


RESEARCH PAPER

PRODUCTS
(OF INTEREST)

Made your money in equities? Keep your money in bonds!

By Peter Dorrian, Head of Remarketing, PIMCO

Has the role of traditional fixed interest managers changed? This paper explores why it remains critical to have fixed interest in portfolios, both as a tool to lock in income and also as a defensive play. It asks "How do fixed interest managers keep pace with investor demand for greater returns, in a world where spreads are tight even in what are considered more risky securities?" Finally, it argues that with the prospect of rising inflation, declining GDP and a new Fed Chairman throwing uncertainty into the mix, perhaps locking in CPI + 4% isn't a bad thing!

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In the early days of superannuation, most funds used fixed interest as a defensive play and were generally happy to clip the coupon (receive interest payments) on a portfolio of domestic government bonds. Over the years, fixed interest strategies have evolved with innovations in the superannuation industry. This has been accompanied by a surge in investor demand for innovative strategies, new products, and, in the most general sense, active management. There has been a shift away from predominantly domestic bond portfolios to portfolios managed against a global bond benchmark. Many investors are also trying their hand at satellite allocations to fixed interest sectors such as emerging markets, high yield, inflation-linked bonds and commodities.

But now an even more dramatic shift is taking place. Where fixed interest was once thought of as a defensive asset class providing steady returns, some now view it as a source of added value over and above coupon payments. This shift in focus is challenging traditional allocations to the asset class, and both investors and investment managers are rethinking where fixed interest fits in a portfolio.

This paper argues that while the traditional role of bonds in an investment portfolio is still valid, the low return environment triggered by reduced risk in the marketplace has meant that investors' attitudes to traditional asset classes have changed. Investors are more interested in return seeking than risk minimising strategies. To meet this demand, innovative products are now being developed to shift the focus of bonds from a defensive play to a return-generating asset class. This paper discusses how two new strategies can be used to return CPI + 4% and how this fits into current portfolio construction techniques. The two new strategies are:

- to remove the constraint of a benchmark; and,
- to allow leverage as part of an absolute return strategy.

While these strategies will increase the risk beyond what has been typical for a fixed interest allocation in

a portfolio, they also have the ability to significantly increase return to account for that added risk. Further, as proposed by Grinold and Kahn (2000), the probability of a higher information ratio – the return discounted for risk – will be amplified if the investor employs a skilled manager with a wide range of sector expertise so the full fixed interest opportunity set can be exploited.

The role of bonds then – on the defence

Traditionally, bonds have played three key roles in an asset allocation strategy – to diversify risk, to preserve capital and to generate income. The nature of the asset class is such that it has the advantage of achieving these roles across a range of economic and financial market conditions that can cause wide fluctuations in returns from equities and other asset classes.

Diversifying risk

Predicting the future of any asset class is impossible, and a diversified portfolio is the most effective way to minimise risks associated with each type of investment. Bonds tend to perform well in periods of economic weakness, and can potentially offset the impact of an economic downturn on equities and other asset classes. Historically, a core allocation to higher-quality, intermediate-term bonds has substantially reduced portfolio volatility with only a modest impact on overall returns. A look at equity and bond returns over the past 20 years illustrates this point. Over the 20 years commencing June 1986, a portfolio of 60% stocks tracking the ASX 300 Index and 40% fixed interest tracking the UBSA Composite Bond Index provided 97% of the returns of an all-stock portfolio, with 36% less volatility.

Figure 1 (overpage) plots annualised total returns and volatility for various asset allocations over the 20 years to June 2006. It illustrates that a diversified portfolio of stocks and bonds can offer a better balance of risk and return than a portfolio of either in isolation. For example, a portfolio of 60% stocks and 40% bonds posted returns of 11.6% per annum over the period, only slightly lower than the 12% per annum return of the all-stock portfolio. But, the all-stock investor faced

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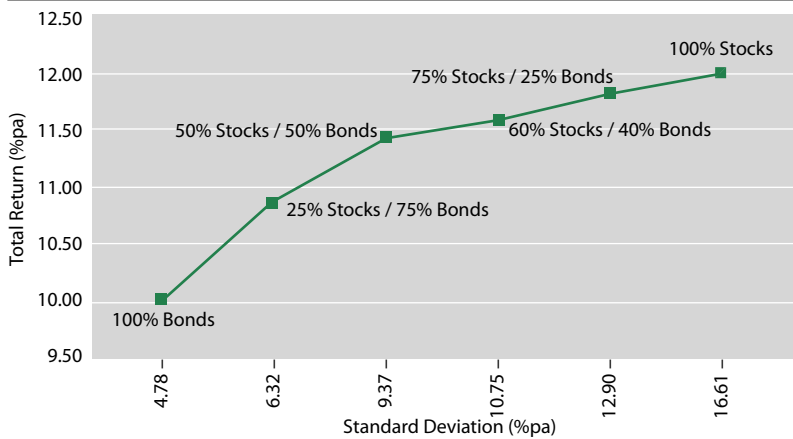
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greater volatility, risking market swings of often more than 15%, while the 60:40 investor risked swings of typically less than 10%.

The lower volatility of the diversified portfolio stems partly from the fact that bonds are typically less volatile than stocks. But, more importantly, long-term performance of a diversified portfolio is smoothed by

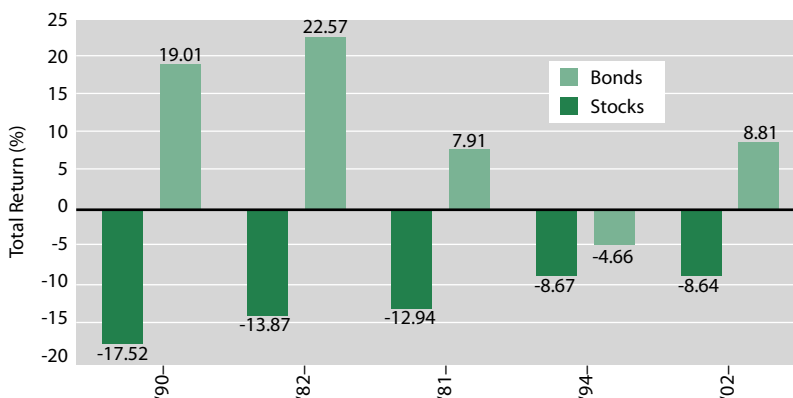
Figure 1: Improving the balance of risk & return – Jun 1986 to Jun 2006



Notes: Stocks represented by the S&P/ ASX 300 Index.
Bonds represented by the UBSA Composite Bond Index.

Source: S&P, UBS

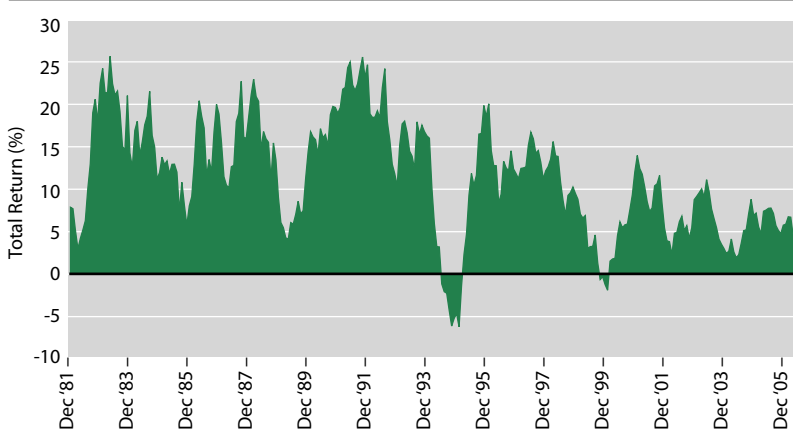
Figure 2: Five worst years for stock returns – Dec 1980 to Dec 2005



Notes: Stocks represented by the S&P/ ASX 300 Index.
Bonds represented by the UBSA Composite Bond Index.

Source: S&P, UBS

Figure 3: Bond market – one-year rolling returns – Dec 1981 to Dec 2006



Note: Bonds represented by the UBSA Composite Bond Index.

Source: UBS

the fact that stock and bond returns are negatively correlated, with returns frequently moving in opposite directions. Figure 2 shows that bonds returned an average 10.73% during each of the five worst years for stock returns since 1980. In 1990, the single worst year for equities in recent decades, the 17.52% drop in the ASX 300 Index was offset by a 19.01% rise in the UBSA Composite Bond Index. While in general, high returns are not perceived as a benefit of fixed interest, if an investor had held an equal portion of equities and bonds in their portfolio during three of the five stock market declines, fixed interest returns were sufficient to offset the negative returns of equities – bonds also have the potential to provide attractive returns.

Capital preservation

Fixed interest allocations are typically less volatile than stocks, and periods of negative returns tend to be short-lived and relatively modest. Further, bonds generally provide higher total returns than lower-risk, cash-equivalent investments. As an example, between 1996 and 2006, the UBSA Composite Bond Index outperformed the UBS Bank Bills Index, a common measure of cash performance. Bonds are one of the best ways to preserve capital in a portfolio, as the chance of a sharp or sustained price drop has historically been far less than for stocks. Periods of negative returns for the bond market have tended to be brief and relatively modest. Figure 3 shows the single worst bond market decline for any 12-month rolling period from December 1981 to June 2006 was -6.19%, far milder than the -39.89% recorded in the worst 12-month period for stocks. Over the same period, bonds produced positive results most of the time. Since 1981, returns from intermediate-term bonds have been positive in 96% of all one-year periods. The threshold period at which returns became consistently positive was just two years.

Income generation

Traditionally, investors have held bonds for income. A bond represents a loan an investor makes to an issuer – the investor can expect to receive a steady stream of interest payments for the life of the loan, as long as the issuer is not in default. The predictability of the payments has always been a central attraction for superannuation funds, as they can use the income to meet similarly predictable liabilities. Reinvesting the interest paid in bonds can increase capital over time, due to the effect of compounding. This can have the effect of maintaining total returns even if the return on capital depletes.

While rising interest rates tend to be damaging to bond prices, any negative impact of rising rates on bond total returns is normally offset by the benefit of reinvesting at higher yields. PIMCO has conducted extensive research in the US to illustrate the impact of changing interest rates on fixed interest returns. Figure 4 shows that even with a sharp 200 basis points increase in interest rates, total returns within five years approach those that may have been achieved had rates stayed

steady or fallen. For time horizons of seven years and more, rising rates lead to higher total returns due to the effects of higher income and compounding interest.

The times, they are a changin’

While diversification, capital preservation, and income generation are important aspects of investing and are still very valid reasons to hold fixed interest in a portfolio, the investment world has become far more dynamic in recent years. Witness the reduction of spread products’ volatility in the past five years – high yield spreads are below the historical average (Figure 5).

High yield bonds (known as junk bonds) are bonds issued by corporations that have received a rating below BBB- by Standard & Poors and/or below Baa3 by Moody’s – that is, below investment grade. Ratings agencies evaluate bond issuers and assign ratings based on their assessment of the issuer’s ability to pay the scheduled interest and principal payments. Issuers considered to have a greater risk of not meeting their repayments on a timely basis are rated below investment grade.

The level of risk an investor takes on when investing in high yield bonds is measured relative (as a spread) to Treasuries. The contraction in spread depicted in the Figure 5 to some degree reflects reduced levels of corporate default rates, especially for securities rated below investment grade. In the past, default rates for

below investment grade companies were in excess of 5%.¹ Now that corporate malfeasance seems to be contained, corporate defaults reduced significantly to less than 2%² in 2005, the lowest they have ever been.

Emerging markets – comprising those nations with economies considered to be developing or emerging from underdevelopment, usually including most or all of Africa, Eastern Europe, Latin America, Russia, the Middle East and Asia – are looking healthier than ever due to improvements in economic and credit fundamentals. More than 40% of external emerging market debt capitalisation is now rated investment grade.³ Figure 6 (overpage) shows the reduction in emerging market debt volatility.

Spread sectors are not the only area in which the current environment is markedly different from past periods. Steep yield curves, the result of investors demanding a risk premium for longer-term lending, are noticeably absent in the current environment. Figure 7 (overpage) shows the shift in the shape of the US yield curve over the past two years. In 2004, the short-term rate was 1% and the yield curve was steep. By mid 2006, the yield curve was flat with both short- and long-term rates at approximately 5%.

The above trends all point to a significant reduction in the perceived level of risk in the fixed interest market. This has caused investors to go searching for yield and thus, inadvertently, increase their risk appetites.

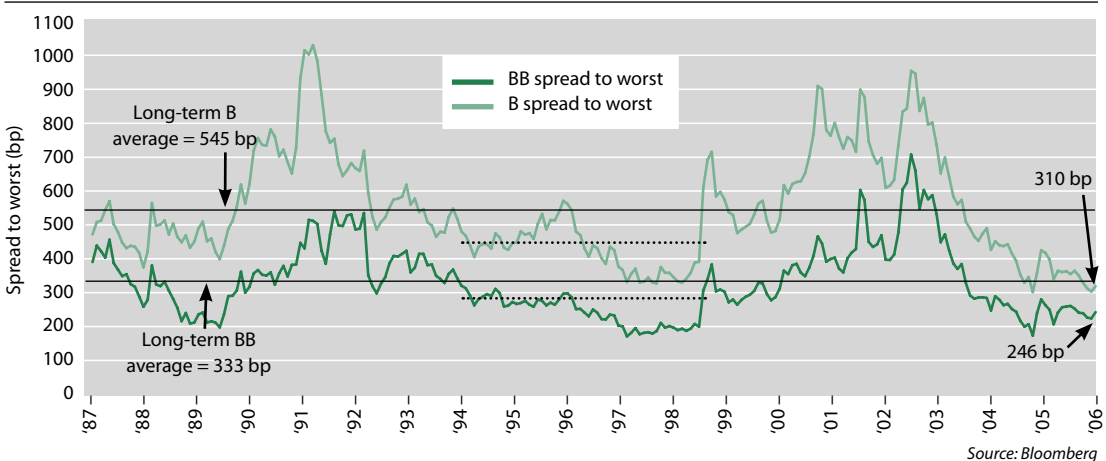
Figure 4: Effect of interest rate changes on annualised index returns over various time horizons

CHANGE IN INTEREST RATES	INDEX RETURNS (%PA)					
	1 YR	3 YR	5 YR	7 YR	10 YR	30 YR
+200 BPS	-2.39	4.03	5.27	5.76	6.90	6.45
+100 BPS	1.53	4.77	5.39	5.64	5.80	5.98
0 BPS	5.58	5.51	5.52	5.52	5.52	5.51
-100 BPS	9.55	6.21	5.63	5.40	5.23	5.04
-200 BPS	13.07	6.77	5.68	5.24	4.93	4.57

Note: Hypothetical example for illustrative purposes only.

Source: Citigroup Yield Book.

Figure 5: High yield (BB and B rated) bonds – yield spreads



Source: Bloomberg

Ferguson (2005) suggests that a strong indicator of the decline or perceived decline in risk is evident by the drastically low household savings rate in the US. At 1.1% of their income, US householders have freed up money for consumption by using the equity in their homes.

And, why wouldn't they? Despite the US Federal Reserve raising short-term interest rates at 17 consecutive meetings and the US housing market showing signs of cooling, the global economy seems to be performing nicely. To date, the main concern for markets seems to have been accelerating inflation accompanied by increasing rates. Many saw new US Federal Reserve Bank chairman Ben Bernanke's statement to the Senate Banking committee that "we essentially have removed that extraordinary degree of monetary accommodation and we are much more into a normal range of interest rates", as suggesting that the Fed will stop hiking rates. Bernanke seems to be suggesting that there is a lag effect from the hikes that has not been fully felt by the economy. Once these effects are felt, inflation will be contained.

In times of such economic uncertainty, it is even more important to have an allocation to bonds.

The role of bonds now – moving into offence

How can the divide between fixed interest playing a defensive role in an investment portfolio, and increased investor demand for return seeking investments be addressed?

Remove the benchmark

One way to solve this dilemma is to remove the shackles of a benchmark. In the current period of modest expected returns from traditional asset classes, it may be impossible to make the CPI + 4% return target many institutional investors are seeking, if constrained by a benchmark.

Using the last financial year as an example, if the objective of an active fixed interest manager is to generate an excess return of 1% per annum, and the benchmark returns 1.2%⁴ for the year, the investor is approximately 5% short of meeting their desired target. Moving away from the constraints of a benchmark will allow a good fixed interest manager to explore the full gamut of opportunities the fixed interest asset class now has to offer, while still maintaining the benefits bonds have traditionally afforded a portfolio. With an unconstrained universe, a skilled manager is able to invest in a diversified portfolio of fixed interest assets including, but not limited to, government bonds, inflation-linked bonds, investment grade credit, high yield debt, emerging market debt and commodities. Alternative asset classes such as emerging market debt and commodities are included in the manager's investible universe, as these sectors can produce returns more consistent with the current target, albeit with a substantial increase in volatility. It is therefore at the manager's discretion to include these asset classes in the fixed interest portfolio where it believes the associated risks are offset by reward. Thus, the manager takes on the asset allocation role that was traditionally the task of the investor – that is, choosing the benchmark, in addition to providing sector expertise, placing the onus on the manager to produce the target return.

Leverage in absolute return strategies

Another solution to boost returns from fixed interest is for managers to take an absolute return approach and use leverage to augment favoured positions. If the manager has a high conviction trade, exposure to it can be amplified by dialling up the leverage. To understand how this is achieved, it is first necessary to understand how the manager derives these positions.

Firstly, the manager needs to separate skill from the market risk – or simply put, alpha from beta. Alpha is the excess return, adjusted for risk, that an active manager seeks to add relative to a given market index by taking an overweight or underweight position relative to a benchmark (whereas beta is the risk and return produced by the market index or asset class itself). For example, assume a global portfolio is overweight duration by 0.5 years, with the alpha therefore representing the difference in return produced by the

Figure 6: EMBIG – one-month rolling standard deviation of daily returns

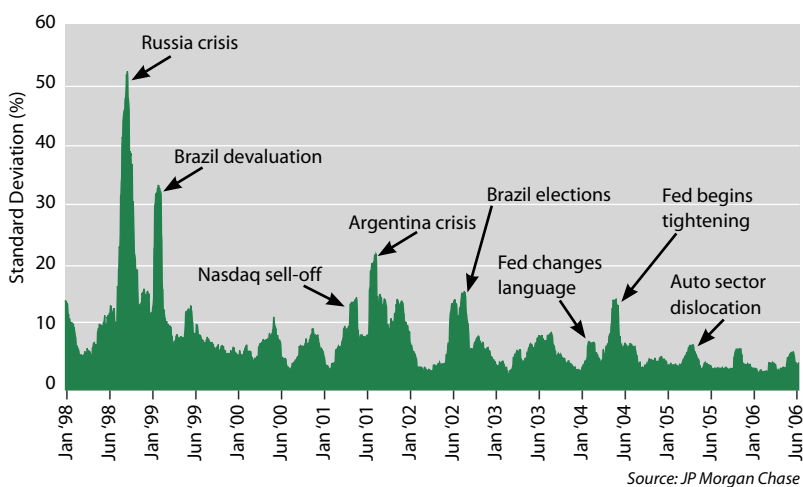
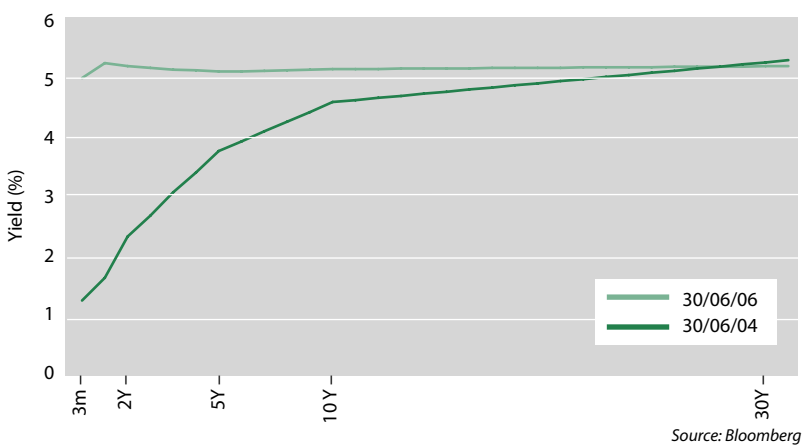


Figure 7: US Treasury Bonds – yield curve Jun 2004 vs Jun 2006



longer duration compared to that of the benchmark. Depending on the level of risk the investor is willing to take, this position can be leveraged by a factor multiplier. If the factor multiplier is five times, the absolute return portfolio will show an overweight duration position of 2.5 years. The manager will take a number of positions against a benchmark and then effectively remove that benchmark and dial up the exposure using leverage.

Both solutions have the potential to result in greater returns and enable the investor to reach the CPI + 4% target. While the risk as represented by standard deviation is definitely greater, at around a 7% to 9%, it is still well below the 12% to 15% introduced to a portfolio by an investment in equities.

Conclusion

The role of fixed interest in investor portfolios is evolving. Once considered the defensive asset class, the class investors fled to when risk in the marketplace became too great, now – with the perception that financial risk is the lowest in history – the function of a fixed interest allocation has needed to adapt in order to meet investor demands. Fixed interest managers have had to design innovative products that provide higher returns yet still retain the attributes for which bonds are traditionally known.

Given the current tight spread, flat yield curve environment, a return of CPI + 4% presents a difficult task for a narrowly defined fixed interest portfolio. If the investor is willing to allow the manager to allocate to the full spectrum of fixed interest sectors and/or employ leverage, there is a far greater probability of meeting this return target. In a world of expected lower returns, allocating part of a portfolio to an asset class that has the potential to return CPI + 4% is not a bad thing! This is particularly the case when you consider that the fixed interest asset class has traditionally been included in portfolios for its risk rather than return characteristics. Now may be a good time for investors to start thinking about moving money made during the equities bull market into the safer haven of bonds. ■

ENDNOTES

1. Moody's Investor Service.
2. Moody's Investor Service.
3. JP Morgan Chase.
4. Annual return as at 30 June 2006 of the Lehman Brothers Global Aggregate Index hedged in Australian dollars.

Ferguson, N., 2005, "Is the World a Riskier Place?", *Controversies that Matter for Markets*, Merrill Lynch.

Grinold, R. C. and R.N. Kahn, 2000, "The Fundamental Law of Active Management", *Active Portfolio Management*, Ch 6, p147.

ABOUT THE AUTHOR



Peter Dorrian has worked with PIMCO for the past eight years, initially as a consultant and adviser. In 2006, Peter joined the firm on a full-time basis as Head of Remarketing. He has strong expertise in investment markets, with almost twenty years experience in funds management. Since 2000, as Chair of the Investment Committee and Trustee Director, Peter has steered the assets of the (Zurich Australia-owned) Finium Super Master Plan, a \$A650m superannuation master fund with some 40,000 members. Prior to this, Peter was Director of Institutional Business with SSgA, and held similar roles with Rothschild and BT. He commenced his career as a superannuation lawyer with Jacques Martin after taking degrees in Economics and Law.

PIMCO is one of the largest specialist fixed income managers in the world, with more than \$US610 billion in assets under management and more than 800 employees in offices in Newport Beach, New York, Singapore, Tokyo, London, Sydney, Munich, Hong Kong, and Toronto. PIMCO is committed to being the best fixed income manager in the world. The investment approach emphasises active management, wide diversification and conservative risk-taking as the key factors in generating consistent returns. Its objective is to maximise total return while moderating volatility in client portfolios. PIMCO believes this low volatility outperformance objective is best achieved through wide diversification across bond market sectors, issuers, industries and countries within global markets. In implementing this process, it concentrates on top-down economic research to identify those factors likely to affect worldwide interest rates, and bottom-up credit analysis of individual bonds and issuers to identify the best values within and between sectors.