Fixed income

Demystifying the myths about bonds

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Tyndall INVESTMENTS

Summary

- **Myth 1 - Shares outperform bonds over the medium and long term.** While it is rare for bonds to outperform shares over a long time period, it has happened. Investors may not be duly rewarded for taking the higher risk of shares, particularly if their time horizon is less than 10 years.
- **Myth 2 – Interest rate rises cause negative bond returns.** While bonds generally produce relatively steady and positive returns, there have been periods when they have produced negative returns. However, the size of the negative return and the time taken to recover the loss is significantly smaller for bonds than equities.
- **Myth 3 – Cash is riskless.** While investing in cash can provide investors with greater flexibility, they may be subject to reinvestment risk – that is, the risk of missing out on the capital gain benefit of a fall in interest rates and that proceeds will need to be reinvested at a lower rate.
- **Myth 4 - Term deposits are a better investment than bonds.** While term deposits can offer greater short-term security and potentially higher returns in the short term, there is a significant sacrifice of return from investing in term deposits over the long run.
- **Myth 5 - All fixed income is the same.** Individual bonds, market indices and products are not all the same. It is important that investors know exactly what they are investing in and be selective about the risks they want to incorporate into their fixed income portfolio. An effective process, robust risk framework and a fund manager's skill are all factors that investors need to consider.

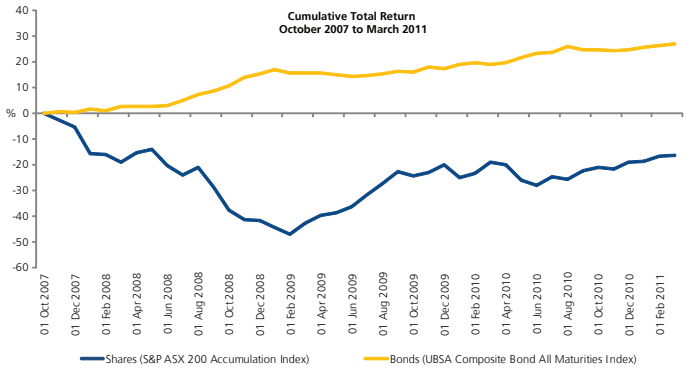
Introduction

There are many myths and misconceptions about fixed income – most of which may cause investors to undervalue the benefits of bonds. In this paper, we focus on the most common myths and provide a reality check for each. We also provide information on the characteristics of bonds and how those characteristics affect the return profile of fixed income.

Myth 1 - Shares outperform bonds over the medium and long term

Reality check: It's widely believed that bonds only outperform shares[1] over short time periods. This belief helps incentivise investors to accept the significantly higher levels of volatility that shares produce. What is not widely known is that bonds have outperformed shares in six of the past 20 calendar years. Another little known fact is that our analysis shows that bonds actually outperformed shares over the 10-year period to 28 February 2008, with returns of 6.3% p.a. and 6.1% p.a. respectively. While it is rare for bonds to outperform shares over such a long time period, it does show that investors may not be paid for taking the higher risk of shares at various times and if their time horizon is less than 10 years, the risk of shares underperforming bonds increases. Chart 1 illustrates how long it is taking shares to regain their losses incurred during the global financial crisis (GFC), whereas bonds have provided relatively steady and positive returns – and this is over a period of three and a half years.

Chart 1: Shares still recovering their GFC losses



Source: Mercer Insight and Tyndall Investment Management Limited

[1] Unless stated otherwise, all references to the Australian bond market and fixed income refer to the performance of the UBS Australia All Maturities Composite Bond Index and all references to the share market and shares refer to the performance of the S&P/ASX 200 Accumulation Index.

Myth 2 – Interest rate rises cause negative bond returns

Reality check: While bonds generally produce relatively steady and positive returns, there have been periods when they have produced negative returns. Let's start by looking at what causes a bond to produce a negative return. For a single bond that is held to maturity, there would have to be a default[2] for there to be a loss of capital or a negative total return on the bond. While the risk of default is low in Australia, it can be mitigated through diversification and, more importantly, successful security selection.

During the life of a bond, changes in interest rates will affect the valuation of bonds. If rates increase, the value of the bond will generally decrease. The sensitivity of a single bond or a portfolio of bonds to an interest rate rise can be calculated using a measure called "duration". In general terms, the longer the maturity of a bond, the higher the bond's duration, meaning that the negative impact on its price if interest rates rise will be greater.

The coupon provides a buffer for any negative revaluation, so, depending on the timeframe, even if rates increase and the value of the bond temporarily decreases, the total return (which includes the coupon payment and any change in capital value) from the bond is often positive.

Perhaps the most significant time over the past two decades when bonds delivered a negative return was during the bond rout of 1994, when Australian bonds returned -6.2% for the 12 months to 31 January 1995. In that case, the Reserve Bank of Australia (RBA) increased the cash rate by 2.75 percentage points within four months – a particularly sharp and significant rise in short-term rates. The effects of these cash increases on the bond market were exacerbated by the market overestimating how far the RBA would increase rates. The RBA and other developed market central banks have since changed the way they manage monetary policy, with many implementing strict inflation target ranges, making way for more manageable rises in the cash rate. For example, the RBA has an inflation target range of 2-3% p.a.. This target has seen the RBA increase the official cash rate by more than 25 basis points only once since December 1994 and that was a 50 basis point increase in February 2000.

There are two main differences between shares and bonds when it comes to periods of negative returns. Firstly, the size of the negative returns and secondly, how quickly they recover. Over the past 20 years, the largest negative monthly return from Australian bonds was -3.29% and for shares it was -12.61%. The largest negative calender year return for shares was -38.4% for shares (2008) and -4.7% for bonds (1994). Chart 2 shows the calendar year returns from bonds and shares and illustrates how much more upside and downside risk there is in shares.

[2] A default could occur for several reasons including the restructuring of the bond (e.g. extension of the maturity of the bond, reduction of the coupon or exchange of the bond for a lesser amount of a new bond) or the liquidation of a company.

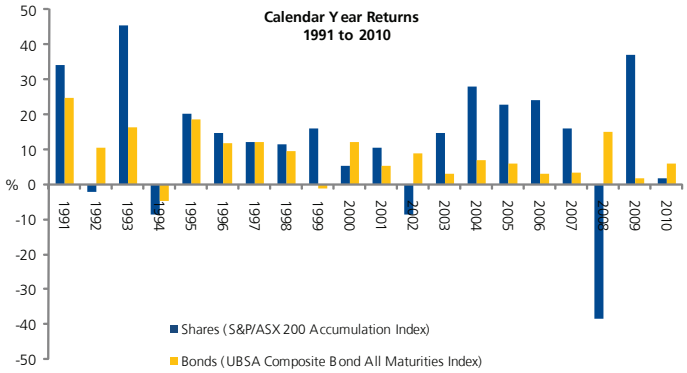
[3] With the exception of inflation-linked bonds – see separate break-out box "Hedging inflation" on page 6.

Characteristics and benefits of bonds

- Bonds are simply loans to a borrower (issuer) with a **fixed maturity date and fixed interest rate (coupon)**. Bonds are issued by governments, semi-governments and corporations. The party that buys the bond (the bondholder) could be a fund manager, a corporation, a government, a hedge fund or an individual. They can then generally be sold by the original purchaser/lender in the secondary market.
- The actual coupon rate will be determined by various factors, including the term to maturity (generally two to 10 years in Australia) and the credit rating of the issuer. Generally, the **lower the credit rating of the issuer, the higher the coupon**. The coupon is generally higher than the dividend yield on shares, making them a particularly valuable investment for those investors seeking higher rates of income, such as retirees.
- As interest rates change over the life of the bond, the value of that bond will change but, regardless of these revaluations, **at the maturity of the bond, the face value of the bond must be paid** to the holder of the bond. Unlike shareholders who must rely on someone wanting to buy their shares in order to have their capital returned, bondholders know how much money they will receive back and when[3] – unless there is a default or they choose to sell the bond prior to its maturity. In the extreme situation of a company going into liquidation, bondholders usually are paid back before shareholders, so generally get at least part of their capital back.
- Bonds are generally **highly liquid**, with large volumes traded on a daily basis. This is reflected in the low transaction costs incurred when buying and selling investment grade bonds, especially government bonds.

All of these characteristics result in bonds experiencing a significantly lower level of volatility than shares.

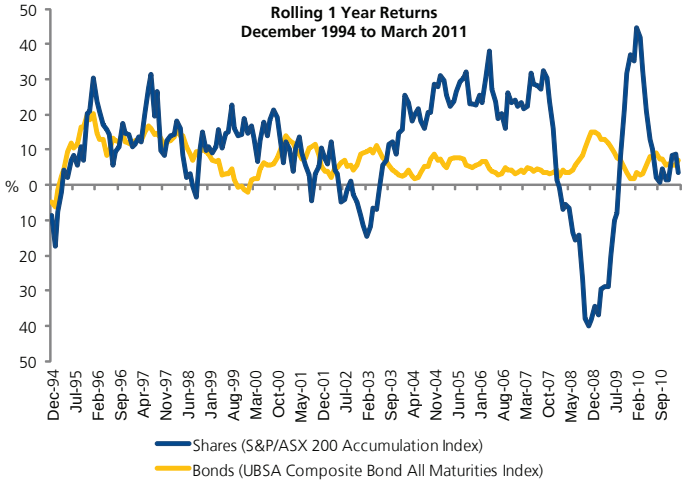
Chart 2: More upside and downside risk for shares



Source: Morningstar and Tyndall Investment Management Limited

Chart 3 shows how quickly bonds recover from their losses. Within two months of the largest negative annual return from bonds (12 months to January 1995), the rolling 12-month return was back to being positive. Over the period of our analysis (December 1994 to March 2011) bonds didn't produce a negative return over a period greater than four months. In contrast, it can take years before shares recover their losses to regain their previous highs (as also highlighted in chart 1) and the rolling one-year returns can therefore be negative for long periods of time.

Chart 3: Recovery period is significantly shorter for bonds



Source: Mercer Insight and Tyndall Investment Management Limited

The Australian bond market is, on average, less sensitive to interest rate rises than other bond markets (i.e. it has a lower average duration) – a significant advantage when interest rates are rising globally. The Australian fixed income market has a shorter duration than other global markets mainly because the Federal Government's longest dated nominal bond in 2011 will only be 2023. They are however, planning on issuing a 15-year bond in 2012. As interest rates rise, coupons and proceeds from maturities can be invested at those higher rates. These two factors mean that the Australian bond market recovers more quickly when interest rates rise.

Myth 3 – Cash is riskless

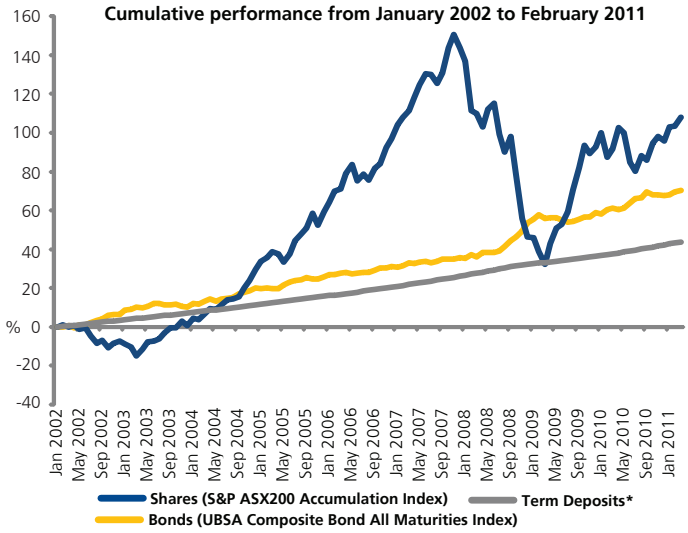
Reality check: While most investors think about risk as being the possibility of not getting their money back, there are other risks involved in investing. One of the benefits of investing in assets that mature in the short term is that investors have the ability to invest in new opportunities as they arise. What happens though, if interest rates fall and an investor misses out on that capital gain that arises in bonds and then can't invest in a security/asset which produces a sufficiently high return to meet their objectives? This is called **reinvestment risk**.

Investors who have substantial holdings in cash accounts at their bank are most subject to this risk. They'll be happy if rates rise, but will miss out on the gains they would have received if they had held bonds and interest rates had fallen. For example, when the RBA reduced the cash rate during the GFC, bonds returned 14.95% in the 12 months to December 2008, while if they were invested in a cash product that paid the same rate of interest as the RBA cash rate, they would have received a markedly lower return of 6.70%.

Myth 4 - Term deposits are a better investment than bonds

Reality check: In the aftermath of the GFC, many investors retreated to the perceived security of term deposits. This made sense for those with a short-term investment horizon. Over the longer term, however, term deposits have underperformed bonds. Chart 4 shows how bonds have performed relative to term deposits over the period since January 2002[4]. There is a significant sacrifice of return from investing in term deposits over the long run.

Chart 4: Term deposits – short-term gain, long-term sacrifice



Source: Term deposit data is sourced from the RBA. The term deposit return is the average rate on $10,000 term deposits across all terms at the five largest banks, including their advertised 'specials' and regular rates (de-compounded monthly). The source for the remaining data is Mercer Insight and Tyndall Investment Management Limited

There is also the issue of liquidity. A term deposit is a loan to a bank for a fixed term. Should an investor need to access their funds before the end of that term, they can be charged a significant penalty by the bank, potentially eliminating a large proportion of their income. Like cash, term deposits do not provide protection from unexpected spikes in inflation and are subject to reinvestment risk which increases as the term of the deposit decreases. If yields fall, investors do not benefit like they do when they hold a bond, as they can't sell a term deposit at the current market rate to take advantage of the higher price and they must reinvest their funds at a lower rate when the term deposit matures.

[4] The data on term deposits is only available on the RBA website from January 2002.

If an investor invests in term deposits with only one or two banks, they may also be subjecting themselves to **concentration risk**, by not diversifying their exposure across different banks and financial institutions. Investing in bonds provides opportunities to invest with issuers other than banks and allows investors to access better credits (sovereigns) or higher-yielding issuers depending on the investor's risk appetite.

Myth 5 - All fixed income is the same

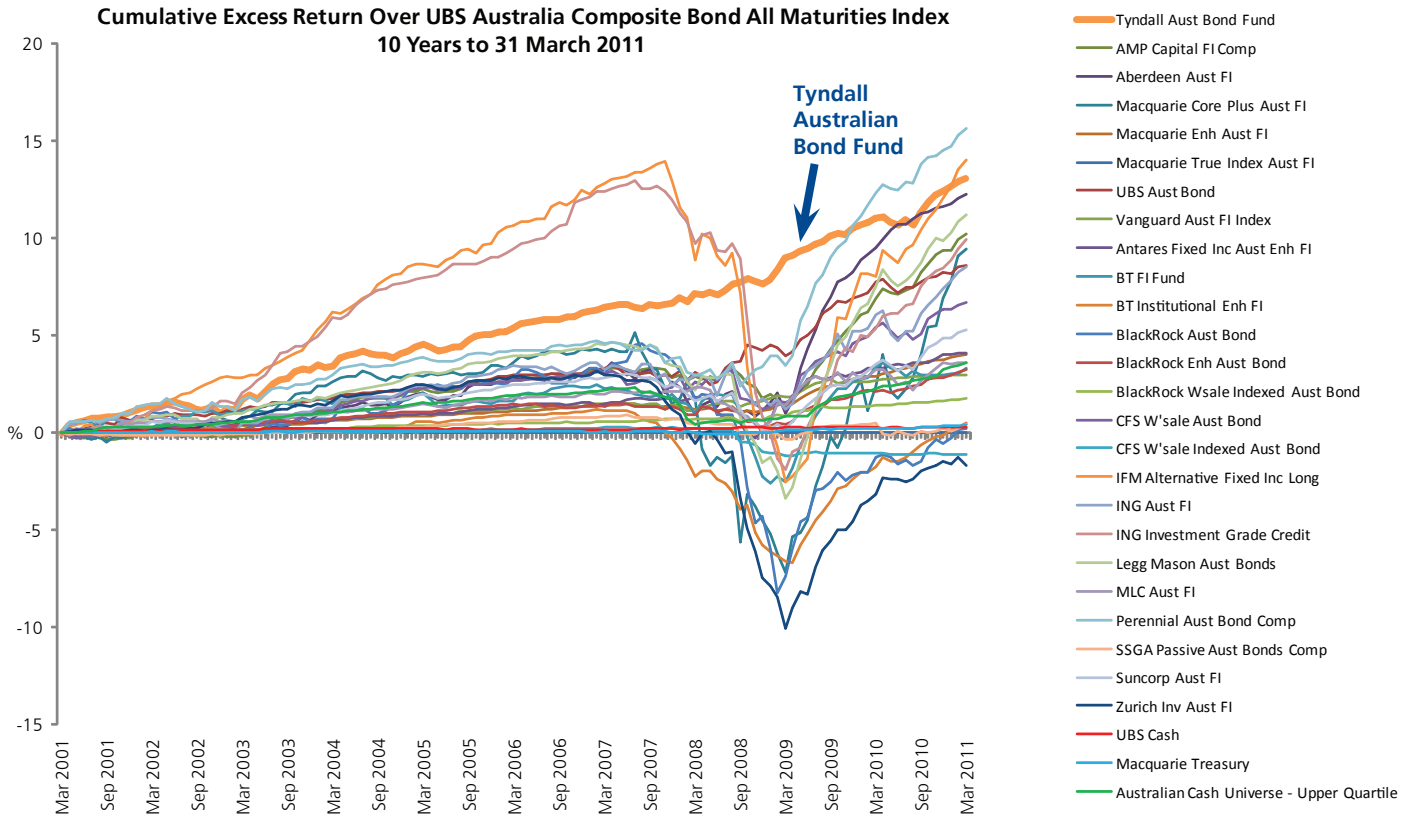
Reality check: Just as individual bonds have different characteristics (see break-out box on characteristics and benefits of bonds on page 3), so do fixed income indices and products. When even government bonds can be affected by credit rating changes, it is important that investors are selective about the risks they want to incorporate into their fixed income portfolio. While most Australian fixed income funds use the UBS Australia All Maturities Composite Bond Index as their benchmark, there is a wide array of choices that allow investors to tailor the maturity and credit profile of their portfolio. For instance, many credit funds are benchmarked to the bank bill index which doesn't have the same credit risk profile as the UBS Australia All Maturities Composite Bond Index.

The benchmark is just the starting point and the position from which fixed income managers can attempt to add value. Investors need to be comfortable that the product in which they are investing will meet their needs. Managers can add value using four different strategies:

- **Duration** - the average sensitivity of the portfolio to a parallel shift in interest rates
- **Yield curve** - how the portfolio is impacted by a change in the relationship between short term and long term interest rates (non-parallel shift in interest rates)
- **Sector allocation** - how the portfolio is allocated between government, semi-government and credit securities
- **Credit selection** - the choice of individual credit securities.

Each one of these strategies provides opportunities for the manager to add value, but this requires an effective process, a robust risk framework and skill. One of the most important of these decisions is how the credit securities are selected. One lesson learnt from the credit crisis is that not all AAA rated bonds are the same – and **not all AAA rated bonds will remain AAA.**

Chart 5: Tyndall Australian Bond Fund - a 'true' bond fund



Source: Mercer Insight and Tyndall Investment Management Limited

Diversification alone is not sufficient as a mitigator of credit risk – skilled management is what is required to minimise the risk of loss and maximise the probability of outperformance. Some level of diversification in a credit portfolio is sensible, as it means investors don't lose as much of their capital if a bond defaults, as it is only a small percentage of the total investment. But it is much better to avoid altogether investing in those securities which are more likely to default. Hence investors should not diversify for the sake of diversification. Rather they need a skilled manager to invest only in securities which are unlikely to default.

Another important consideration is the sector allocation. If a portfolio has too much credit exposure when credit spreads widen significantly, the portfolio may not provide the defensive qualities which attracted the investor in the first place. Chart 5 on page 5 shows how important it is to choose a fixed income fund that can successfully take advantage of the opportunities available over time and still provide an effective hedge to shares. A large proportion of the funds included in the Mercer Insight database were either indexed/enhanced funds that provided a small amount of value-add, or had large allocations to credit and so provided a volatile outcome that was much more correlated with shares than many investors would have desired at a time when their shares were providing negative returns. Tyndall was an exception as it produced a relatively consistent path of value-add throughout the period.

Conclusion

Bonds play a critical role in a balanced portfolio. Apart from the intrinsic benefits of a known and relatively high rate of income and a return of capital at a predetermined date, bonds provide investors with a useful diversifier to shares. The forces that drive shares down usually are the same forces that push the value of bonds up. Fixed income can therefore significantly outperform shares in the short term, but can also outperform shares, cash and term deposits over much longer periods of time. Choosing a fixed income manager carefully is critical to ensuring that investors receive the benefits of fixed income when they need them most. If the manager is too dependent on achieving higher returns by investing in higher risk credits, they may not provide the diversification benefits they were seeking from the defensive part of your portfolio.

Hedging inflation

For those investors who are particularly keen to protect their portfolio from the effects of inflation, there are inflation-linked bonds (ILBs, or "linkers"). There are different types of ILBs depending on whether they index the capital and/or coupon. ILBs are generally issued by governments as they tend to have long maturities and increasing credit risk due to the principal being indexed.

It is worth noting that, to the extent that inflation is expected by the market, it will be priced into the value of the ILB, so you can consider ILBs as providing protection from unexpected inflation. If the market is already expecting high inflation, investors are often better off buying fixed rate nominal bonds as their price/yield reflects a combination of expected inflation and the current real interest rate.

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