Original Article

Chasing contractual cash flows

Received (in revised form): 24th August 2011

William Nicoll

joined M&G (M&G Investment Management Limited) in 2004 and is Head of Alternative Structures. He is responsible for the development of various products including credit solutions for institutional investors, social housing and other aspects of non-bank lending. Before joining M&G, William was Head of European Credit at Henderson Global Investors and before this had worked at Cazenove & Co in corporate bond research and fund management. William graduated from Trinity College, Cambridge University with a degree in Natural Sciences. He is a CFA charterholder and a member of the Securities Institute.

ABSTRACT This article argues that pension funds need to re-evaluate how they invest in fixed income assets. The industry is currently heavily focused on reducing investment risk through benchmark investing. However, benchmarks may not offer investors a sensible level of risk, especially in fixed income markets where exposures may increase as companies borrow more, and therefore become riskier. Pension funds should look at their investment universe and make sure that they include fixed income assets that contractually provide them with the type of cash flows that they require to meet their liabilities. Long lease property is one such example.

Pensions (2011) **16,** 271–276. doi:10.1057/pm.2011.25

Keywords: bonds; inflation; fixed income; ABS; loans; social housing

INTRODUCTION

The effects of the financial crisis over the last 3 years have been fascinating. The Lehman Brothers default was one of those rare events that sharply and forcefully reversed entire market trends that had been developing for years.

Leading up to the height of the crisis, the financial environment had evolved to a point where investment and retail banks were becoming indistinguishable. Supposedly cautious fixed income investors were willingly bought subordinated debt from banks for a minimal additional return over that achieved by senior debt, working on the assumption that if banks were too big to fail then an investor should take on as much credit risk as was on offer.

During this period, fuelled by the growing use of off-balance-sheet vehicles, financial institutions became increasingly more indebted. Investors were happy to believe that these vehicles would never end up back on the banks' balance sheets and cause them any sort of problem. In retrospect, of perhaps even greater concern was that investors were effectively allowing their credit decisions to be made by rating agencies, with no regard for any potential issues such as regulatory interference or conflict of interest.

All of that changed quite dramatically. Since the Lehman Brothers' collapse, gone are the days when subordinated debt was a cheap source of funding – banks are now forced to issue equity. For investors, scrutiny of the ratings agencies has become an increasingly important part of their due diligence and indeed the quality of the rating agencies' research has improved as has their independence.

However, in many ways, we are still in the process of turning the supertanker that is fixed income investment around. Pension funds used to invest in public debt to acquire buy-and-hold investments that would fundamentally reduce the

Correspondence: William Nicoll
E-mail: consultant.relations@mandg.co.uk

risk of their pension scheme not meeting its liabilities. This approach meant that a steady contractual cash flow (only breakable by default) provided pension funds with exactly what they required – enough income to pay pensions.

Since then, unfortunately for pension funds, the nature of fixed income investing has evolved to resemble something altogether different and, from many a Trustee's point of view, more complicated. The industry has largely moved towards benchmark-style investing, partly on the assumption that investing in a diverse index will lower investor risk by reducing volatility through diversification.

The problem with this approach is that benchmarks are not necessarily set up to provide the right cash flows to pay pension liabilities. Furthermore, the risks involved with benchmarking are all too often downplayed. A good example is the fact that a number of benchmarks – such as constant maturity indices and indices that are structured to hold higher-risk debt – actually incur artificially high levels of volatility through the way in which they are compiled.

We believe that the future for pension funds may be closer to the model of the 1980s than that of the pre-crisis years. It seems a more diverse world of fixed income opportunities is returning, as private lending, debentures and secured funding all play a more important role in financing European companies, governments and infrastructure. We are seeing entire industries that require funding fall away from the investment and retail banks, as new financial regulation takes effect and the banks' own cost of capital increases. In some cases, we are also seeing the creation of an opportunity for different lenders to step in –for example, pension funds – and fill this funding gap through direct lending – a role that they traditionally filled before the 1980s.

Our view is that pension funds need to reconsider the position of fixed income within their portfolios and expand their universe of investment. The first step is to look for contractual returns that will beat scheme liabilities in a safe and secure fashion, and we have some thoughts on how to achieve that.

THE PROBLEM WITH BENCHMARKS

Benchmark investing is not a perfect solution for pension funds. Schemes require returns from investments that can hedge against the inflation and interest rate risks to which their liabilities are subject. Diversifying through a benchmark may reduce investment risk if the underlying assets are not all highly correlated. However, there is no guarantee that the composition of bonds within a particular index will adequately match pension fund liabilities.

Indeed, an investment in a benchmark index leaves the scheme susceptible to subsequent changes in the benchmark composition. This is illustrated in Figure 1, which shows the composition of the Merrill Lynch Sterling Non-Gilts Index over 1999–2011. During this time, Tier 1 bank debt grew from an insignificant proportion of the index to a peak of over 5 per cent in 2007. Much of the fall since then has been due to lower market prices, but there has also been no new issuance.

This has more fundamentally increased the risk in the benchmark that was not picked up by most funds. More importantly, fixed income benchmarks act very differently from benchmarks in the equity markets, but not all investors take this into account. Bond benchmarks reward consistent and large issuers with the best pricing, meaning that issuance becomes easier the more often it is done. In some cases, such as in the growth of Tier 1 and Upper Tier 2 issuance, this can add to the risk of the index as a whole. Also, the most indebted issuers comprise the largest proportion of bond indices – simply by having the most bonds – and therefore the most debt – outstanding.

Rather than relying on benchmarks for guidance, pension funds could look for fixed income assets that contractually provide the income to pay their liabilities, and assess the risks very carefully before purchasing such assets. Given the uncertain macroeconomic outlook, we believe that assets senior in the issuer's capital structure, which are secured against collateral, are of primary importance when seeking secure returns. Using this approach means that risk measures that attempt

 © 2011 Macmillan Publishers Ltd.

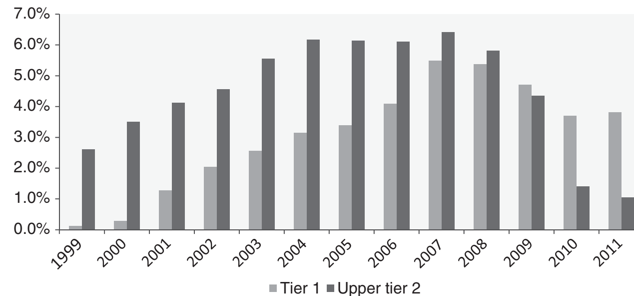

Figure 1: Merrill Lynch sterling non-gilts index.
Source: Merrill Lynch, Bloomberg.

to model volatility of returns such as standard deviation or value-at-risk are unhelpful, as they do not allow for the inherent differences in recovery rates that exist when investing in separate parts of the capital structure.

FLOATING-RATE AND INFLATION-LINKED ALTERNATIVES

At the height of the financial crisis, a part of the monetary policy response in the United States, United Kingdom and Europe was to lower official interest rates aggressively. Fixed-rate government bonds in each region performed strongly, as the price of a fixed-rate government bond is inversely related to interest rates. It is frequently argued that yields in each region cannot now go much lower as bond yields are observably anomalous compared with historical values, and it is therefore reasonable to assume that in the long term they will have to increase.

Some predicting high levels of inflation and aggressive interest rate hikes have argued that the fixed income market is currently in a 'bond bubble'. It is important to note that floating-rate and inflation-linked fixed income investments will not fall in value if interest rates and inflation rise significantly (as opposed to fixed-rate bonds).

Furthermore, inflation-linked assets have historically performed better than equities during periods of stagnant growth and high inflation, and floating-rate bonds have also typically performed well during these periods, reflecting how important it is to treat the various bond types differently.

Given the above, assets that provide protection against increases in inflation are perhaps more natural investments for pension funds, owing to the significant proportion of contractual RPI-linked liabilities held by most schemes. However, with one of those assets, 30-year inflation-linked gilts, currently offering a real yield below 0.5 per cent per annum, we believe that pension funds should look for alternatives to the inflation-linked gilt market to meet these future liabilities. Moreover, where possible, schemes should look to invest in senior debt, secured against collateral, so that in a worse-case scenario of a default, potential losses are minimised.

We believe there are a number of alternative investment opportunities in the fixed income world that provide these favourable characteristics for pension funds and we will look at these in more detail below. The main case study is Prime Long-Lease Property, rented to high-quality tenants. But investments in the Social Housing sector, certain Asset-Backed Securities (ABS) and Leveraged Loans are also key examples.

CASE STUDY: PRIME LONG-LEASE PROPERTY

To invest in a long-lease property investment, an investor must purchase a well-located commercial property, occupied by high-quality tenants whose business models are, preferably, protected against inflation – an example being a large supermarket operator. The investor then receives income through the tenant's rental payments, which are contractually payable over a long-term lease

Table 1: Returns of property investment compared with those of bond investments

£100 investment at assumed market breakeven of 3.42%	*Income in year 1*	*Income in year 25*	*Cumulative income from years 1–25*	*Cumulative Income and capital repayment*
UK Treasury Index Linked Gilt 2036	30p	£1.61	£11.55	£111.59
Tesco Index Linked Corporate Bond 2037	£1.61	£4.52	£61.85	£161.89
Tesco Lease (property price falls to £0)	**£4.55**	**£10.19**	**£175.23**	**£175.23**
Tesco Lease (property moves with inflation)	**£4.55**	**£10.71**	**£175.23**	**£275.27**

Cumulative returns based on purchase of Tesco foodstore at a Net Initial Yield of 4.55% with a 25 year fully repairing and insuring lease to Tesco Stores Limited (guaranteed by Tesco PLC) with annual RPI rental increases (based on data at the time of the acquisition of property by M&G in Q3 2010) and Tesco 2036 index-linked corporate bond and UK Treasury 2037 index-linked gilt (both bonds based on data at August 2011).

Source: M&G, Bloomberg.

(for example, 25–30 years), and will increase explicitly with inflation.

Rental payments are contractually agreed cash flows backed by contract law. They are designed to meet inflation-linked liabilities, and as they are not liquid investments they are suited to investors looking to invest for the entire lease term. Long-lease investments are typically structured to protect the investor against deflation, by revaluing at between 0 per cent and 5 per cent per annum, meaning that they will not protect investors against hyperinflation unless the property value increases at the same rate.

As the investor has purchased the underlying property, they can effectively be seen as being secured against it. That is to say, if the tenant goes bust, the property can either be sold or re-let to a competitor. Furthermore, unlike a bond investment, this arrangement allows for the possibility of a capital gain, should the property increase in value over the term of the lease. This compares rather favourably with the process that follows a corporate bond default, one that has historically provided investors with approximately 40 per cent of their initial investment on average and no further income.

Long-lease property investments can be seen as an alternative to investing in inflation-linked corporate bonds. Inflation-protected corporate bonds are occasionally issued into capital markets by corporations whose business models are inherently protected against inflation. Prime examples of such issuers are utility companies or supermarkets. Inflation-linked bonds issued by these companies are typically swallowed up by buy-and-hold investors and not traded in the secondary market at all, meaning they are exempt from the volatility of much of the bond market. They can therefore be attractive assets for pension funds to hold, provided the issuer's credit quality is adequate. It should be remembered, however, that inflation-linked corporate bonds in the public market are not secured against collateral.

Table 1 demonstrates the returns of:

(a) a long-dated index-linked gilt;
(b) an index-linked corporate bond issued by Tesco; and
(c) a long-lease property investment in a Tesco supermarket.

We have assumed a constant level for the Retail Price Index, in line with current market expectations (determined by the 30-year inflation breakeven at time of writing), and that interest payments and capital payments increase with inflation. In the case of Tesco's corporate bonds, this assumption is backed by contractual law. However, in the case of the long-lease property investment, there is no guarantee that the Tesco building will move in value with inflation, and therefore the table takes into account the possibility that the property loses its entire value over the 25-year term. As demonstrated by the figures, under the stated assumptions, the returns of the property investment are very attractive

 © 2011 Macmillan Publishers Ltd. 1478-5315

compared with the bond investments, even when the value of the property falls to zero.

OTHER OPPORTUNITIES

Social housing

Investments in social housing take the form of lending funds to Housing Associations (HAs) – the directly regulated entities that provide and manage all social housing across the United Kingdom. Close to 10 per cent of all housing in the United Kingdom is provided through these non-profit organisations, almost all lending to the sector is secured against certain properties, and significantly the sector is regulated, with particular focus on the economic stability of the HAs. Lenders have historically never made a loss when providing funding for regulated social housing groups, as the regulator has acted quickly and decisively to protect tenants and stakeholders in times of stress.

The rental income (much of which is provided directly from housing benefit) paid to the HAs is typically indexed to inflation, providing an inflation-linked cash flow to investors. An additional benefit for investors is that the HA will typically pay back the capital of a loan throughout its term, rather like a repayment mortgage, reducing the risk of a default on the whole notional amount of the loan.

This sector has historically been financed by banks, however with banks now less willing to lend for the 30–40 year periods that suit the social housing world, the sector may progressively look towards pension funds and insurance companies for funding.

Asset-backed securities

ABS bonds, particularly those backed by residential and commercial mortgages (RMBS and CMBS, respectively), may be particularly suitable assets for pension funds to hold, as their cash flows are typically floating rate. Unlike regular corporate bonds (or even covered bonds), the assets, which are issued through special purpose vehicles, are not typically liabilities of the originating bank and are usually structured to be bankruptcy remote. Investors are explicitly secured against the underlying assets and the process following a default is clearly mapped out.

Moreover, credit spreads on ABS have, since 2008, been significantly wider than spreads on unsecured bank bonds. It is arguably a perverse outcome that investors are being paid more to hold a secured asset than they are to hold an unsecured one. There are two reasons for this: the first is their association with the US ABS market and the sub-prime crisis. The second is that the assets are often highly complicated structures requiring significant resources to adequately analyse.

However, the European ABS market as a whole has behaved very differently to its US counterpart. Since the onset of the crisis, the default rate on US ABS has been over 5 per cent, whereas in Europe it has been closer to 0.5 per cent. In recent investigations, we have found that RMBS bonds are able to withstand a remarkable amount of stress before defaulting, and believe these securities exhibit desirable characteristics for pension fund investment.

Leveraged loans

The final example is senior secured company loans. Borrowers in this market are of comparable credit quality to those issuing high-yield (HY) bonds. But loans are secured against certain company assets and are senior to HY bonds in the issuer's capital structure. As the European loan market is also not part of the public debt market, investors are privy to private information that public investors do not have access to. Loans also pay floating-rate cash flows, whereas HY bonds are typically fixed rate in nature.

The seniority and security of the investment helps mitigate credit risk, as demonstrated by historical recovery rates, typically around 70 per cent, and no less in than 90 per cent in the case of M&G's senior loans. Furthermore, the floating-rate payments mitigate interest rate risk. Although less common in the European loan market than in the United States, interest rate floors, which are derivatives that ensure a minimum interest rate payment (for example, 2 per cent) can also be applied to loans, and these are able to hedge

investors against the event that interest rates remain low for a long period of time.

Before the height of the credit crisis, loans paid similar credit spreads to HY bonds (when measured on an asset-swap spread basis and excluding financials to ensure a like-for-like comparison), however, since the crisis, credit spreads on loans have comparatively widened. This is most likely due to loans' lack of liquidity compared with public debt. However, as liquidity is not such a concern for pension funds, the additional credit spreads could make this an attractive investment opportunity.

CONCLUSION

In summary, fixed income is an extremely important asset class for pension funds. Since the financial crisis, the market has been changing and we are seeing alternative opportunities within fixed income. A number of these could be attractive investments for pension funds and we believe that schemes should invest in these alternative products in addition to their benchmark funds.

Investments offering contractual cash flows are particularly desirable for trustees tasked with meeting their schemes liabilities. Each of the examples we have discussed provides contractual returns, and in many cases offers additional yield premia over more liquid assets, which is beneficial to investors who may not value liquidity. Pension funds are a natural example of such an investor, and therefore prime candidates to invest in these instruments.

Disclaimer This article reflects the author's present opinions, reflecting current market conditions, and are subject to change without notice and may involve a number of assumptions that may not prove valid. This is not an offer of any particular security, strategy or investment product. It has only been written for informational/educational purposes and should not be considered as investment advice or as a recommendation of any particular security, strategy or investment product. Information given in this document has been obtained from, or based on, sources believed by us to be reliable and accurate although M&G does not accept liability for the accuracy of the contents. Past performance is no guarantee of future performance. The value of investments can fall as well as rise. You should ensure that you understand the risk profile of the products or services you plan to purchase. M&G does not offer investment advice or make recommendations regarding investments. M&G Investments is a business name of M&G Investment Management Limited and is used by other companies within the Prudential Group. M&G Investment Management Limited is registered in England and Wales under numbers 936683 with its registered office at Laurence Pountney Hill, London EC4R 0HH. M&G Investment Management Limited is authorised and regulated by the Financial Services Authority. (2311/FI/0811).