

## **Constructing Fixed Income Portfolios in a Low Interest Rate Environment**

**Author and Presenter: Stuart Piper, Portfolio Manager, MLC**

### **Abstract**

In a prospective environment of slower economic growth in developed countries, heightened levels of market volatility and modest investment returns, the defensive component of your clients' portfolios has become even more critical. Simple strategies such as investing in government bonds or passively following market indices through the cycle are no longer sufficient to fulfil the dual purpose of protecting portfolios when growth assets are weak and generating sufficient income to meet client goals. MLC will focus on the structural changes that have occurred to debt markets and how debt strategies can be managed using a more dynamic approach tailored to the needs of investors.

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## Introduction

In a prospective environment of slower economic growth in developed countries, heightened levels of market volatility and modest investment returns, the defensive component of investment portfolios has become even more critical. Simple strategies such as investing in government bonds or passively following market indices through the cycle are no longer sufficient to fulfil the dual purpose of protecting portfolios when growth assets are weak and generating sufficient income to meet client goals. This paper will focus on the structural changes that have occurred to debt markets and how debt strategies can be managed using a more dynamic approach tailored to the needs of investors.

This paper outlines a portfolio construction framework for building fixed income portfolios relevant to the prospective environment from today's starting point and is structured in the following sections:

- Section A:** Outlines the key objectives all investors require from fixed income portfolio allocations;
- Section B:** Analyses the main risk/return characteristics of several potential fixed income sectors in a historical context, including their potential diversification benefit within multi-asset class portfolios; and
- Section C:** Reviews the prospective market environment for fixed income investors, including reviewing current valuation levels in global treasury and credit markets, drawing conclusions on potential strategies to mitigate poorly compensated investment risks

## A. Fixed Income Portfolio Objectives

Construction of a fixed income portfolio necessarily requires clarity as to its investment objectives. While this may seem an obvious requirement, it is worth identifying at the outset the principal investment objectives that the portfolio could be expected to achieve. These objectives could be summarised as follows:

- i. Capital Preservation & Income
  - Although these objectives are common to most fixed income portfolios, important considerations in constructing the portfolio include; the tolerance for default risk (credit risk); mark to market risk (volatility of returns) including tolerance for a negative annual return; the requirement for inflation protection; and the investment horizon.
- ii. Diversification
  - Whether viewed in the context of a multi asset portfolio or as a stand alone fixed income portfolio, nominal investment grade bonds (sovereigns in particular) provide protection against deflation and typically perform very strongly during periods of poor equity market returns; inflation linked investment grade bonds unsurprisingly provide protection against inflation and normally perform strongly in poor equity markets as well; non investment grade corporate bonds by contrast typically perform very poorly during periods of poor equity market returns or during periods when defaults would be expected to rise (economic recession and/or credit crisis).

iii. Liquidity

- Ready access to cash for portfolio rebalancing or expenditure; typically the less liquid debt sectors such as non investment grade credit have an embedded liquidity premium which compensates investors by way of a higher yield but is not a substitute for liquidity.

## B. Portfolio Construction

### Debt Sector Return & Risk

Ultimately a forward looking assessment of risk and return for each of the debt sectors will form the basis for constructing a portfolio that is expected to satisfy the risk/return objectives of the client. However, the historic risk from the domestic and international fixed income sectors provides a good starting point to think about expected risk and how a suitable portfolio would be constructed for clients. Historic returns however should not be used as a basis for determining expected returns as inputs to the portfolio construction process. Nevertheless, it is also worth reviewing the long term historical returns and in particular the pattern of returns and their correlation with other asset classes.

Table 1 sets out the historic return and risk of the principal fixed income sectors.

Table 1 (refer appendix for source)

Fixed Income Sector	Returns (%pa)		Risk (%pa)	
	Since July 2000	Since April 1991*	Since July 2000	Since April 1991*
<b>As of July 2010</b>				
UBS Bank Bill Index	5.54%	5.97%	0.33%	0.42%
UBS Australian Composite Index, 0-3 yrs	6.10%	7.13%	1.33%	1.89%
Barclays Capital Global Aggregate Index, 1-3 yrs (A\$ hedged)	6.93%	7.23%	1.03%	1.22%
UBS Australian Composite Index	6.39%	8.15%	2.92%	4.13%
UBS Australian Government Inflation Linked Index	6.51%	7.88%	4.82%	5.54%
Barclays Capital Global Treasury Index (A\$ hedged)	8.00%	8.69%	2.85%	3.06%
Barclays Capital Global Aggregate Index (A\$ hedged)	8.31%	8.88%	2.81%	3.06%
Barclays Capital US Corporate Index (A\$ hedged)	9.12%	9.13%	6.52%	5.79%
Barclays US High Yield Index (A\$ hedged)	9.19%	9.96%	12.14%	9.44%
JP Morgan EMBI+ Index (A\$ hedged)	12.34%	11.56%	10.93%	15.33%
Diversified Equities Benchmark	3.14%	8.39%	13.05%	12.28%
<b>Hypothetical Sector Allocations</b>				
'Low Risk Portfolio' 30% UBS Bank Bill Index/42% UBS Composite, 0-3 yrs/28% BCGA, 1-3 yrs (A\$ hedged)	6.15%	6.81%	0.82%	1.12%
'Market Risk Portfolio' 50% UBS Australian Composite / 50% BCGA Index (A\$ hedged)	7.36%	8.53%	2.59%	3.29%

\* *JP Morgan EMBI+ Index (A\$ hedged) since Jan-1994*

The following points should be noted from the Table:

- Fixed income returns have exceeded the return from the risk free rate (as measured by the UBS Bank Bill Index) over both measurement periods
- Fixed income returns have exceeded the return from equities over the last 10 years and performed in line with equities since 1991 (as measured by the Diversified Equities Benchmark)
- Australian nominal bonds have performed in line with Australian inflation linked bonds but with lower risk over both measurement periods.

- Global treasury bonds have performed in line with global aggregate bonds and with very similar risk over both measurement periods
- US High Yield and Global Emerging Market Debt have outperformed equities (as measured by the Diversified Equities Benchmark) and with lower or comparable risk
- An equally weighted 'market risk' portfolio of UBS Australian Composite bonds and Barclays Capital Global Aggregate (A\$ hedged) bonds has had lower risk than either of the constituent markets (reflecting the benefits of a globally diversified portfolio) over the last 10 years; has had lower risk than UBS Australian Composite bonds since 1991; and an attractive Sharpe Ratio over both measurement periods (0.7-0.8)

When observing long term historic fixed income returns, it is instructive to look at the pattern of returns over the observation period in order to appreciate the manner in which that return was achieved. To demonstrate this pattern of returns, 2 hypothetical portfolios were used:

- A globally diversified investment grade 'low risk' portfolio comprising 30% UBS Bank Bill Index, 42% UBS Australian Composite Index 0-3 yrs and 28% Barclays Capital Global Aggregate Index 1-3 yrs (A\$ hedged) with an average modified duration of 1.1 yrs; and
- A globally diversified investment grade 'market risk' portfolio comprising 50% UBS Australian Composite Index and 50% Barclays Capital Global Aggregate Index (A\$ hedged) with an average modified duration of 4.4 yrs.

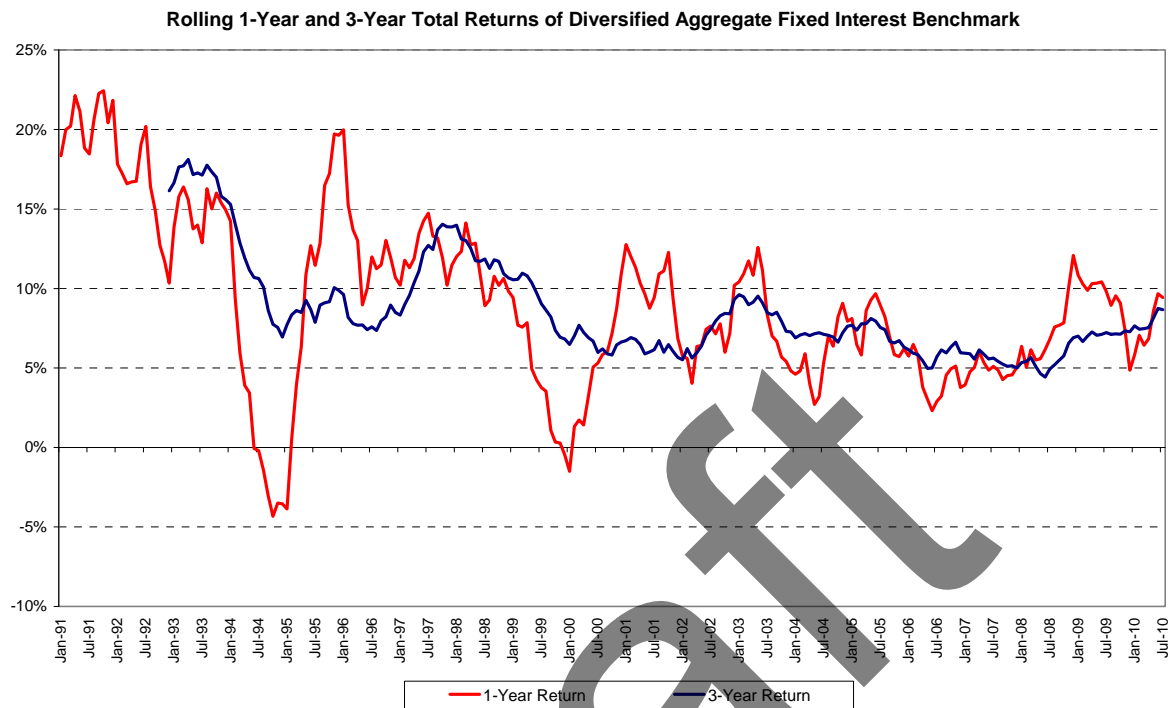
Figure 1 shows the pattern of rolling total returns for the 'low risk' portfolio.

Figure 1 (refer appendix for source)



Figure 2 shows the pattern of rolling total returns for the 'market risk' portfolio.

Figure 2 (refer appendix for source)



The following points should be noted from Figures 1 & 2:

- The frequency of negative annual total returns from the 'low risk' portfolio was nil while the 'market risk' portfolio experienced infrequent negative annual returns (1994/1995 & 1999/2000 periods)
- The frequency of negative 3 year annualised total returns from both the 'low risk' and 'market risk' portfolios was nil (unsurprisingly)

Figure 3 shows the pattern of rolling excess returns (vs UBS Bank Bill Index) from the same 'low risk' portfolio.

Figure 3 (refer appendix for source)

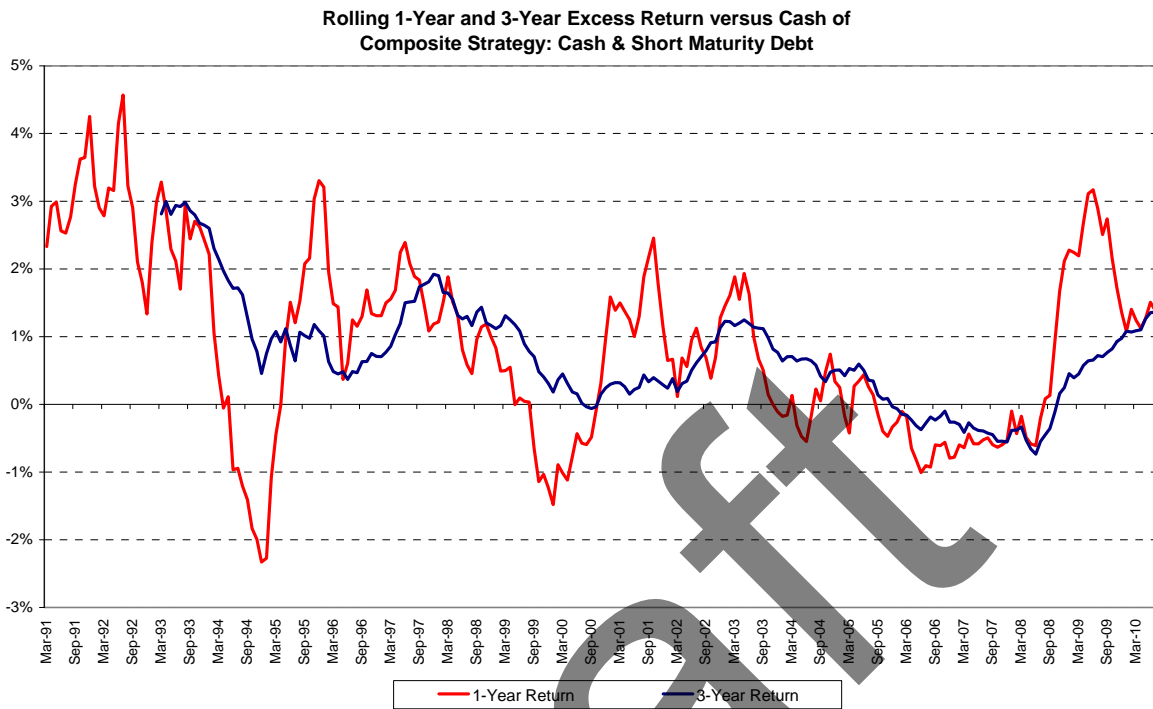
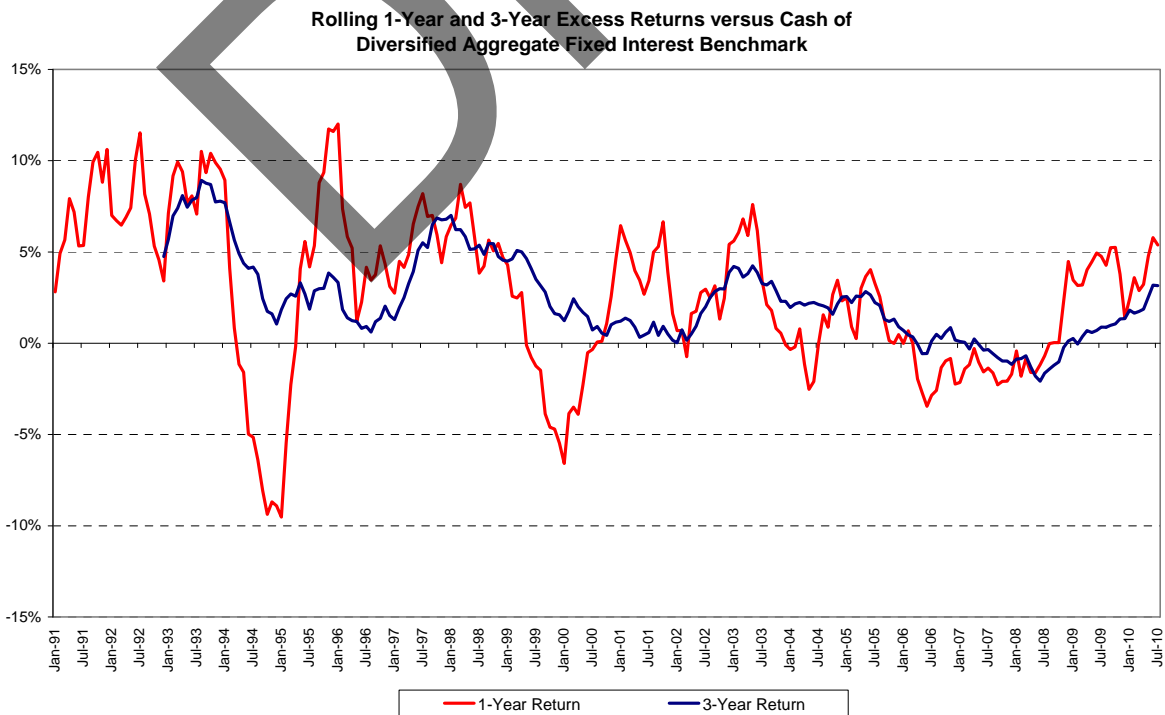


Figure 4 shows the pattern of rolling excess returns from the same 'market risk' portfolio.

Figure 4 (refer appendix for source)



The following points should be noted from Figures 3 &4:

- The frequency of negative annual excess returns from the 'low risk' portfolio was similar to that experienced by the 'market risk' portfolio and broadly corresponded to periods during which monetary policy was tightened (1994/95;1999/2000;2004/2008 periods),
- The magnitude of negative annual excess returns from the 'low risk' portfolio (in a range of 0.5- 2% approx) however was significantly lower than that experienced by the 'market risk' portfolio (in a range of 2-10% approx)
- The frequency of negative 3 year annualised excess returns from the 'low risk' portfolio and the 'market risk' portfolio was low and corresponded to a period in which policy was gradually tightened over a number of years (2004/2008 period)
- The magnitude of negative 3 year annualised excess returns from the 'low risk' portfolio (up to 0.7% pa approx) however was significantly lower than that experienced by the 'market risk' portfolio (up to 2% pa approx)

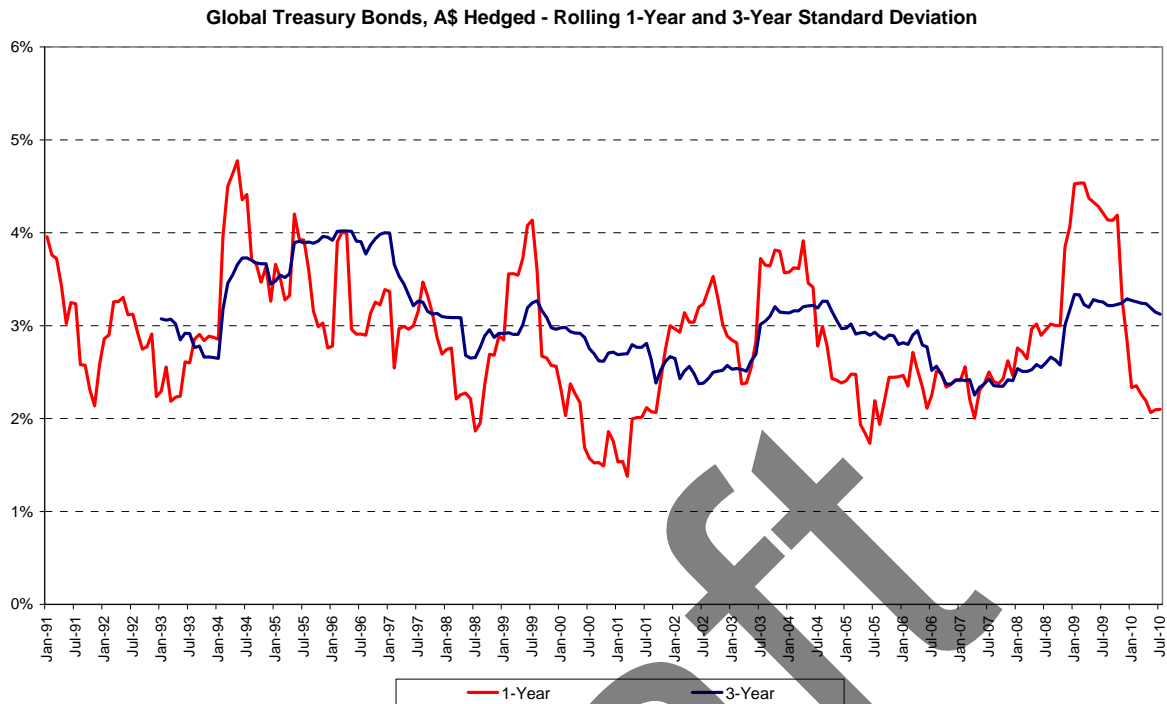
In assessing prospective returns from today, it should be noted that the most recent 1 & 3 year returns (both total return and excess return) have been exceptionally strong reflecting the extremely low level of global official interest rates and other Central Bank initiatives (such as quantitative easing) that have caused bond yields to fall to multi year lows. Consequently, the starting point for sovereign bond yields in many markets (G5 markets in particular) is well below sustainable levels and consistent with very poor prospective returns in the years ahead. This issue is discussed later in the paper under 'Market Outlook and Strategy'.

In addition to looking at the globally diversified fixed income return patterns (as proxied by the hypothetical 'low risk' and 'market risk' portfolios above), it is also instructive to look at the pattern of sovereign bond return volatility over the observation period. In recent years global sovereign interest rate volatility has moved in a fairly narrow range in line with relatively low GDP and inflation volatility. In contrast, the volatility of credit market excess returns (as proxied by option adjusted US corporate spread volatility) fell to very low levels in 2005/2006 before rising dramatically in 2007/2008 with the onset of the global financial crisis. (It should be noted that credit market excess returns in this context refers to the credit market return [as defined] less the return from the corresponding duration matched treasury market.)

In making judgements about expected sovereign bond return volatility (interest rate risk) and credit excess return volatility (credit risk), it is instructive to look at volatility trends in these sectors.

Figure 5 shows the evolution of sovereign bond interest rate risk as measured by the return volatility of the Barclays Capital Global Treasury Index (A\$ hedged) over rolling 1 and 3 year periods.

Figure 5 (refer appendix for source)



It is clear from Figure 5 that the return volatility from sovereign bonds has increased only modestly in recent years to be in line with the long term average (circa 3%pa). The longer term volatility however masks shorter periods of marked changes in volatility (as measured by the rolling 1 year volatility). Further, the return series includes Japan (approximately 31% weight) where bond yields have moved in a very narrow range over an extended period of time and has significantly dampened volatility. This contrasts with the United States where bond yields have exhibited considerable volatility in line with GDP and inflation volatility. Looking forward, it seems reasonable to expect rising volatility as Central Banks normalise monetary policy and in response to expectations of increased GDP and inflation volatility. This increased volatility will almost certainly occur during a period of rising bond yields thereby resulting in capital losses and very poor bond market returns.

Figures 6 & 7 show the evolution of credit risk as proxied by the option adjusted spread volatility of the Barclays Capital Global US Corporate Bond Index and the Barclays Capital US Corporate High Yield Index over rolling 1 and 3 year periods.



Figure 6 (refer appendix for source)

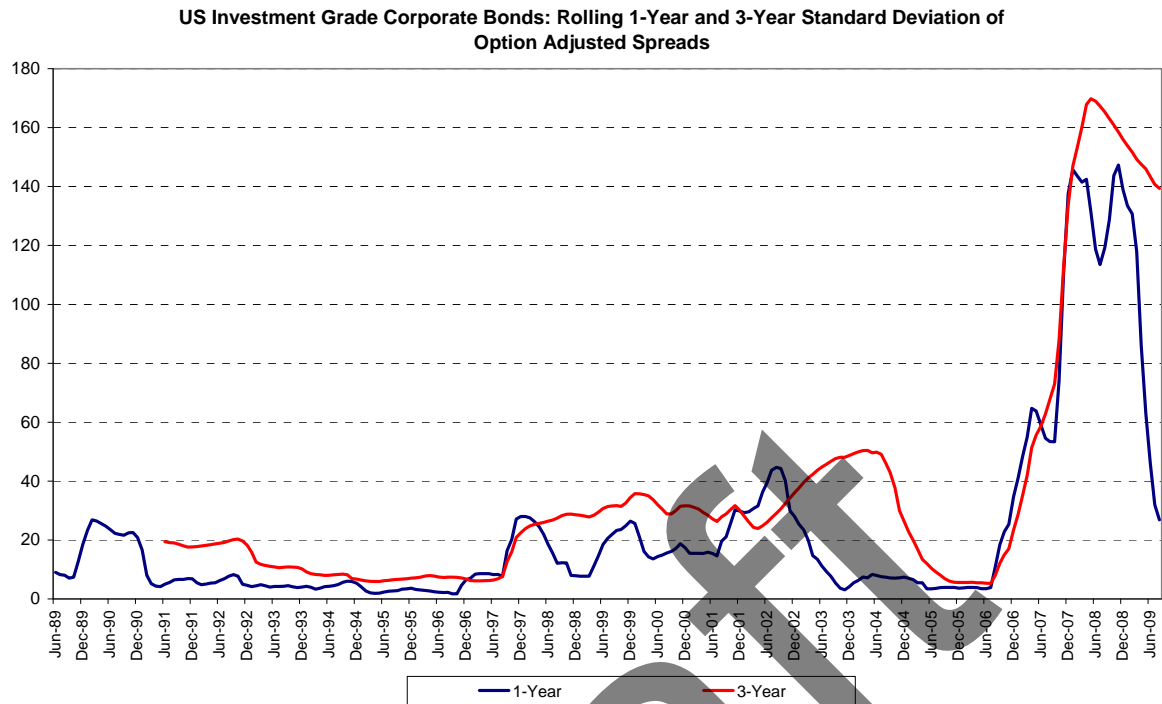
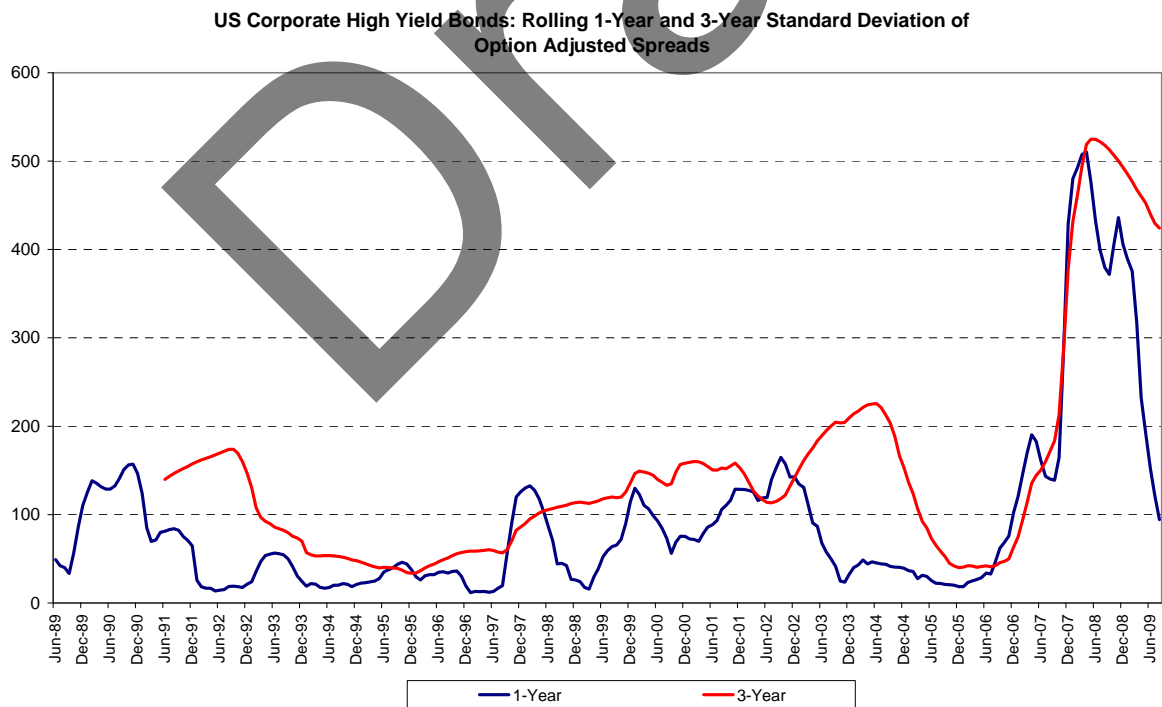


Figure 7 (refer appendix for source)



It is clear from Figures 6 & 7 that the credit spread volatility from US investment grade and US non investment grade corporate bonds has increased markedly in recent years in line with increased GDP and equity market volatility. Looking forward it seems reasonable to expect a significant reduction in volatility as the impact of

the global financial crisis (2008) washes out of the numbers but credit spread volatility should remain at elevated levels.

In summary, the above discussion should provide a good perspective on the risk/return characteristics of the various debt sectors as input to constructing a suitable portfolio for clients. What does seem clear though is that prospective returns will be much lower compared to recent years; that returns from some sectors of the market (eg G5 sovereign bonds) appear to offer more risk than reward; that credit markets are likely to remain volatile and vulnerable to episodes of risk aversion, especially the non investment grade sector; and that liquidity will be problematic for other than the developed treasury bond markets.

### ***Debt Sector Correlations with other Asset Classes***

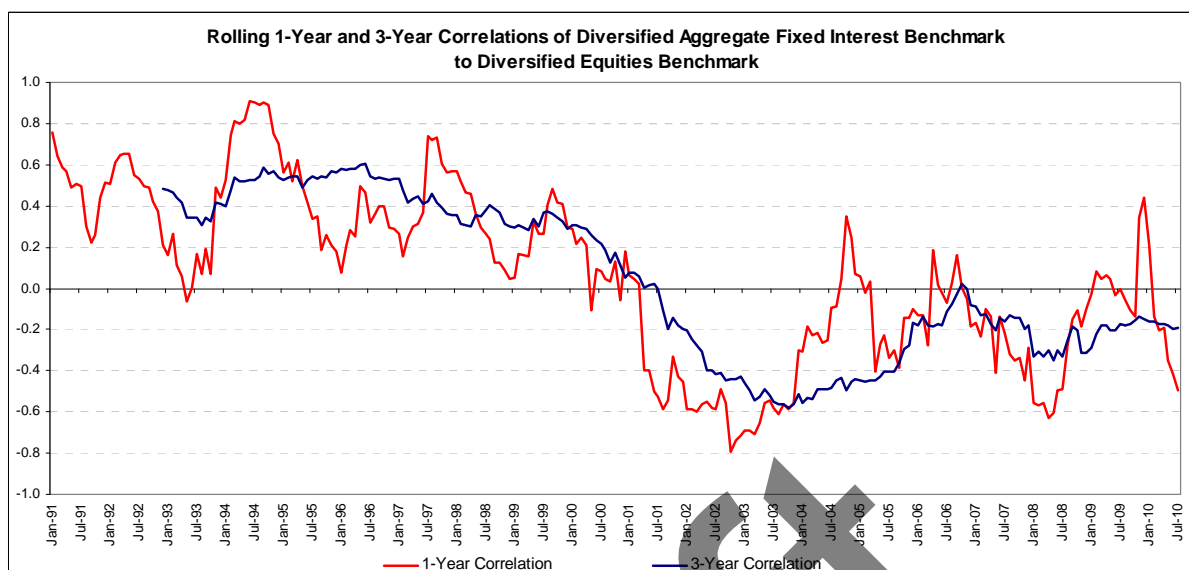
Invariably the fixed income assets form part of a multi asset portfolio for risk control purposes (i.e. to dampen return volatility). In this context, the construction of the fixed income portfolio needs to balance the diversification objective with the long term return maximisation objective. The diversification objective requires that the fixed income assets preserve capital under 3 principal scenarios – deflation, severe equity market downturns and inflation. The focus of this section will be to explore which of the debt sectors best preserve capital during periods of severe equity market downturns. Additionally we examine the relationship between domestic nominal bonds and inflation linked bonds and their behaviour under a deflation and inflation scenario.

The 2008 global financial crisis (GFC) brutally exposed the risk of holding excessive exposures to credit, especially non investment grade credit, during severe equity market downturns. Equally it exposed which assets are the ultimate sources of liquidity in a crisis; namely, developed market sovereign bonds. It is now common knowledge that non investment grade credit performs very poorly in a severe recession, particularly one that involves a severe contraction in credit, and during periods of severe equity market downturns which are invariably near contemporaneous events. That was not new information and had already occurred twice in the prior 20 years, namely during the 1990/91 global recession and US recession in 2001 (NBER: US Business Cycle Dating Committee) following the burst of the technology boom.

In contrast, sovereign bonds and other high quality bonds unsurprisingly performed very strongly during the GFC in much the same way as in earlier episodes of financial market stress. A good proxy for such a portfolio is the hypothetical globally diversified 'market risk' portfolio (referred to above) which is comprised of very high quality assets including 40% in global treasury bonds. As can be seen from Figure 2, this portfolio performed very strongly in 2008, recording a total return above 12%, as it did in prior periods of financial market stress.

Figure 8 shows the rolling correlations (monthly basis) of the hypothetical globally diversified 'market risk' portfolio (referred to above) against a diversified global equities portfolio comprising 46% ASX S&P 300 Index, 24% MSCI All Country World Index (A\$ hedged), 30% MSCI All Country World Index (A\$ unhedged).

Figure 8 (refer appendix for source)



The key point to note from Figure 8 is that the globally diversified ‘market risk’ portfolio was negatively correlated to the diversified global equities portfolio when it mattered most; namely, during severe equity market downturns such as occurred during 2000/2001 and 2008. As such, the ‘market risk’ portfolio satisfied the diversification objective of preserving capital as much as possible during periods of financial market stress. An alternative ‘market risk’ portfolio where the global component is comprised of treasury only assets exhibits a very similar correlation profile although in 2008 global treasuries outperformed all high quality non treasury assets.

As already noted, the performance of the globally diversified ‘market risk’ portfolio contrasted dramatically with the performance of the non investment grade portfolio as proxied by the Barclays Capital US Corporate High Yield Bond Index (A\$ hedged). The lower end of the investment grade US Corporate market (BBB rated sector) also exhibited very similar performance behaviour.

Figures 9 & 10 show the rolling correlations (monthly basis) of the Barclays Capital US Corporate High Yield Index Total Return (\$AUD Hedged) and the Barclays Capital US Corporate Index, BBBB Rated Excess Return against the same diversified global equities portfolio (46% ASX S&P 300 Index, 24% MSCI All Country World Index (A\$ hedged), 30% MSCI All Country World Index (A\$ unhedged).

Figure 9 (refer appendix for source)

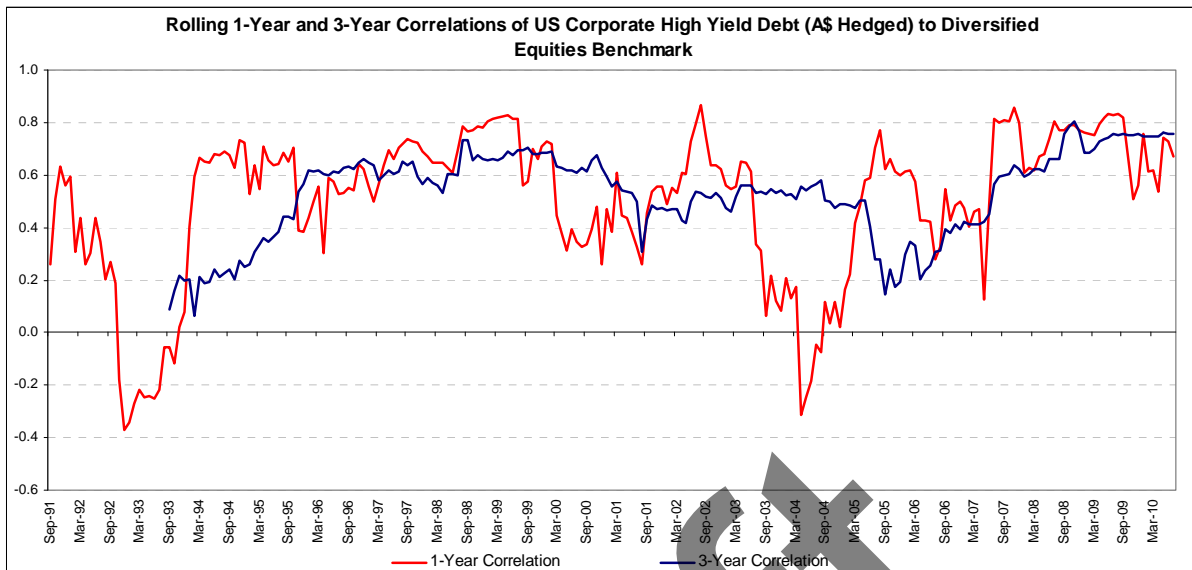
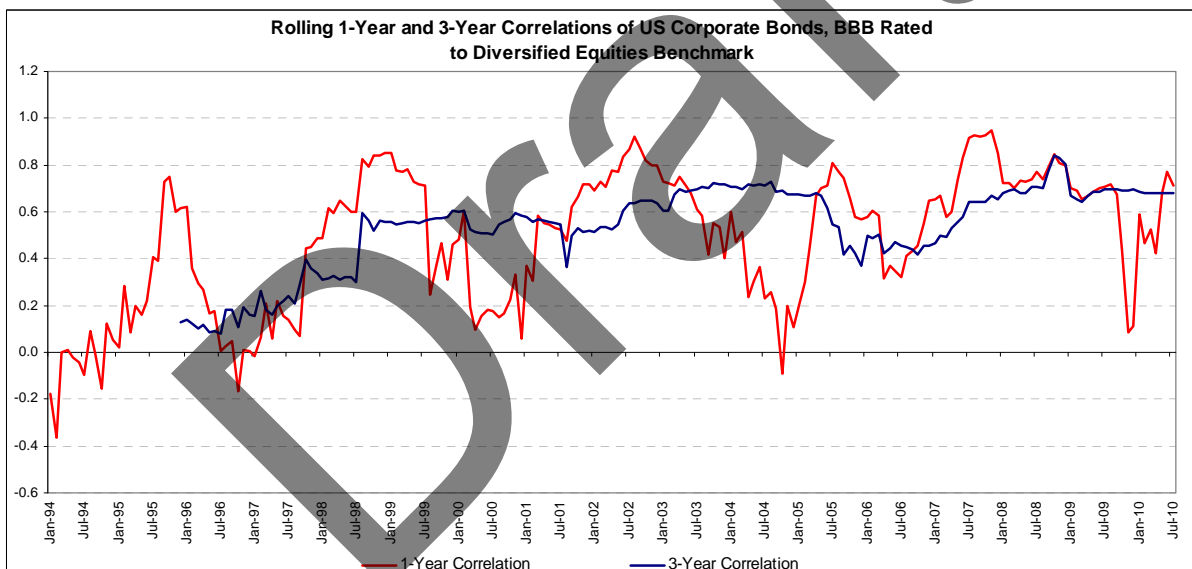


Figure 10 (refer appendix for source)



It is clear from Figures 9 & 10 that non investment grade credit and BBB rated credit are generally highly correlated to equities and particularly so during periods of severe equity market downturns (2001/2002; 2007/2008) where the correlation approached 1. These debt sectors have poor capital preservation attributes and exposures to these sectors need to be carefully controlled if the diversification objective of the portfolio is to be achieved. A normal exposure to the non investment grade sector would approximate 5% with a maximum allocation of 10%.

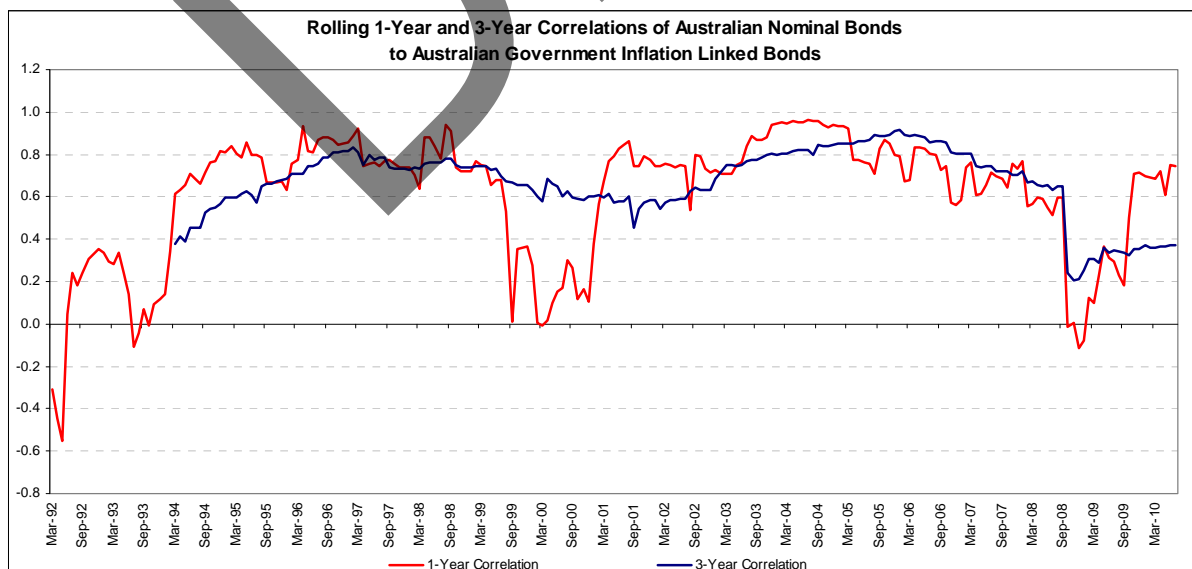
Turning briefly to the diversification attributes of Australian investment grade nominal bonds and Australian government inflation linked bonds under an inflation and deflation scenario. In normal market environments, inflation linked bonds are highly correlated to nominal bonds through the 'break-even inflation' relationship.

Break-even inflation (BEI) essentially equates the expected return (yield to maturity) of the nominal bond with that of the inflation linked bond and is therefore a measure of long term inflation expectations (i.e. break even inflation = nominal bond yield – equivalent maturity inflation linked bond real yield). In that respect, changes in the BEI are analogous to a spread change and reflect changes in inflation expectations in much the same way as changes in credit spreads reflect changes to expected credit risk.

However, the performance of these assets will vary significantly under a high inflation scenario or under a deflation scenario and so should be seen as separate asset classes. Under the deflation scenario the correlation between the two asset classes fell to zero and on 2 occasions was negative (1991/92 & 2008). Nominal investment grade bonds perform very strongly under this scenario however inflation linked bonds will lose capital as the 'inflation factor' becomes negative. Equities also perform poorly under the deflation scenario and so inflation linked bonds will not provide the same level of diversification as nominal bonds and hence not protect capital to the same extent. Under the inflation scenario, inflation linked bonds clearly protect capital and nominal bonds typically perform relatively very poorly. However, under a high inflation scenario, the equities markets are unlikely to suffer a severe downturn although such a scenario is not favourable to earnings growth and other drivers of equity market returns. Ultimately the inclusion of inflation linked bonds in the portfolio is an asset allocation decision and will be driven by broad diversification considerations and/or by specific requirements for inflation linked income streams (e.g. to match inflation linked liabilities).

Figure 11 show the rolling correlations (monthly basis) of the UBS Australian Composite Bond Index against the UBS Australian Government Inflation Index.

Figure 11 (refer appendix for source)



In summary, the diversification objective is best achieved with a globally diversified investment grade portfolio (whether 'low risk' or 'market risk') if the objective is to protect capital during periods of severe (global) equity

market downturns. From a portfolio construction perspective, investment grade nominal bonds should be seen as the strategic part of the portfolio. Inflation linked bonds should also be seen as the strategic part of the portfolio where the objective is to protect capital during periods of high inflation. Non investment grade bonds should be a low allocation within the portfolio ( $\leq 10\%$ ) and viewed as the variable or non strategic component of the portfolio with allocations adjusted to reflect the reward/risk ratio.

### ***Implementation Considerations***

Once the investment policy of the portfolio has been determined (risk/return characteristics and liquidity profile), it is important that the investment policy is efficiently implemented and maintained. This requires control over the allocations to sovereign bonds, investment grade credit and non investment grade credit through time and the flexibility to alter these allocations in response to changed market conditions.

This can be implemented either through the selection of specialist sector managers or through the selection of broad discretion managers or through a combination of both. Each of these choices has a number advantages/disadvantages:

- i. Selection of specialist sector managers may be limited by market availability but provides for the greatest control and flexibility,
- ii. Selection of broad discretion managers is not limited by market availability but significantly limits control and flexibility,
- iii. Selection of a combination of specialist managers and broad discretion managers involves complexity but provides for a good balance between manager discretion and control and flexibility.

### **C. Market Outlook & Strategy**

Weak growth prospects, low inflation and rising sovereign indebtedness across the developed world have been a key focus for financial markets. More recently, disappointing growth in the United States during mid 2010 has raised fears of a double dip recession and deflation. The rapid deterioration in the US fiscal position in particular stands in stark contrast to the stable fiscal position in Australia. Tables 2 & 3 set out the current global forecasts for growth and inflation and a profile of sovereign indebtedness for a selection of developed countries.

Table 2 sets out the current Global Consensus Forecasts for GDP and Inflation

Table 2

<b>Global Consensus Forecasts</b>			
<b>GDP Growth</b>	<b>2009</b>	<b>2010F</b>	<b>2011F</b>
G5#	-3.5	2.4	2.3
Emerging Markets	1.6	6.8	5.9
Global	-2.4	3.4	3.1
<b>CPI Inflation</b>	<b>2009</b>	<b>2010F</b>	<b>2011F</b>
G5#	-0.1	1.4	1.4
Emerging Markets	3.6	4.7	4.4
Global	0.7	2.1	2.1
# US, Euro-area, Japan, UK, Canada			
Source: Thompson Financial, Datastream, MLC, IMF			

Table 3 sets out the evolution of gross debt for a selection of countries within the developed bond markets. This table demonstrates very clearly the fiscal deterioration of the United States, Japan and Germany over the last 10 years.

Table 3

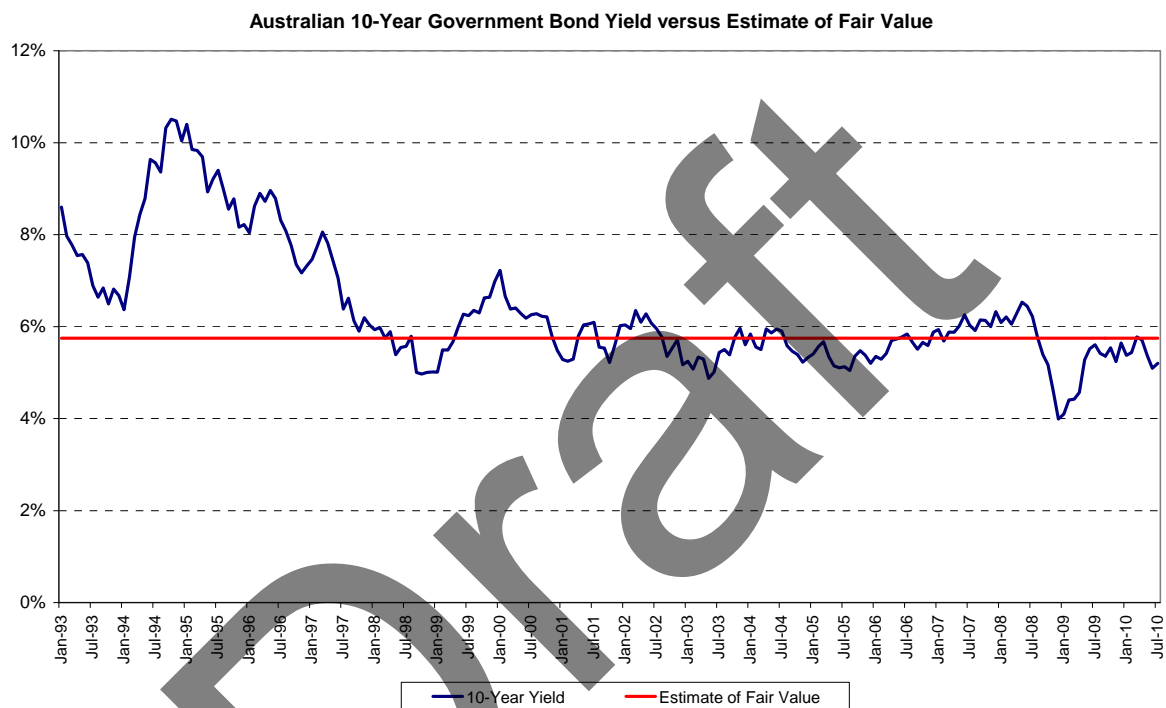
<b>Year</b>	<b>General Government Gross Financial Liabilities as % GDP SADJ</b>			
	<b>United States</b>	<b>Japan</b>	<b>Germany</b>	<b>Australia</b>
2000	54.5	135.4	60.4	24.7
2001	54.4	143.7	59.7	21.8
2002	56.8	152.3	62.1	19.8
2003	60.1	158.0	65.3	18.3
2004	61.1	165.5	68.7	16.6
2005	61.4	175.3	71.1	16.1
2006	60.9	172.1	69.2	15.3
2007	61.9	167.0	65.3	14.3
2008	70.4	173.8	68.8	13.6
2009	83.0	192.9	76.2	19.2
2010	89.6	199.2	80.9	23.4
2011	94.8	204.6	84.2	25.9

Source: Datastream

G5 bond market yields are at multi year lows and market sentiment towards risk assets is fragile. How should fixed income portfolios be positioned?

A review of the Australian bond market reveals some overvaluation with the 10 year yield at the lower end of the historic range.

Figure 12 (refer appendix for source)



A review of the US, Japanese and German bond markets reveals very significant overvaluation and risk of loss of capital. A rise of a mere 0.5% in yield on a 10 year bond would more than consume the annual yield and result in a negative return (on a mark to market basis).

Figures 13-15 show the long term history of the 10 year government bond for these markets and an estimate of the long term fair value. The difference between the two values is a measure of the degree to which the yield is below its long term sustainable level.



Figure 13 (refer appendix for source)

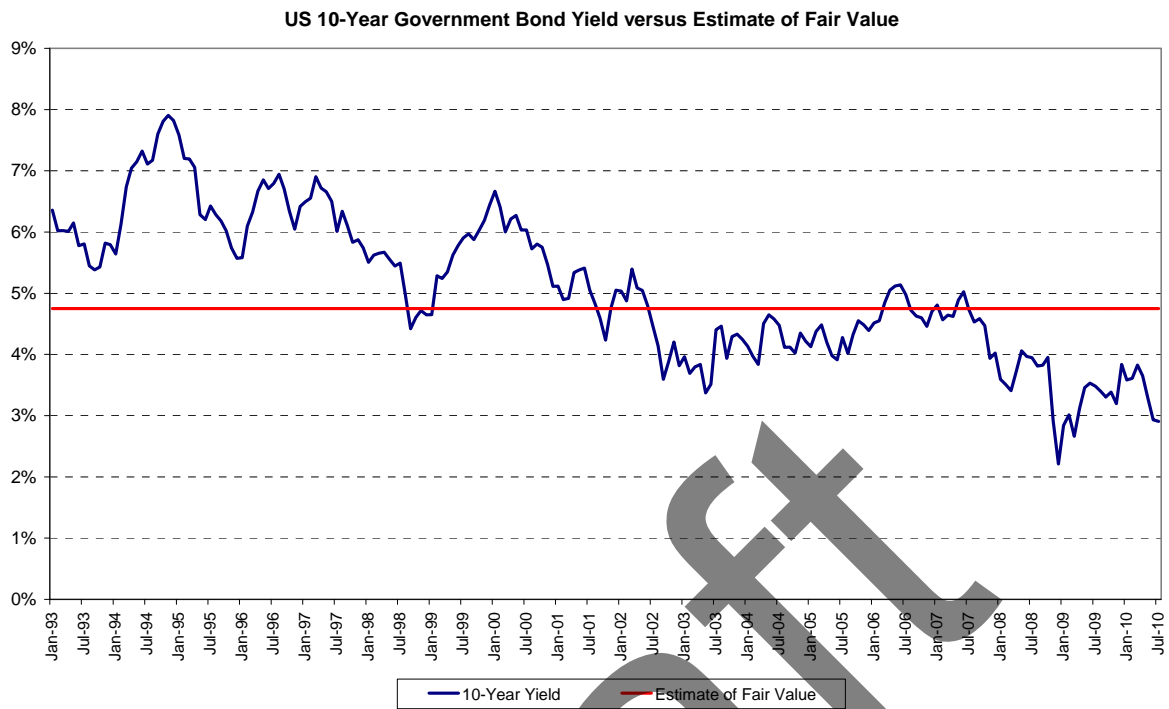


Figure 14 (refer appendix for source)

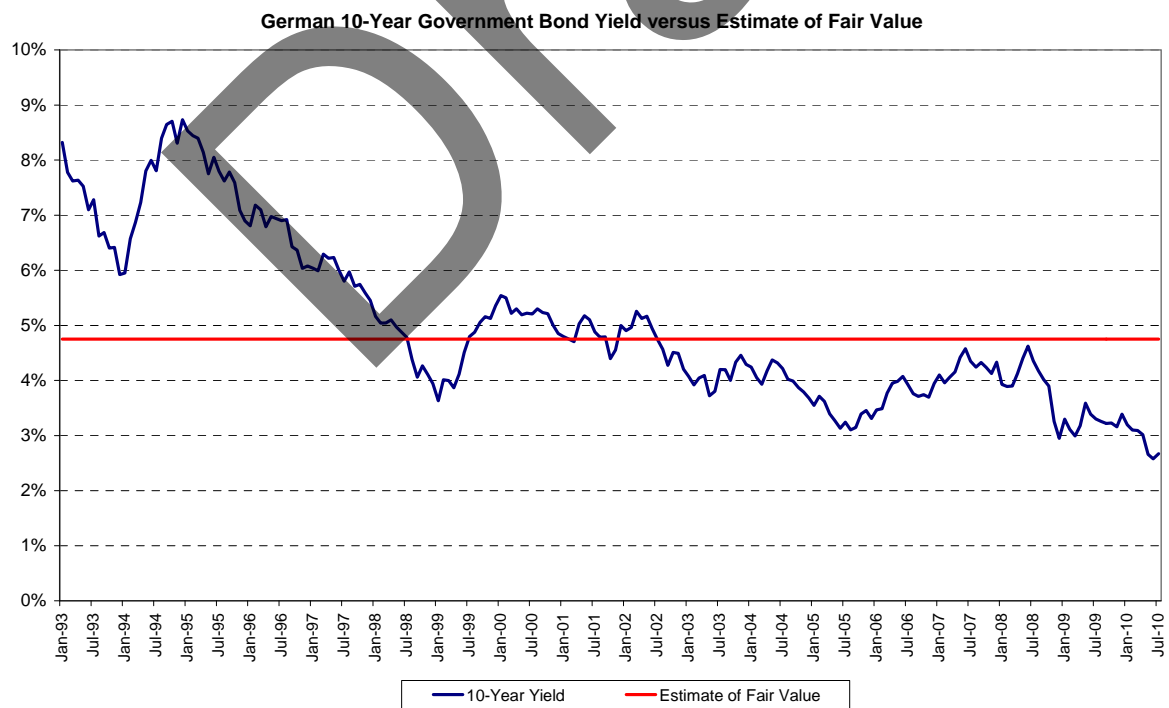
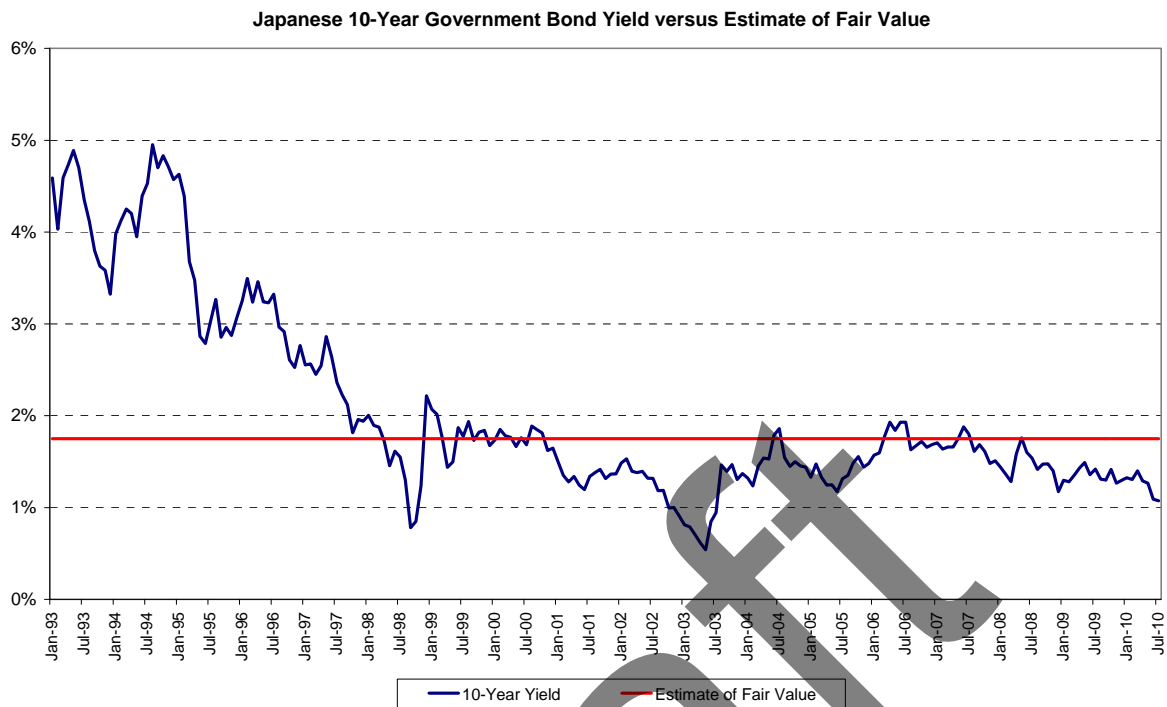


Figure 15 (refer appendix for source)



By contrast, credit markets (both investment grade and non investment) are fairly priced as measured by the yield spread between the corporate bond and the equivalent maturity treasury bond. However for fixed rate corporate bonds there is a significant embedded duration risk which will result in material capital loss as treasury yields eventual rise to more normal levels. All other things equal, floating rate corporate credit appears very attractive.

Figures 16 & 17 show the option adjusted spread versus the long term average for US Investment Grade Corporate Bonds and US Corporate High Yield Bonds. Current yield spreads for both markets are above their long term averages.

Figure 16 (refer appendix for source)

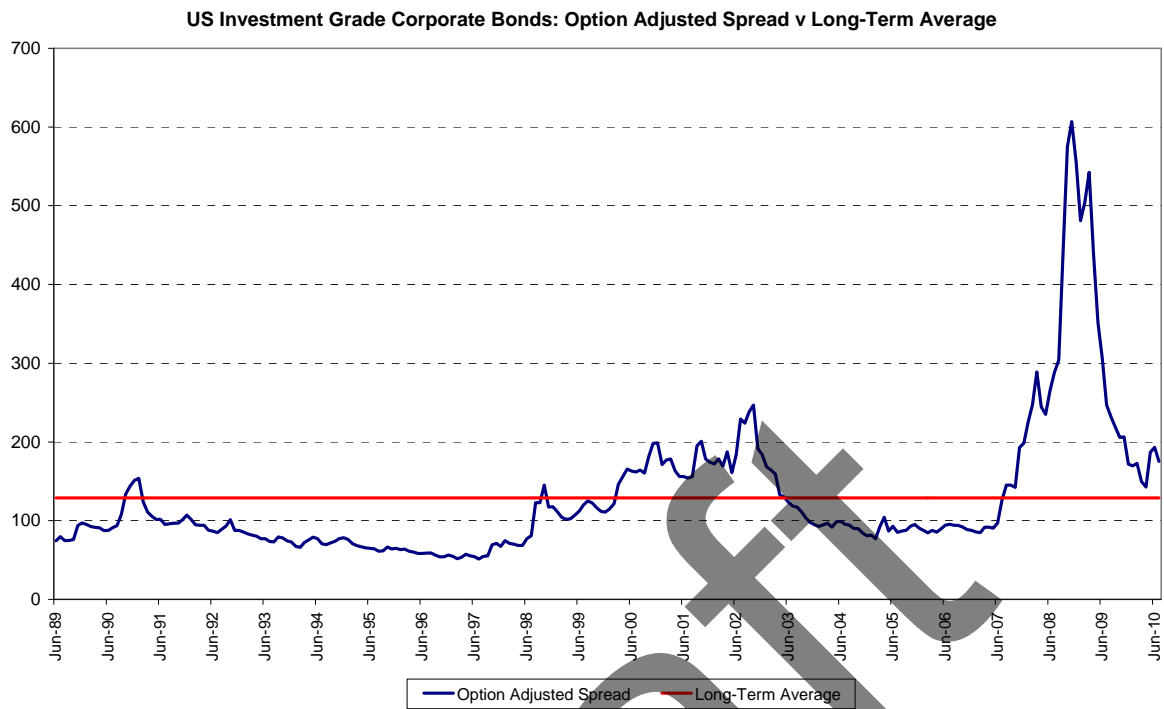
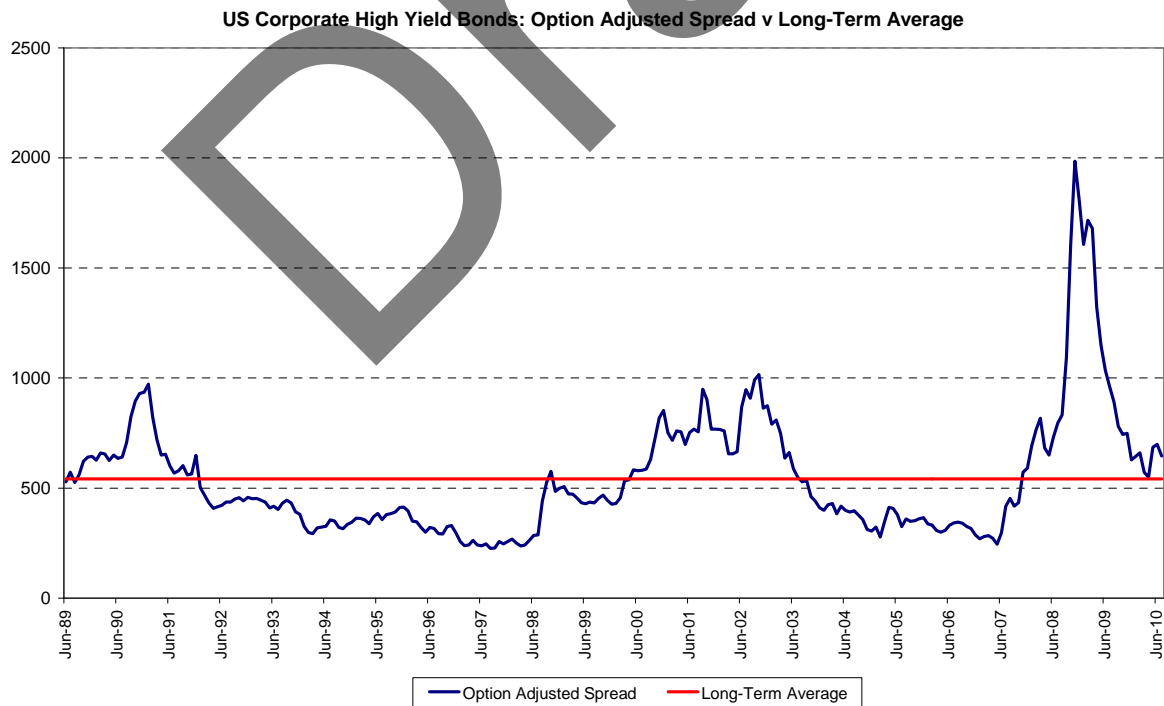


Figure 17 (refer appendix for source)



In summary:

- There is a clear case for strategically reducing exposure to G5 treasury bonds in favour of Australian cash, Australian bonds or some of the investment grade emerging bond markets such as Korea reflecting unfavourable valuations and bond supply considerations in the G5 markets,
- There is a clear case more generally for reducing interest rate exposure (duration) in the developed bond markets (including Australia) again reflecting unfavourable valuations and bond supply considerations,
- There is a strong case for maintaining an allocation to investment grade corporate bonds reflecting favourable valuation and sound credit metrics (e.g. falling default rates, strong earnings, solid interest cover and relatively low gearing),
- There is a case for only a neutral weight to non investment grade credit despite reasonable valuation and credit metrics as downside risk to equity markets remains significant.

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August, 2010

## APPENDIX

### Constructing Fixed Income Portfolios in a Low Interest Rate Environment

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1. Table 1      Benchmark: 46% ASX S&P 300 Index, 24% MSCI All Country World Index (A\$ hedged), 30% MSCI All Country World Index (A\$ unhedged)  
  
                    Source: UBS, Barclays Capital, JP Morgan, IRESS, DataStream, MLC Investment Management
2. Figure 1     Source: UBS, Barclays Capital, MLC Investment Management
3. Figure 2     Source: UBS, Barclays Capital, MLC Investment Management
4. Figure 3     Source: UBS, Barclays Capital, MLC Investment Management
5. Figure 4     Source: UBS, Barclays Capital, MLC Investment Management
6. Figure 5     Source: UBS, Barclays Capital, MLC Investment Management
7. Figure 6     Source: Barclays Capital, MLC Investment Management
8. Figure 7     Source: Bloomberg, MLC Investment Management
9. Figure 8     Source: UBS, Barclays Capital, IRESS, DataStream, MLC Investment Management
10. Figure 9    Source: Barclays Capital, IRESS, DataStream, MLC Investment Management
11. Figure 10   Source: Barclays Capital, IRESS, DataStream, MLC Investment Management
12. Figure 11   Source: UBS, MLC Investment Management
13. Figure 12   Source: Bloomberg, MLC Investment Management
14. Figure 13   Source: Bloomberg, MLC Investment Management
15. Figure 14   Source: Bloomberg, MLC Investment Management
16. Figure 15   Source: Bloomberg, MLC Investment Management
17. Figure 16   Source: Barclays Capital, MLC Investment Management
18. Figure 17   Source: Bloomberg, MLC Investment Management