

Bonds – getting better all the time?

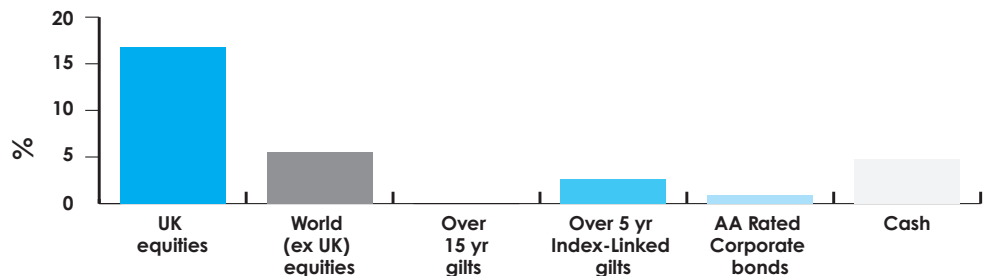
by Neil Higgins, Director Index Funds

For film goers the debate at the end of 2006 was “who was the best Bond?” For pension fund trustees the debate was more likely to have been was any bond any good given their relative performance compared to that of equity markets.

The answer, as it often is in debates, is “it depends”. For film goers it depends whether you prefer the ruggedness and greater realism of Daniel Craig to the glamour and slickness of one of his predecessors. For trustees it depends upon whether you were looking for pure performance or a correlation with changes in your liabilities. For those looking for performance, as the chart (fig 1) shows, 2006 was not a good year but for those more concerned that their deficit

did not deteriorate, markets were generally kind. The press is reporting that overall pension deficits of FTSE 100 companies reduced by more than £20 billion during 2006 to their lowest level since 2002. This was as a result of higher equity markets, improving discount rates used in the calculation of liabilities and cash injections from sponsoring employers. If the experience of FTSE 100 companies is mirrored by all schemes, 2006 could be regarded as quite a good year.

Fig. 1: Markets Returns 2006*



* as of 31 December 2006

Unfortunately, as experience consistently reminds us, “past performance is not a guarantee of the future” and unless steps are taken to hold the ground that has been gained by schemes gradually clawing their way out of deficits, the improvements of 2006 could easily be lost. No employer who has injected significant cash sums into the pension plan will want to see their effect wiped out by the vagaries of future markets. The week from the 26th February to the 5th March illustrates the impact markets can have. The major sell off of Chinese shares sparked widespread market falls that fed through to an estimated £15 billion increase in the deficits of FTSE 100 companies. (source: AON consulting). Fortunately there is a solution that can help – “Better Bonds”.

Better Bonds

Investment managers, such as Legal & General Investment Management (LGIM), have recognised the dilemma faced by trustees and have launched many new bond products to help. Whereas not so long ago LGIM only offered four gilt index funds and one overseas bond index fund, today it has 38 passively managed gilt, UK corporate and overseas government bond funds plus an extensive range of actively managed bond funds sufficient to meet trustee requirements.

The liabilities of any scheme will fluctuate according to a number of factors – the discount rate used, mortality, wage and price inflation, and changes in the marital/partnership status of members. For a scheme still open to new members, changes in the age

spread of the membership will also be a factor. Once a scheme has closed to new entrants and future accruals the degree of possible change reduces, which is why so many schemes are considering taking this step. The marital/partnership relationship is a factor not always recognised. It has added to many schemes liabilities in recent years as more partner benefits now have to be provided compared to a few years ago. The mortality of partners as well as members is, therefore, a critical factor as benefits have to be paid throughout the lifetime of the survivor. It is an interesting feature of many schemes how many partners emerge around retirement age!

The Equity to Bond Split

While it is not possible to mitigate against changes in all these factors it is possible to mitigate against changes in the discount rate and inflation. Most trustees will have discussed with their adviser, their actuary and the employer what proportion of their assets they feel should be allocated to equities and the amount to be allocated to fixed interest securities. That decision usually depends upon the amount of risk that the trustees are prepared to accept relative to the covenant of the employer and any promises in respect of future contributions he might have made. The amount invested in equities is typically referred to as the “return portfolio” as it will have the objective of achieving the best returns consistent with the degree of risk set by the trustees. Often the trustees will choose to diversify their return portfolio by incorporating alternative investments such as property. The return portfolio can be seen as that

part of the assets that might help claw back any deficit as a result of achieving greater returns than those assumed by the actuary in calculating the liabilities. The fixed interest assets, often referred to as the “matching portfolio”, need to be invested in such a way that they move in line with the liabilities thereby preventing any increase (and conversely any decrease) in the deficit. The key is to use the right bonds in the matching portfolio.

Government or Corporate Bonds

The starting point in choosing the right bonds is to assess the basis on which the liabilities are being calculated and if that is the basis against which matching is to be achieved. Many schemes are concerned with the FRS17 deficit that appears in their company accounts. If that is the basis against which matching is required then the yield on AA rated bonds is the critical factor. If FRS17 is not an issue and some other prudent basis is being used, as suggested by The Pensions Regulator in setting out his requirements for Scheme Specific Funding, then that should be the starting point. The old MFR funding included calculations based on the yields of over 15 year gilts and over 5 year index-linked gilts for example. That starting point will help the trustees decide whether they should have a bias towards gilts or corporate bonds in their portfolio. Corporate bonds offer the prospect of greater returns because of the risk of default and are, therefore, subject to greater volatility as the assessment of that risk, known as the credit spread, changes. FRS17 uses AA rated bonds as they are generally regarded as being a very acceptable compromise between

risk and return. AA rated bonds are typically bonds offered by the major banks and utility companies. LGIM offers a number of alternative corporate bond funds with different risk profiles but one of the most popular is the AAA-AA-A Corporate Bond - Over 15 – index fund because that is a good diversified alternative to an exclusively AA bond fund.

Higher returns can be sought by choosing a fund that includes BBB rated bonds, such as LGIM's Investment Grade Corporate Bond Fund but that will entail accepting higher risk because the chances of the risk of default are greater with BBB rated bonds. Alternatively, less risk may be taken by using a fund that

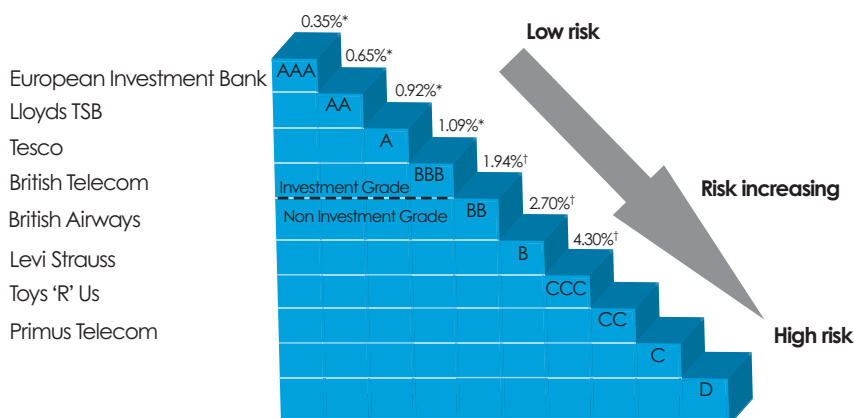
invests only in AAA rated bonds. These funds offer the prospect of higher returns over gilts but with minimal extra risk because they invest in bonds issued by organisations such as the World Bank, European Investment Bank and other state backed entities (fig 2).

If you wish to diversify your gilt and UK corporate bond investments into overseas markets, just as you would in an equity portfolio, you can choose to invest in overseas government bonds. This may, however, mean accepting some currency risk in some markets which may not be desirable in a portfolio where the aim is to minimise risk. Overseas bonds do, however, present an opportunity that

some trustees might find worth consideration if they feel there are some better fixed interest opportunities available outside the UK.

In putting together a portfolio it is also necessary to consider how much ought to be invested in index-linked securities that allow you to mitigate inflation risk. The amount that should be invested in index-linked will depend upon the proportion of your liabilities that are index-linked. Your actuary will be able to give you the appropriate figure. However, it is not absolutely essential to match that figure as the trustees may decide to invest in non-index-linked believing that they are currently better value. That means the portfolio will be carrying extra risk relative to the liabilities but it is a decision a number of trustees have made because they believe that currently you would be paying too high a premium for the inflation protection. There is no reason why the decision could not be changed if their views change at a future date.

Fig. 2: Corporate Bonds - Spreads



As at 31 March 2007
 Source: Moody's/S&P Ratings
 * iBoxx rating band spreads
 † Lehman rating band spreads

Interest Rate Sensitivity

Having decided the bias of your matching portfolio between gilts, corporate bonds and any index-linked split according to the basis of calculation of your liabilities and the amount of risk you might want to take on the variability away from that basis, the next step is to ensure that the impact of changes in interest rates is the same on your liabilities as it is for your matching portfolio investments. Your scheme actuary will be able to calculate a specific factor that indicates the sensitivity of your liabilities to an interest rate change. Every scheme will have a

different factor and it will depend on the stream of benefit payments the scheme can be expected to make in the future. The factor, known as duration, is conceptually very simple and there is no real need to understand how it is calculated. It is expressed in years and is best explained by using an example. A scheme with liabilities calculated to have duration of 10 years means that for every 1% change in interest rates the liabilities will change by approximately 10%. Thus if interest rates go up by 0.5%, you can expect the current value of liabilities to fall by about 5%. This is because the actuary would be able to use a higher discount rate to calculate the liabilities. Conversely, if interest rates fall by 0.5% liabilities will increase by about 5%. This is the reason why in 2006 so many scheme deficits have been cut. Quite simply the increase in long term interest rates has reduced the value of the liabilities.

If you want to protect your fund from falls in interest rates all that is necessary is to ensure that the duration of your

bond portfolio is the same as that of your liabilities. Any difference will result in your investments not moving in line with your liabilities. Of course if you protect your scheme from interest rate falls you are also sacrificing any advantage that you might gain from interest rate rises. For most schemes who are trying to recover deficits that is an acceptable compromise as it is more important not to have an increasing deficit than one that will fluctuate according to interest rate movements. In order to ensure that your bond portfolio has a similar duration to your liabilities it is not necessary to find a fund with an exact match. You can select a number of funds that when combined produce the relevant duration. LGIM has launched a number of single stock gilt funds and single payment corporate bond funds that are ideal for adjusting a portfolio to get the exact duration required. For example, if a scheme has liabilities with duration of 10 years and investment in an All Stocks Gilts Index Fund with duration of just over 8 years, it will be exposed to interest rate movements. By

combining that Fund with two others that hold the 2038 and 2055 gilts only (duration 17 and 21 years respectively) in a ratio of 85%/7.5%/7.5%, the scheme has a bond portfolio with duration of 10 years the same as its liabilities (see fig. 3).

In conclusion, unlike James Bond, today's investment bonds are very much the same as yesterday's bonds but they are now being packaged differently to meet the needs of trustees in their fight against funding deficits. All that they need to do is pick the right combination.

Fig. 3

Fund	%	Fund Duration (Years)	Duration Contribution (Years)
All Stocks			
Gilt Index	85	8.4	7.1
2038 Gilt	7.5	17	1.3
2055 Gilt	7.5	21.1	1.6
Total	100	-	10.0

Note:

If you would like details of LGIM's full range of bond funds and their respective durations please contact your usual Account Manager who will also be able to suggest alternative additional bonds for your bond portfolio to bring its duration into line with that of its liabilities.

The funds are all sections of the Legal & General Assurance (Pensions Management) Limited's unit linked life insurance policy only available to pension schemes. The investment management and marketing of the funds is delegated to Legal & General Investment Management Limited. Both companies are authorised and regulated by the Financial Services Authority.