The Three Levers in Fixed Income

Duration, Credit and Pure Relative Value

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"In a world that is constantly changing, there is no one subject or set of subjects that will serve you for the foreseeable future, let alone for the rest of your life." – John Naisbitt, an American author, whose analysis of social trends led to predictions regarding automation in the workplace, globalisation and even the rise of artificial intelligence. While some of his predictions were a little wide of the mark, this quote about change can certainly be applied to the world of investing and the current macro environment where predicting the future level and direction of interest rates is inherently difficult.

Adding Pure Relative Value upgrades the portfolio diversification toolkit

Within Fixed income, there are two well-known levers, duration and credit. In addition, there is also a lesser known third lever, Pure Relative Value investing. This third lever provides compelling diversification benefits when blended with duration and credit.

Ultra-low inflation and zero interest rates to sky-high pricing and aggressive tightening

Investors have faced tremendous change over the past decade and perhaps an even more radical shift in recent years as ultra-low inflation and zero, even negative, interest rates gave way to sky-high pricing and aggressive tightening by central banks in both the developed and emerging world. Rapidly rising interest rates have been particularly painful for fixed income investors but have also contributed to equity market uncertainty and created dislocations in the relationship between asset classes.

Central banks become volatility amplifiers.

Central banks have suffered some criticism for their response to the challenge of rising inflation and dwindling economic growth and while some of this may be unfair, central banks in fixed income markets have undeniably shifted from suppressors of market volatility to volatility amplifiers.

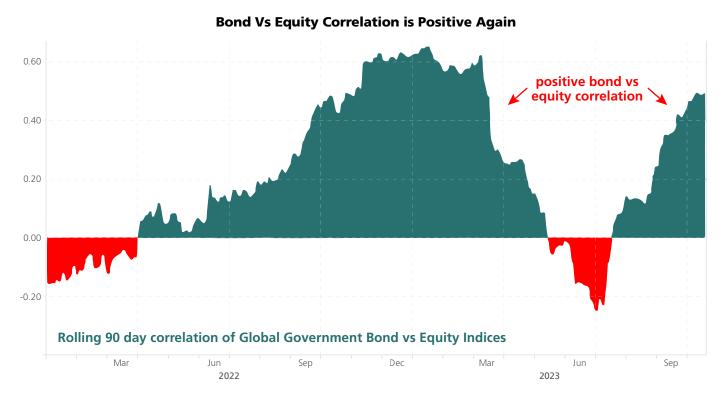
Until recently, central banks were quick to intervene whenever there was some form of market stress, either in the shape of interest rate cuts or quantitative easing, and that intervention was easy to justify given their objectives of price stability and economic growth were perfectly aligned. Inflation was running well below target, so whatever policy makers did to facilitate stable prices was consistent with supporting growth. These objectives are now misaligned, with the options available to tame inflation undesirable from the perspective of economic prosperity.

Why is this relevant? Bond yields in a structurally higher volatility regime

These conflicting objectives, the associated policy uncertainty and central banks aggressively running down their pandemic-era bond portfolios are why we consider the worlds' reserve banks to be amplifiers of volatility. This also means that interest rates and bond yields are in a structurally higher volatility regime than they have been for most of the post Global Financial Crisis era (since 2008).

Furthermore, uncertainty about inflation and the path of interest rates introduces a more variable correlation between bonds and equities. This is particularly relevant for multi-asset portfolio managers because the composition of their fixed income allocations now carries more weight. Historically, investors could simply rely on duration (government bonds) to diversify equity risk, but today that duration component is more volatile and also has a more volatile relationship with equities.





*Data as at 20-Oct-2023. Global Government Bond Index = Bloomberg Global Aggregate Treasuries Index; Global Equity Index = MSCI World Index Source: Bloomberg and Ardea, January 2002 to November 2023.

Fixed income investors face a similar dilemma, with corporate bonds suffering the same upward pressure on yields (downward pressure on prices) as government issued debt, but with greater potential for default. This means the two traditional levers of fixed income portfolio management – duration and credit – have more uncertainty.

Pure Relative Value (RV) investing

Pure RV investing does not rely on conventional fixed income sources of return and is not impacted by the level of bond yields regardless of whether they are high, low, or even negative. Nor is it reliant on corporate credit risk or a fund managers' ability to forecast the direction of interest rates. Instead, the Pure RV approach focuses on pricing inconsistencies between closely related securities – it offers investors an additional lever.

The global fixed income market contains a huge array of securities that are explicitly linked to each other by well-defined relationships. In an efficient market, these securities would always be consistently priced with one another, but the fixed income market is not efficient. Underlying structural factors such as regulation, mandate restrictions and varying investor use objectives cause market participants to transact for reasons other than profit maximisation.

As such, we continually observe pricing inconsistencies between closely related securities that have very similar risk characteristics. These pricing inconsistencies can be isolated using a wide range of risk management tools, including derivatives, which strip out unwanted market risk allowing the strategy to target the generation of positive returns regardless of the level of bond yields or the direction of interest rates.

The Ardea Real Outcome Fund ('ARO' or 'Fund') is an absolute return fund that focuses on Pure RV opportunities within the highest quality and most liquid government bond markets. Our approach is duration neutral and excludes corporate credit, which provides investors a true alternative to traditional fixed income strategies. This additional lever in fixed income provides compelling diversification benefits when blended with the conventional levers of duration and credit and can upgrade the portfolio diversification toolkit as seen in the following table and charts.

Fixed Interest levers in action

| The Third Lever in Action | CYTD Return | CYTD Vol. | 2022 Return | 2022 Vol. | 2021 Return | 2021 Vol. | 2020 Return | 2020 Vol. |
|--|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|
| RV lever Ardea Real Outcome Fund: net | 4.8% | 4.1% | 1.0% | 4.1% | -0.6% | 1.2% | 5.7% | 1.8% |
| Duration lever Ausbond Government Bonds Index | 2.1% | 7.2% | -10.7% | 7.1% | -2.9% | 6.9% | 4.5% | 3.0% |
| Credit lever Global Corporate Bond Index, AUD | 3.5% | 7.2% | -16.2% | 9.7% | -1.0% | 3.1% | 7.5% | 9.8% |

Source: Bloomberg and Ardea Investment Management (Ardea IM), to 30 November 2023. Index performance is hedged to AUD. Fund performance is net of fees.

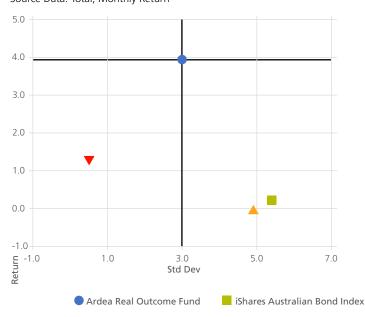
Return target and 'style of returns'

The Fund targets a medium term return above CPI (inflation), as well as cash, of +2% before fees, it also seeks to deliver uncorrelated investment performance whilst maintaining a modest level of volatility targeted at 2% pa while providing daily liquidity. As such, we consider the style of our returns every bit as important as the size of our returns.

This 'style of returns' is illustrated in the following chart from Morningstar direct, it plots cumulative performance against standard deviation for ARO and the core defensive asset allocations - RBA cash, the Bloomberg Ausbond Composite Bond Index and the Bloomberg Global Aggregate Index for 5 years and 10 years to 30 November 2023 (as represented by the iShares index ETFs which replicates the Bloomberg Ausbond Composite Index and the Bloomberg Global Aggregate index.). Since the Fund's launch*, its RV strategy has outperformed the key fixed income indices included in the analysis, and it has done so with a much lower degree of volatility.

Risk-Reward - 5 years

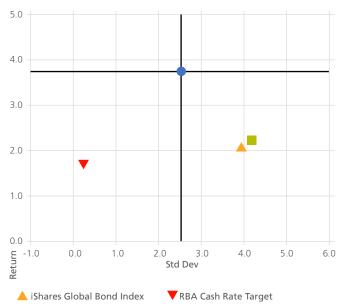
Time Period: 01/12/2018 to 30/11/2023 Currency: Australian Dollar Source Data: Total, Monthly Return



Risk-Reward – 10 years

Time Period: 01/12/2013 to 30/11/2023

Currency: Australian Dollar Source Data: Total, Monthly Return



Source: Morningstar Direct. Performance is net of fees.

^{*} Ardea Real Outcome Fund was launched July 2012 and ActiveX Ardea Real Outcome Bond Fund (Managed Fund) (ASX:XARO) was launched December 2018.

The Three Levers in Fixed Income: Duration, Credit and Pure Relative Value

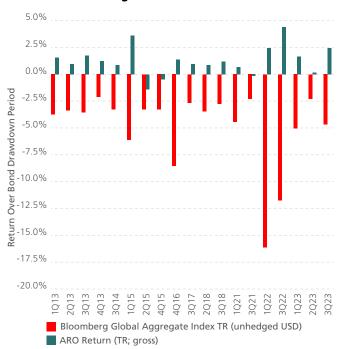
The absence of duration, corporate credit and foreign exchange risk (the portfolio is fully hedged) means that ARO works particularly well in providing downside protection during periods of market stress and improves risk-adjusted returns. In a conventional multi-asset portfolio

diversification benefits, both performance and volatility, can be achieved by utilising the fund's pure RV approach. The following charts highlight ARO's performance during peak to trough drawdown periods.

Performance During Equity Market Drawdown Periods

Befund Over Eduity Drawdown Period -5% -0% -10% -10% -10% -25% -30/10 -30% -35% -40% -35/10 -30% -35/10 -30% -35/10 -30% -35/10 -30% -35/10 -30% -35/10 -30% -35/10 -30% -35/10 -30% -35/10 -3

Performance During Bond Market Drawdown Periods



Note the X-axis labels only provide a reference point for approximately when each index drawdown occurred, while the return is calculated specifically over the peak-to-trough drawdown period.

Source: Bloomberg, Ardea Investment Management. Data as at 30-Nov-2023. Performance is before fees and assuming distributions have been reinvested. Past performance is not a guide to future performance. Future returns are not guaranteed, and a loss of original capital may be incurred.

To find out more about Ardea IM and ARO, please visit www.ardea.com.au.



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