This paper summarises existing Vanguard research exploring the role of fixed income as part of a diversified investment strategy.¹

Fixed income securities, or bonds, play a vital role in a well diversified portfolio. They are defensive in nature and provide capital stability, income, liquidity and diversification to other growth-oriented asset classes such as equities and property.

**Bonds have traditionally fulfilled four important roles in an investment portfolio.**

**Income stream:** The majority of investment return for bonds is through coupon, or interest, income. Over a broad portfolio of bonds, these coupon payments constitute a reliable stream of income. The general level of income paid across the portfolio will change at the margin through time as coupons on new issues are set in accordance with prevailing levels of interest rates.

**Capital preservation:** Bonds also provide capital stability. By definition, principal is to be repaid to investors upon maturity of the bond. When this is combined with the strong credit-worthiness of many fixed income issuers, it provides an effective form of capital preservation. Consider government bonds, which are backed by the full faith and credit of a sovereign government. While it is theoretically unlikely that a sovereign government would default, the government could raise cash to meet its obligations by increasing taxes.

**Store of liquidity:** Fixed income securities can be used as a store of liquidity. In this regard, many central banks around the world exchange cash for fixed income collateral when they implement monetary policy, and also when they act to stabilise turbulent markets. Smaller investors are also able access this liquidity in a cost effective way through fixed income funds which typically allow entry or exit on a daily basis.

**Diversification to growth asset risk:** Fixed income can be characterised as a defensive asset class which can reduce the variability of returns of growth assets such as equities. Bond returns are less volatile than equities and their returns are also negatively correlated to equity market returns. This reduces the chance of negative returns across the broader portfolio as bonds exhibit a flight to quality characteristic in declining markets since yields tend to fall, in turn increasing the value of existing securities.

¹ The role of fixed income as part of a diversified investment strategy (McIntosh, Murik, April 2012).
Bonds versus cash

Cash as an asset class has seen a significant increase in usage since the 2008 financial crisis and many investors mistakenly consider cash a substitute or alternative to fixed income, given the apparent similarity between the two asset classes. While both investments offer capital preservation, liquidity and income, there are significant differences in their profile.

Cash can be better described as a savings vehicle rather than an investment asset class. Investing funds in cash instruments can help cover known short term liabilities or meet near term financial goals. The return on cash is principally determined by the cash rate set by the Reserve Bank of Australia and the short term funding costs of the major financial institutions. As such, the results of holding cash over extended periods of time are:

- Very high level of capital stability
- Very low volatility and low expected nominal returns
- Low real returns (including the possibility that cash may underperform inflation over medium term)

Cash returns have much lower volatility than bond returns. Importantly, however, bonds have higher expected returns than cash because of higher levels of interest rate risk and credit risk exposures from fixed income investments which are not present in cash investments due to their shorter maturity terms. These risk exposures also influence the slope of the yield curve, which typically associates higher interest rates for longer investment terms.

Figure 1 below demonstrates this by evaluating the total risk and return of various combinations of portfolios composed of Australian equities and Australian fixed income (red line) and Australian equities and cash (grey line) over the three years ending 31 December 2011.

The graph shows that for an investor willing to accept volatility of greater than 2% per annum, but less than equity market volatility (14% per annum), greater returns (improved portfolio efficiency) could be obtained for the same amount of risk from any portfolio comprising shares and bonds relative to a portfolio that held shares and the equivalent allocation to cash.

While the actual shape of the curves will vary over different periods and evaluation dates, the results consistently show that fixed income tends to provide better longer term outcomes compared to cash as an asset class because the interest rate risk characteristics of bonds provide on average higher yields as compensation for higher return variability.

![Figure 1 Two very different efficient frontiers](image)

Sources: Standard & Poor’s, UBS, Vanguard calculations
Bonds versus term deposits

Term deposits, which are a subset of the cash asset class, provide higher rates of interest for fixed terms than at call cash, but typically with a penalty fee for early recall.

Term deposits can form a useful part of an asset allocation strategy as a means of holding surplus cash or to help time the short term provision of liquidity. Given their very low risk and fixed maturities, investors can use them to manage the cash in their portfolios towards specific short term financial objectives.

However, there are drawbacks to holding term deposits, particularly for investors wanting to time their investments into the sharemarket. There are no duration benefits to investing in term deposits, which are offered predominantly at maturities of less than one year. There is also reinvestment risk at times, as shown by the steep decline in cash rates in late 2008. Term deposits are conventionally held with either one or a small number of authorised deposit taking institutions, so there is a degree of concentration risk.

In addition, penalty fees mean that holding investments in term deposits as a means to time market entry also introduces liquidity risk. That is, at the time that an investor wishes to invest, he or she may face some obstacles to quickly obtaining their cash.

A portfolio essential

The benefits of holding fixed income securities as part of a balanced portfolio are timeless. When held in a diversified form across a variety of maturity dates and investment grade issuers, fixed income asset class returns provide a narrower, less volatile range of investment outcomes than equities. Fixed income as an asset class principally provides coupon income, liquidity and high levels of capital stability. By including a fixed income allocation in a balanced portfolio, these features also provide portfolio efficiency gains from reducing the total variability of returns below the levels of the weighted average of the combined asset classes.

References

The role of fixed income as part of a diversified investment strategy (McIntosh, Murik, April 2012)