MAKING THE SWITCH TO BONDS

JOHN RALFE OF BOOTS EXPLAINS THE TRANSITION PROCESS RETAIL GIANT BOOTS UNDERTOOK IN MOVING THE WHOLE OF ITS OF ITS £2.3BN PENSION FUND FROM EQUITIES TO LONG-DATED BONDS.

The Boots final-salary pension scheme is one of the 50 largest UK pension funds, with 72,000 members and £2.3bn of assets. As of April 2000, the assets were invested 75% in equities, 20% in short-term traded bonds and 5% cash, the average for UK pension funds.

Over the 15-month period to July 2001 the fund sold all its equities and short-term bonds and moved 100% into long-dated sterling bonds. They are all AAA/Aaa sovereign issuers and a very close match for the maturity and indexation of pension liabilities, with a weighted average maturity of 30 years and 25% index-linked bonds. The bonds are held passively, with no trading and automatic re-investment of net income.

This move by Boots from equities to matching bonds turns pension fund conventional wisdom on its head. For a generation the 'cult of the equity' appears to have served UK pension funds well, with an apparently reliable long-term outperformance from UK and world equity markets over the past 20 years (conveniently forgetting Japan, where the Nikkei is at the lowest level for many years). This outperformance of equities over bonds, or equity risk premium, is something UK companies seem to have been able to capture through their pension funds.

Despite UK pension practice, corporate finance textbooks support the opposite – that is, that pension funds should hold bonds, not equities. This has been reinforced over the past few years by a number of increasingly influential actuaries which have applied corporate finance principles to their actuarial work[1].

Pension fund equity investment poses a risk for shareholders, creditors and scheme members. Shareholders and creditors face the risk that the company has to make large and unexpected pension contributions to compensate for a pension fund deficit caused by market movements. Members face the risk of losing part of their expected pension if the fund is in deficit, the company is not able to make good any shortfalls and the company or scheme is wound up. Public concern about pension fund underfunding has been further fuelled by the Equitable Life scandal[2].

WHY THE MOVE FROM EQUITIES TO BONDS? Boots' shift from equities to matching bonds addresses these risks and is positive for the company's shareholders, bondholders and pension scheme members because:

- it reduces Boots' financial risk by matching pension assets and liabilities. Holding equities creates the risk of a deficit, because equity values do not move in line with the value of pension liabilities, with a deficit having to be met by increased cash contributions from Boots. The matched bonds move closely in line with the value of pension liabilities, significantly reducing the risk and potential size of any deficit. This is in line with the recommendations of the Turnbull Report on risk management;
- it fixes Boots' long-term contributions at their current level. Moving to 100%-matched bonds locks in a surplus of assets over accrued pension liabilities. This surplus is expected to maintain the long-term company pension contributions at £50m in real terms.
- it reduces management charges and dealing costs. The management fees and dealing costs for a £2bn largely equity fund are significant at about 0.5% or £10m a year. These have been reduced to £0.25m for the bond portfolio. The new strategy also reduces the costs of management time and effort by the company and trustees, including compliance costs; and
- it increase security for pension scheme members. Matching pension assets and liabilities increases security for members, since the value of assets should always be enough to pay all pensions, regardless of any movements in financial markets. Going well beyond the legal minimum underlines the importance the company places on its pension promise to pension scheme members.

'CONVENTIONAL WISDOM THAT EQUITIES OUTPERFORM BONDS AND THAT THIS OUTPERFORMANCE REDUCES PENSION COSTS, CRUCIALLY IGNORES RISK'

THE THEORY BEHIND THE MOVE

Before considering the practical issues we spent a long time applying corporate finance and treasury principles to the pension schemes.

PENSION FUND ASSETS AND LIABILITIES ARE ECONOMIC ASSETS AND LIABILITIES OF THE COMPANY.

- A final-salary pension represents deferred salary. In economic terms, the obligation to make payments from retirement to death is a liability of the company, since company pension contributions are on a 'balance of cost' basis, with the company obliged to make up any shortfall after member contributions and investment returns.
- Because the fund assets and liabilities are economic assets and liabilities of the company the risk of pension fund asset and liability mismatch is a risk for the company. Although in economic terms the pension fund is part of the company, the funds are, of course, legally separate from the company, since they act as security for members' benefits.

INVESTING IN EQUITIES IS A MAJOR ASSET/LIABILITY MISMATCH.

- As part of the company in economic terms, the pension fund's cost and risk should be managed as part of the company and part of the capital structure of the company.
- The previous Boots asset allocation of 75% equities and 20% short-dated bonds represented a significant asset/liability mismatch. Since this is something we would never consider in the company, why should we be comfortable with this mismatch through the pension fund?

INVESTING IN FINANCIAL ASSETS HAS ZERO VALUE.

- This is a familiar principle from treasury management – the expected cashflows from a financial asset discounted at the risk-adjusted rate equals the price of the asset. The equilibrium price of a financial asset in a liquid market is adjusted for all information and for all risk, with willing sellers and buyers operating at the margin. Another way of putting this is to say that £1,000 cash has the same value as £1,000 of equities or £1,000 of bonds. If we believe £1,000 of equities are worth more than £1,000 of bonds, we should sell bonds (or borrow) and buy equities until we reach the point of equilibrium.

CHANGING ASSET ALLOCATION IN THE PENSION FUND CANNOT ADD VALUE FOR SHAREHOLDERS.

- The Miller-Modigliani principle is also familiar from treasury management and states that, absent tax, changing the capital structure of a company – that is, its debt/equity mix, cannot add value for a company's shareholders. The increase in shareholder return from gearing is no more than a reward for taking higher financial risk.
- Holding equities in the pension fund is the same as the company borrowing and any extra return is simply a reward for extra risk. It is impossible to add value or reduce the pension cost by changing the pension fund asset allocation. The risk-adjusted equity risk premium is zero. Taking credit for the equity risk premium without taking risk into account is double-counting.
- By investing in equities through the pension fund, the company is doing nothing its shareholders cannot do directly. Shareholders should make and allocate decisions, not the company. The optimal capital structure of the company is determined by second-order effects, particularly the tax-deductibility of interest versus dividends.
- Pension fund asset allocation should also be decided as part of a decision about overall capital structure and on second-order grounds. The tax regimes in the UK and US strongly encourage pension funds to hold bonds and for individual shareholders to own equities directly.

PUTTING IT INTO PRACTICE

Having addressed the theory, what about the practice?

ACTUARIAL. We have been working with Bacon & Woodrow, the fund actuary, to ensure the April 2001 actuarial valuation is transparent and capable of being understood by anyone who understands discounted cashflow and secured lending. The liabilities of the pension fund are valued in the same way as any obligation to make future payments. Members' accrued pension rights are discounted at a market rate, in this case the AAA bond yield. The bond assets are taken at their market value, with a 5% cushion for re-investment risk.

ACCOUNTING. Current UK accounting regulations allows the economics of pension fund investment to be hidden. SSAP 24 keeps pension assets and liabilities off balance sheet, with values opaque, even to pension experts. The gains and losses from the asset/liability mismatch are hidden, with a smoothed p&l. Accounting gives the impression that pension fund equity investment has the superior return of equities, with the lack of volatility versus the liabilities of bonds. Such an instrument would be the philosophers' stone.

Boots has publicly supported the controversial new accounting standard for pensions, FRS 17, which values pension fund assets and liabilities on a market basis and makes movements in their value more transparent. Boots was the first major company to disclose its FRS 17 pension position on, in its March 2001 accounts. The move from equities to bonds was driven by economics, not accounting, but FRS 17 allows shareholders to understand clearly the reduction in risk Boots achieved.

RATING AGENCIES. The credit rating agencies are increasingly aware of the impact of a company's pension on its overall creditworthiness[3]. They have recognised that the Boots move to matching bonds has reduced risk. By reducing 'off balance sheet' risk we can increase 'on balance sheet' risk, within the same rating.

TRUSTEES. Boots' trustees took their own actuarial and legal advice. The trustees' legal advice was clear that, when considering asset allocation, pension trustees have a duty both to the members, since the assets act as security for their benefits, and the company, which provides the 'balance of cost'. Trustees have no duty to members to increase financial returns, since these largely benefit the company through contribution holidays and is likely to involve increased risk for members.

'LEGAL ADVICE WAS CLEAR THAT, WHEN CONSIDERING ASSET ALLOCATION, TRUSTEES HAVE A DUTY BOTH TO THE MEMBERS AND THE COMPANY'

COMMENT

MANAGING THE RISKS OF A PENSION FUND

Whether readers agree with Boots' approach or not, the key point must surely be that treasurers who do not already have an active interest in their company pension fund should do so. In some cases, the pension fund is larger than the market capitalisation of the company, and contributions are therefore relatively significant in the context of the company's cashflow. In addition, the company now needs to deal with accounting risk arising from the move to valuing pensions on a market value rather than a long-term acturial basis.

Most companies with immature schemes would take the view that their time horizon is long enough to accept the risk of equity investment to earn the additional return usually expected relative to bonds. That the risk associated with equity investment will now be disclosed should not change the strategy. However, those companies with loan documentation containing financial covenants that include gearing or minimum net worth may find that the accounting risk is too great under FRS 17 for their pension funds to accommodate a high level of equity investment.

We do not know the maturity profile of Boots' fund, but if it is mature it would be making the shift to bonds as a normal part of risk management. If it is not mature, then Boots runs the risk of needing a higher level of contributions in the long term than one would usually expect to be the case for a fund heavily invested in equities. This is the cost of taking a low-risk stance. Of course, what was 'normal' over the past 30 or 40 years may no longer apply and the risk/return trade-off may have changed, but it would be odd if, in the long term, a higher risk strategy did not earn a premium. It is worth noting the size of the management fee saving that Boots have achieved through simplicity; control of fund managers is perhaps the most important issue in pension funding after asset allocation.

It should also be noted that the ability of other companies to follow Boots' example is limited by the short supply of suitable bonds to invest in.

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TRANSITION MANAGEMENT. Legal & General Investment Management (LGIM) was appointed as transition manager by the trustees, selling equities on a mechanical basis over 15 months, at an average FTSE level of about 6,000. (Since we sold equities into a falling market the tactical timing was good, but the strategy is about reducing risk, by matching assets and liabilities, not about outguessing the market). LGIM also bought more than £2bn of AAA/Aaa sovereign bonds for the fund, at a material spread over gilts, including over £500m of index-linked bonds.

Boots Pensions bought the whole of the first indexed-linked AAA/Aaa issue, a £100m 2030 deal from The World Bank in August 2000. Royal Bank of Scotland (RBS) brought this deal and also played a key role in getting access to other AAA/Aaa bonds, along with Barclays Capital.

As the company member of the three-person pension trustee investment committee I was in continuous contact with LGIM, RBS and Barclays Capital to ensure we were getting the best bonds, in terms of name, maturity and spread over gilts. Most of the bond purchases were new issues from medium-term note (MTN) programmes, which RBS and Barclays Capital were able to access knowing our particular requirements.

PENSION FUND RISK. Conventional wisdom that equities outperform bonds and that this outperformance reduces pension costs, crucially ignores risk. The equity risk premium is a reward for risk, not a 'free lunch'. Pension fund risk has been opaque to shareholders, creditors and pension scheme members because of poor accounting and disclosure requirements. Pension scheme risk will become more apparent over the next three years as FRS 17 is adopted by all UK companies, and shareholders, creditors and pension scheme members will expect it to be properly managed.

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NOTES:

1 See in particular Exley, CJ Mehta, SJB and Smith, AD (1997), *The Financial Theory of Defined Benefit Pension Schemes*, *Institute of Actuaries*, 28 April 1997. Gordon, T. (1999), *The Price of Actuarial Values*, Staple Inn Actuarial Society, London, 16 February (www.sias.org.uk-papers-cdfpaper.pdf).

2 Concern about solvency levels and the impact for members has reached the popular press – for example, 'How safe are big company pensions?' (*Daily Mail*, 15 August 2001); 'Leading firms face crisis on pensions' (*Mail on Sunday,* 30 September 2001); and 'Blue-chip companies in pension fund scare' (*Sunday Express*, 14 October 2001).

3 For example, 'S&P examines pension concern after market falls' (*Financial Times*,3 October 2001) and 'Day of reckoning looms for final salary schemes' (*Financial Times*, 4 October 2001). Both articles are available on the *Financial Times* at www.ft.com. The $1.85bn deficit in Bethlehem Steel's pension fund was one of the key factors cited in its filing for Chapter 11 bankruptcy-court protection.

FURTHER COMMENT

If readers have any views on either this article or Helen Wilkinson's comment, please email the Editor, Mike Henigan at mhenigan@treasurers.co.uk, or Helen directly. Responses may be published in a further edition unless otherwise requested.