the typical strategies employed, look at the correlations between certain strategies and traditional equity risk premia and explore various portfolio construction issues.

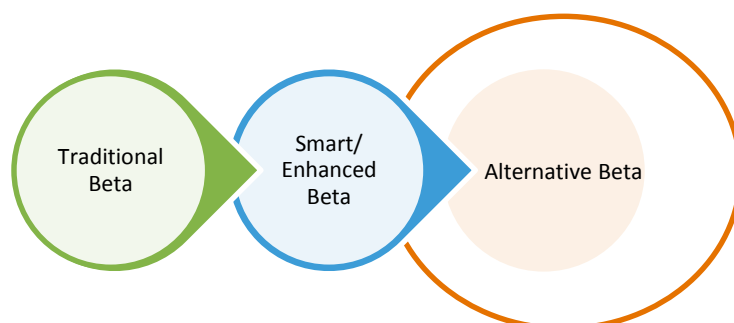
Overall we believe that alternative beta has merit in a diversified portfolio and as a complement to a broader alternatives allocation but requires careful selection of risk premia and a risk controlled portfolio construction approach to best capitalise on the benefits of this strategy.

Introduction

Investors are familiar with traditional “beta” – that is broad market returns such as listed equities, interest rates, credit risk. Alternative beta is used to describe non-traditional, but persistent return sources across all asset classes. Alternative beta should be distinguished from “smart beta”, which is a long only investment strategy designed to capture equity market beta more efficiently through factor tilts (e.g. tilting between momentum or value stocks). In contrast, alternative betas are long/short (or long only) strategies that focus on allocations to risk factors across asset classes.

They are “alternative” in the sense they harvest risk premia traditionally employed by hedge fund strategies but now also commonly employed by multi asset and fixed income managers, for example merger arbitrage, volatility, and yield curve or spread risk. Our research focuses on the less well represented risk premia in typical balanced portfolios such as hedge fund and esoteric betas. When combined together and isolated from market exposure, alternative betas can produce a diversified absolute return stream. Diversified alternative beta portfolios can also be structured to produce different absolute return and risk characteristics (e.g. low correlation to equity markets).

Alternative beta became increasingly popular after the GFC, in part because of poor hedge fund performance, and also due to somewhat lower fees. The key attraction of alternative beta is the concept that return streams once called “alpha” can in fact be captured as “beta” in a more transparent and cost effective manner. In addition, the liquidity of certain alternative beta strategies has helped to gain traction for clients with liquidity constraints, thus the coining of the term “liquid alternative risk premia”.



The case for alternative beta

Implementation

Managers implementing alternative beta strategies will typically use long/short strategies to extract risk premia as well as use leverage and derivatives. Short positions are used in order to remove the market position, leaving the alternative beta component.

Typical Strategies

Table 1 outlines some of the typical risk premia strategies commonly employed by alternative beta managers. The table is not a comprehensive list of all strategies employed, rather we have attempted to categorise the most common strategies according to style.

Table 1 – Typical risk premia strategies

Alternative premia	Premia harvested	Example of implementation
Momentum		
Equities	Spread between positive and negative momentum stocks	Long stocks with positive momentum and short stocks with negative momentum, for example via moving averages
Fixed interest	Momentum premium in bonds from market participants executing on trailing bond movements	Long bonds (futures or swaps) experiencing positive momentum and short those with negative momentum
Managed futures/trend (CTAs)	Momentum premium in multiple asset classes (equities, bonds etc)	Trend following strategy across multiple asset classes (buy into positive trend, short into negative trend)
Carry		
Currency	Spread between low yielding and high yielding currencies	Long position in high yielding currency and short position in lower yielding currency
Fixed interest	Spread between low yielding and high yielding bonds.	Buy high yielding bonds only; or buy high yielding bonds and sell low yielding bonds
Value		
Equity sector earnings yield	Spread between high yielding and low yielding equity sectors	Long underpriced stocks, short broad market index
Arbitrage		
Merger arbitrage	Spread between target and acquirer equities in M&A deals	Long companies being acquired in upcoming mergers and short acquirer companies
Convertible arbitrage	Spread between underlying equity and value of the convertible bond	Long convertible bonds and short the related equity, and hedge out interest rate and credit exposure
Other		
Insurance linked Securities	Not technically a premium – essentially buying an insurance product priced at perceived probability of natural catastrophe events occurring	Buy catastrophe bonds or related derivative (generally long only)
Volatility	Volatility risk premium	Access the volatility risk premium via swaps or options across different asset classes (equities, fixed interest, etc.)

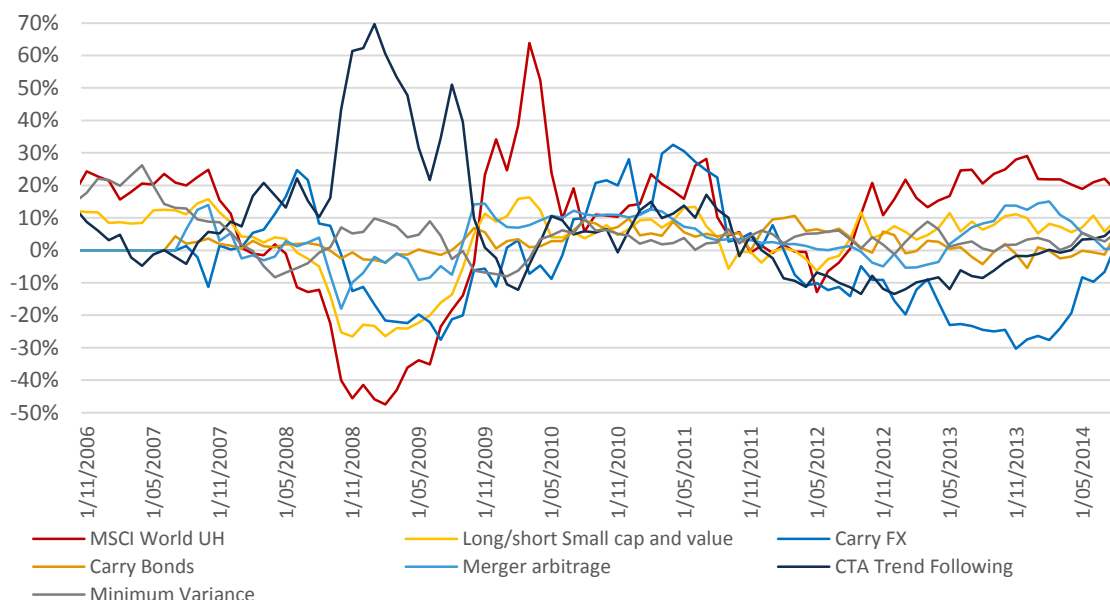
The case for alternative beta

Correlations

We have tracked the returns of a number of typical alternative risk premia strategies, and compared it to the MSCI World (unhedged) as a proxy for equity risk premia. In analysing returns, we note that a key consideration is the live track record managers can present.

Our preference is for managers with a live track record (critically though the GFC, Euro Zone crisis and other periods where these premia have changed rapidly) but there is a limited number. The following chart shows a live track record from Alternative Beta Partners¹.

Chart 1: 12 month Rolling Correlation of Risk Premia and MSCI World (US\$)



Source: Lars Jaeger's track record from his time at Alternative Beta Partners.

Chart 1 demonstrates the variety of return patterns in different alternative betas and the diversification benefits from combining a range of risk premia within a portfolio. Some strategies provide clear correlation benefits and others that provide a return profile with a reasonably positive correlation to equity markets. CTA trend following outperformed during the GFC due to its short positions on equities over this period.

Minimum variance also shows an uncorrelated return stream to equities. Other strategies are more growth oriented and likely to have a higher correlation to equities.

To briefly encapsulate the returns of alternative risk premia during crises periods, Table 2 compares the returns of a few common risk premia compared to the traditional beta returns from equities and fixed interest

¹ Data is provided by Lars Jaeger, who joined (GAM) late last year, as such the performance shown ends as at August 2004.

The case for alternative beta

Table 2 – Alternative Risk Premia performance in 2008 and 2011

Alternative risk premia	2008	2011 (May-Sep)
CTA Trend Following	62.2%	-3.2%
Merger arbitrage	-6.9%	-0.9%
Volatility arbitrage	-26.4%	-5.5%
Minimum variance	5.6%	8.0%
Long/short Small cap and value	-22.9%	-12.0%
Fixed income arbitrage credit	-5.2%	-6.6%
Carry FX	-11.3%	-6.0%
Carry bonds	-2.8%	6.0%
Emerging markets	-18.7%	-13.4%
Traditional Beta	2008	2011 (May-Sep)
MSCI World (US\$)	-40.7%	-19.6%
Barclays Global Agg (US\$)	4.8%	0.5%

In order to construct a portfolio of diversified risk premia, a mix of both correlated and uncorrelated strategies is required.

Portfolio construction

Crucial to the assessment of an alternative beta product is how a manager brings together these risk premia sources in a way that minimises risk and maximises return potential. In terms of minimising risk, we seek managers that demonstrate low positive correlations to traditional sources of market risk over the market cycle, and an ability to limit portfolio losses in stressed markets.

Fees

Fees are greatly varied depending on the degree of active management involved, the split of qualitative and quantitative analysis and the degree of leverage. Fees can range between 0.4% and 1.0% (plus performance fees in many cases).

We have found that managers with higher fees typically exhibit more sophisticated systems and processes, be that in the signal detection techniques, portfolio construction and or risk management. So the old adage “you pay for what you get” is often true in this space.

Summary

In conclusion, whilst there are a number of alternative beta managers offering seemingly differentiated risk premia sources, it is important to select a manager that has a track record of delivering risk adjusted return streams over a period of time. Alternative beta strategies can be a good source of diversified return streams at a reasonable cost, but careful due diligence should be conducted before investing in such strategies as the “devil is in the detail”.

Oil price opportunities

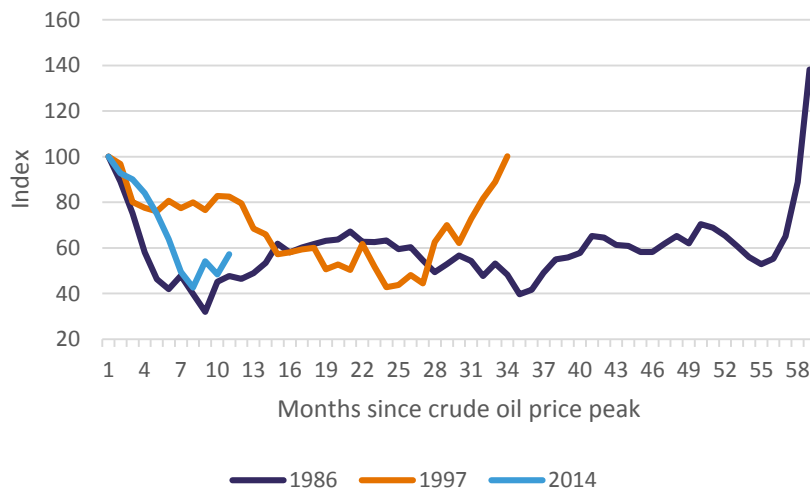
This section focuses on our views of the various potential investment opportunities that have arisen out of the oil price decline, specifically within high yield, emerging market debt and illiquid energy-related strategies. Before discussing these opportunities, it is worth briefly reviewing the magnitude of the recent drop in the oil price and considering the uncertainty around a price recovery. The possible timing and extent of the oil price recovery is key to assessing the likely opportunity set and the attractiveness of current valuations, both within liquid and illiquid markets.

The recent oil price weakness is a product of both weaker than expected demand and increased supply. A price decline of this magnitude is rare and almost always associated with a recession.

However, there have been two events in the past 30 years when sharp drops were not associated with global recessions (1986 and 1997-8). Frontier continues to believe that this seems likely to be another such example.

The current episode is not the sharpest drop in the oil price relative to history and previous similar episodes have seen oil prices remaining at depressed levels for years before recovering (Chart 2). While the price has recovered somewhat, the timing of a more sustained recovery still remains uncertain. This is particularly the case in the US where we understand the breakeven level for many exploration and production (E&P) companies is meaningfully above the current price.

Chart 2 – Brent Crude Oil (US\$/BBL)



Source: Bloomberg, Frontier Advisors

Oil price opportunities

Initially we gave consideration as to whether there was an opportunity within the high yield energy sector. E&P, typically considered to be most exposed to oil price volatility, makes up over 50% of the high yield energy sector. This contrasts with lower risk midstream and refining businesses that are a smaller component of the sector.

While energy sector spreads blew out to over 1,000 basis points in 2014 as the oil price fell, the uncertainty around the timing of an oil price recovery and the fact most companies had oil price hedging in place for only around 12 months meant it seemed unlikely default risk for some credits was being appropriately priced, even at that level. As such we didn't consider high yield to be a particularly attractive "beta" opportunity. At best it appeared to be more of an "alpha" opportunity for active managers to opportunistically make credit specific allocations within existing mandates.

We also considered whether there was a buying opportunity within the hard currency emerging market sovereign debt of oil exposed countries, specifically Venezuela, Russia and the Ukraine.

However, our conclusions were that a "dislocated emerging market debt" strategy aiming to achieve around 20% p.a. return (as some strategies marketed by managers were targeting) would also be taking on significant political risks and exposure to oil price outcomes which we felt were too uncertain. In addition, to make the targeted return, a meaningful allocation to the Ukraine, the outlook for which is very challenging to forecast, was required.

Overall, our view was that such a concentrated strategy made some sense as a carve-out within an existing emerging market debt mandate but not as a standalone new allocation.

More recently, we have considered the merits of an energy specific strategy within illiquid markets. The US energy sector has undergone significant change and the recent oil price fall has led to a number of alternative managers advising of specific energy related funds being raised or increased opportunity sets being discussed in private markets.

We are currently in the process of reviewing the attractiveness of the opportunity set and the offerings from a number of key alternative managers. Given the level of global "dry powder" and lack of other opportunities within illiquid markets there is a risk that valuations are pushed to a level that are simply unattractive. Anecdotal evidence is that recent deal pricing indicates that quite bullish underlying assumptions around the timing and magnitude of an oil price recovery have been used.

As such, any significant illiquid distressed opportunity set may be some time away. Our initial view is that an opportunistic approach via a broader mandate is likely to be the most appropriate access method for this price opportunity. However, we are undertaking further work in this area and will provide a definitive view over the next quarter.

Liquidity risks

Frontier has been discussing the level of liquidity in markets over recent months and this was a key potential risk coming out of the recent European research trip in May.

Almost all markets appear to be experiencing bouts of brief illiquidity and thus volatility, although this section focuses specifically on debt markets. The key questions worth considering are what does this mean for longer-term investors and is there a potential risk that these spikes in volatility could be an indicator of a more systemic risk within markets?

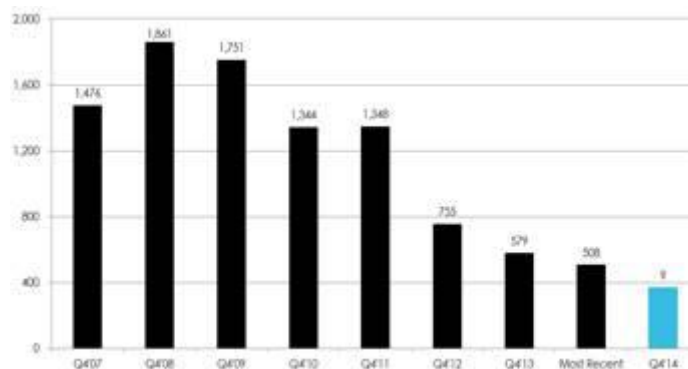
The Value-at-Risk (VaR) measure (reflecting the level of market risk being warehoused by banks to facilitate customer business and to “make a market”) has been progressively falling since the end 2011 when prudential measures (Volker, increased capital from Basel III) were announced (Chart 3).

At the same time, volatility has been very low thanks to the accommodative monetary policy environment. However, when volatility has spiked over recent periods, it has done so dramatically, for example in October 2014 when US treasury markets experienced an eight or nine standard deviation move intraday, a multi-million year event!

The Fed recently released a white paper that noted that the sudden spike in volatility was due to broker-dealers or market-makers stepping back from the market, further exacerbating volatility levels. At this stage, it is probably reasonable to conclude that market-makers will provide liquidity and facilitate trades in “normal” market environments but are unlikely to in a stressed event.

So, if treasury markets are currently experiencing bouts of illiquidity, what does this mean for corporate credit markets?

Chart 3: Aggregate Reported Value-at-Risk (USD) Across Major Global Banks



Source: Capstone

Liquidity risks

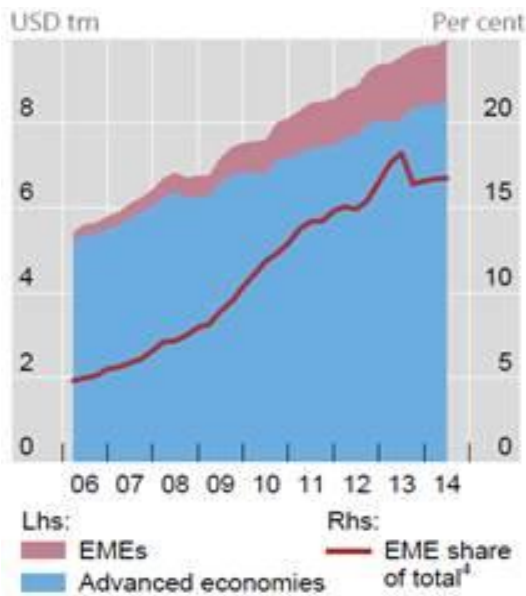
The Bank of International Settlements (BIS) released a report in May 2015 discussing the impact of increased regulation on credit markets. One key issue raised was the significant growth of corporate debt since 2006 (Chart 4) and the ability of the system to effectively facilitate transactions given the reduction in proprietary trading and market making activity by banks.

The BIS also highlighted a relatively recent shift in terms of the end holders of this debt over recent years. ETFs, mutual funds and money market fund holdings of corporate debt have increased significantly, particularly post 2008 (Chart 5). It appears evident that some investors (e.g. ETFs, money market funds) are less able to absorb this illiquidity risk with daily redemption terms a likely liquidity mismatch.

We believe that increasing levels of volatility should be expected but that this presents opportunities for longer-term investors better able to manage illiquidity risks.

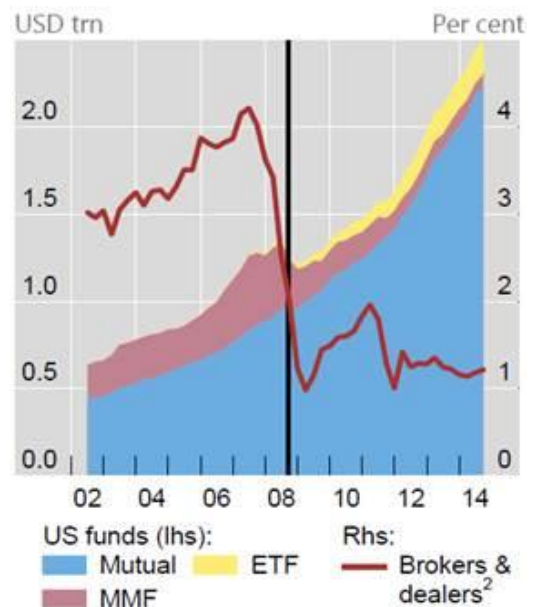
It is difficult to gauge the extent to which this issue is potentially systemic. The 2008 crisis demonstrated the degree to which contagion from one relatively small part of the market (i.e. sub-prime) can spread to the broader market. While this period may just be somewhat of a restructure of liquidity providers and an adjustment period for markets, it may also be a wider transfer of risks from the banking sector to the investment community. While it is arguable that many investors are better able to absorb this illiquidity, many are likely either ill prepared, unwilling or unable to absorb this risk.

Chart 4: Outstanding Debt of Non-Financial Corporates



Source: The Bank of International Settlements

Chart 5: Corporate Bond Holders



Source: The Bank of International Settlements



Level 16, 222 Exhibition Street

Melbourne, Victoria 3000

Tel: +61 3 8648 4300

www.frontieradvisors.com.au

[@frontier_adv](#)

About Frontier Advisors: Frontier Advisors is one of Australia's leading asset consultants. We offer a wide range of services and solutions to some of the nation's largest institutional investors including superannuation funds, government/sovereign wealth funds and universities. Our services range from asset allocation and portfolio configuration advice, through to fund manager research and rating, investment auditing and assurance, quantitative modelling and analysis, and general investment consulting advice. With around \$230 billion in funds under advice we have been providing investment advice to clients since 1994. Our advice is fully independent of product, manager, or broker conflicts which means our focus is firmly on tailoring optimal solutions and opportunities for our clients. At Frontier, we're on your side.

Frontier does not warrant the accuracy of any information or projections in this paper and does not undertake to publish any new information that may become available. Investors should seek individual advice prior to taking action on any of the issues raised in this paper. While this information is believed to be reliable, no responsibility for errors or omissions is accepted by Frontier or any director or employee of the company. Frontier Advisors Pty Ltd ABN 21 074 287 406. AFS Licence No. 241266.