

Solvency protection for private pension systems – background note on United Kingdom perspective

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Introduction

The purpose of this paper is to outline the nature and method of operation of pensions protection mechanisms in the United Kingdom (UK). There is no pensions solvency insurance arrangement in the UK. Therefore it is important that these mechanisms are seen in the context of the other measures in place in the UK to protect the interests of members of company pension plans. Accordingly, Section 1 of this paper gives an overview of these measures. Section 2 gives details of the pensions compensation arrangements in the UK, while Section 3 gives background and technical detail on the UK minimum funding rule for funded defined benefit schemes.

This minimum funding rule (the 'MFR') is currently under review and a copy of the government's consultation document of September 2000 on this subject is appended to this paper.

1. UK COMPANY PENSION PLANS: MEASURES TO PROTECT THE SECURITY OF MEMBERS' BENEFITS

1.1 Overview of operation of company pension plans

The legal framework within which company pension plans operate in the UK includes Social Security law, trust law, tax law, contract law, employment law, the Financial Services Act and European Community law. The most recent major legislation is the Pensions Act 1995 which introduced a range of new requirements which are described in more detail below. The Pensions Act 1995 did not affect the overriding requirements of trust law. The vast majority of UK pension plans are set up under trust to provide security for the members by keeping the plan's assets separate from those of the employer and so that the plan can qualify for the tax reliefs granted by the tax authorities.

There is no single piece of legislation which lays down what a trust is or what its trustees must or must not do, although the Pensions Act 1995 introduces some specific requirements on pension plan trustees. In general, trustees are not expected to act as representatives of any particular sectional interest. It is their responsibility to administer the trust deed in accordance with the rules of the plan. They have a personal and fiduciary responsibility to invest the plan assets in a prudent way, in compliance with the trust deed and rules and they remain ultimately responsible for the sound management of the affairs of the pension plan.

1.2 **The Pensions Act 1995**

Until the mid-1990s there was no general system of supervision of pension plans in the United Kingdom although there were certain requirements laid down regarding authorised investment managers, actuarial valuations and the disclosure of information to members. There were also numerous statutory provisions for the protection of members but their enforcement relied upon the integrity of trustees and the legal rights of members.

Following the alleged malpractice in 1991 by the employer in the case of certain pension plans in the Maxwell business empire, the UK government of the day set up the Pension Law Review Committee (PLRC) in 1992 to report on the security of pension plan rights and to recommend any changes to the law which might be desirable to enforce such security.

The PLRC reported to the then Government in September 1993 with 218 recommendations covering a broad range of the operation of company pension plans in the UK. After a period of consultation many of these recommendations were incorporated, in one form or another, into legislation, with the passage of the Pensions Act 1995. This Act sets out a framework of responsibilities and powers. It also reaffirms the principle that the basic right and duty to run a plan lies with the trustees, who must ensure that the plan is well run and complies with the law. The main changes introduced are summarised below, and in Section 3, which covers in detail the Minimum Funding Requirement (MFR) for defined benefit schemes introduced by the Pensions Act 1995. Most of the provisions of the Pensions Act 1995 came into force on April 6 1997.

1.2.1 **The Occupational Pensions Regulatory Authority**

The Pensions Act 1995 set up a new independent body, the Occupational Pensions Regulatory Authority (Opra), from 6 April 1997. Opra's main role is to protect plan members' interests if the trustees of company pension plans do not meet their legal obligations, and to safeguard plan assets. It does not deal with individual retirement arrangements which are currently regulated primarily under the Financial Services Act 1986.

Plan auditors and actuaries are under a duty to inform Opra of breaches of the law. Anyone else, including trustees and employers, may also report their concerns to Opra. Its investigators are able to carry out on-site checks, even if no complaint has been received, but it does not ask for regular reports on plans on which no adverse report has been received.

Further information may be found on Opra's website (www.opra.gov.uk).

1.2.2 **Member-nominated trustees**

Plan members have the right either to choose at least one third of the plan's trustees or to approve alternative arrangements. A minimum of two trustees must be chosen (except for small plans with fewer than 100 members where at least one must be chosen).

Plans may devise their own rules for selecting member-nominated trustees. These rules must be approved by the plan members under a statutory consultation procedure.

Employers can propose alternative arrangements to having member-nominated trustees. Any proposal must be approved by plan members under the statutory consultation procedure.

1.2.3 **Plan administration**

The plan trustees are formally responsible for appointing the plan's professional advisers. Nearly all plans are required to have an auditor. Defined benefit plans must also have an actuary (see Section 1.2.4). Most plans will also require an investment manager and a legal adviser. Any custodians of the plan's assets must also be appointed by the trustees. If an adviser resigns, the trustees must obtain a written statement from them, setting out the reasons and any concerns or problems.

The Act requires employers to give employee trustees time off work with pay for training and to carry out trustee duties.

Certain people are automatically disqualified from being trustees of a plan e.g. the auditor and actuary are ineligible, as are people convicted of committing certain offences. Opra may also disqualify other people shown to be unfit.

Rules are in place regarding the keeping of books and records, including records of trustee meetings and about the safekeeping of plan assets. Strict provisions apply to plans with regard to payment by the employer to the trustees of contributions to the plan and the recording of payments due and received. The employer must pay the employees' contributions to the trustees within 19 days of the end of the month in which they were deducted from pay. The employer's contributions must also be paid by an agreed date. Any late payment must generally be reported by the trustees to Opra. If non-payment continues, plan members must be notified.

1.2.4 **Role of the actuary**

The key role of the actuary to a defined benefit plan is to monitor the funding position of the plan: the Pensions Act requires the trustees to obtain regular valuations from the actuary, including funding advice in relation to the MFR position (see Section 3) and advice in relation to the *maximum* levels of funding permitted by the tax authorities in order for plans to gain the available tax reliefs. As mentioned in Section 1.2.1, the actuary also has a statutory duty to report relevant breaches of the law to Opra.

The actuary will also be involved in advising the trustees on matters such as:

- the financial implications of changes in plan rules or individual augmentations of benefit;
- the certification of the basis of calculation of individual transfer payments from the plan; and
- advice in relation to the funding and investment implications of matters such as plan mergers or the winding up of the plan.

The actuary may also advise on the content of the Statement of Investment Principles (see Section 1.2.5).

1.2.5 **Investment of plan assets**

The trustees must ensure that the plan has suitable banking arrangements. Plan assets must be clearly identifiable and separate from the employer's funds.

Trustees may invest the plan assets as if they were their own, subject to their duty of care to act in the best interests of the plan members and the taking of proper advice from qualified advisers. It is a criminal offence under the Financial Services Act 1986 (FSA) for a person to carry out investment business in certain categories of assets in the UK unless that person is authorised or exempt. Although, technically, the trustees of a pension plan will normally be carrying out investment business, authorisation is not required if the day-to-day investment decisions are taken by someone who is authorised or exempt. The Pensions Act 1995 requires trustees of any plan which holds investments covered by the Financial Services Act 1986 to appoint a fund manager who is authorised or exempt under the Financial Services Act to carry out investment business. There must also be a formal agreement with the investment manager setting out the trustees' investment needs and responsibilities. For other investments it is necessary for the trustees to be satisfied that the person from whom they take advice has the appropriate knowledge and experience.

The trustees remain responsible for the overall investment strategy to be taken for the plan assets. Plans must prepare a Statement of Investment Principles, which is a written document setting out how decisions about investments must be made. In preparing this statement, advice must be sought from a person authorised under the Financial Services Act and the employer must be consulted. The trustees or their fund managers must organise the investment of the plan's assets in line with the statement, which must include details of:

- trustees' compliance with the need to diversify investments;
- the suitability of various categories of investments and individual investments therein;
- the types of investments to be held and the balance between them;
- the risks and expected returns;
- the realisation of investments, and
- ensuring compliance with the MFR (if relevant).

In general, no more than 5% of the plan's assets may be invested in employer-related investments, and certain arrangements between the trustees and the employer are not permitted (e.g. loans to the employer).

1.2.6 Disclosure of information

The Pensions Act 1995 has increased the amount of information which must be made available to plan members, their spouses and other dependants, prospective members and trade unions. In some cases, information is provided automatically, in others it is available on request or free of charge once a year. Much of this information is made available by issuing a plan booklet, together with updates in the trustees' annual report and accounts.

The trustees must obtain an audited set of accounts for the plan and produce an annual report within seven months of the end of the plan year, which must include a range of specified information relating to the financial affairs of the plan.

Members of defined benefit plans (including members with preserved pensions) are entitled to receive once a year on request a statement of their accrued benefits, including the benefits payable on death. The statement must also include information on the date pensionable service began (and ended, where appropriate), the accrual rate for benefits and details of any offsets, and the member's current pensionable salary.

The amount of the cash equivalent transfer value provided by the trustees of a defined benefit plan must be given within three months of a request and within ten days of the date at which it is calculated (the "guarantee date"). The value must be guaranteed for three months. If the transfer value is taken by the member, it must be paid within six months of the guarantee date.

Members of defined contribution plans should automatically receive a benefit statement at least once a year which should detail the contributions paid in the previous year and the transfer value available if that differs from the value of the rights.

The trust deed and rules of the plan and copies of the actuarial valuation report, the MFR valuation (see Section 3), the schedule of contributions or payment schedule and the Statement of Investment Principles must all be made available to members, dependants, prospective members and trade unions on request.

1.2.7 **Internal dispute resolution**

The trustees must appoint someone to whom members may apply if there is a dispute concerning the plan and must inform members who that individual is. If the applicant is unhappy with the decision reached, he or she can ask the trustees to confirm or revise the decision.

2. **PENSIONS COMPENSATION ARRANGEMENTS**

2.1 **Introduction**

One of the key recommendations of the PLRC (see Section 1.2 above) was for a compensation scheme to protect members of company pension plans from the defaults of those dealing with plan assets. Such a scheme should, the PLRC considered, be limited to loss resulting directly from fraud, theft and other misappropriations.

The PLRC specifically recommended the establishment of an independent Pensions Compensation Board which would have the sole right to decide whether compensation should be triggered in any particular case.

The Pensions Compensation Board (PCB) was therefore established by the Pensions Act 1995 to operate such a compensation scheme to cover losses resulting from the dishonest removal of assets from pension plans in cases where the employer is insolvent and unable to make good the loss. The compensation scheme came into force on April 6 1997.

The Board consists of a part time Chairman and two part time members. The Secretary of State for Social Security is required, under the terms of the Pensions Act 1995, to appoint the Board members after consultation with organisations representative of employers and employees respectively. Dr Julian Farrand, Chairman of the PCB, is also the present Pensions Ombudsman.

2.2 **The compensation scheme**

2.2.1 **When compensation can be paid**

The Pensions Act 1995 provides that the PCB can decide if compensation is payable, and to pay compensation where the employer is insolvent, providing the Board has *reasonable grounds* to believe that a dishonest act has occurred and that the loss resulting from the dishonest act took place on or after April 6 1997. The PCB must also be satisfied that it is reasonable in all the circumstances of each individual case that compensation be paid. Applications relating to dishonesty which took place before 6 April 1997 are not covered by the Act. A number of applications made to the PCB since it started its operations have been ruled inadmissible on these grounds.

Compensation is only payable if, for defined contribution plans, a plan has lost at least 10% of its assets or is, for defined benefit plans, below 90% of the MFR (see Section 3). In defined benefit plans compensation is limited to 90% of the loss, or the amount needed to bring the plan back to 90% of the benchmark funding level set by the MFR (see Section 3), whichever is less. In defined contribution plans, it is limited to the lesser of 90% of the loss or the amount needed to bring the plan back up to 90% of the assets held prior to the loss taking place. A number of changes are being made to these rules (see Section 2.4 below).

The compensation scheme is funded by an annual levy on all eligible company pension plans, calculated on the basis of the number of members. The levy is collected by Opra on behalf of the PCB. In addition to funds raised by the levy, the PCB also has the power, if needed for compensation payments, to raise funds from loans from recognised financial institutions subject to an upper limit of £15 million.

2.2.2 Who can apply and how

Trustees and members of company pension plans and their representatives can apply for compensation, which must be in writing. Such applications must generally be made within a year of the later of the employer's insolvency and the date on which the trustees, or the plan actuary or auditor, ought reasonably to have known that a loss had occurred.

2.2.3 Right of appeal

The PCB may review its decision on compensation if there has been a change in circumstances, new information has come to light or a clear mistake has been made in the PCB's original decision. Reviews are also possible for other reasons, at the PCB's discretion.

2.2.4 Payment and recovery

Before making a final payment of compensation, the Board must satisfy itself that no further cost effective recovery action can be taken. The Board may make payments in anticipation to the trustees in cases where the Board believes that the trustees would not otherwise be able to meet certain liabilities (for example, the payment of pensions), and that the application may fall within the compensation criteria of the Pensions Act 1995. The PCB may subsequently recover such interim payments of compensation if it decides that an application is not appropriate or that such payments are excessive.

2.3 **Operations to date**

No compensation awards were made by the PCB in its first two years of operation and the Board therefore decided that no compensation levy was necessary for 1998/99, 1999/2000 and for the current year, 2000/2001. The PCB's first award of compensation was made on June 14 1999. The sum awarded as an interim payment to the plan in question, £33,300, represented 90% of the losses claimed. The application for compensation was prompted by the wrongful payment of plan assets between one company and another. The Board decided that there were reasonable grounds for believing that the transfer of monies was attributable to acts constituting offences of dishonesty.

2.4 **Looking forward**

In December 1998, the government announced proposals for a number of changes to pensions as part of its programme of welfare reform, including improvements to the compensation arrangements.

The present compensation rules (see Section 2.2.1 above) could produce potentially very unfair results for members of defined benefit plans. When such a plan terminates, pensioners generally have priority over other members. Therefore in a mature plan, where many of the members are pensioners, active members could receive very little of their expected benefits.

For defined benefit plans, the calculation of the amount of compensation payable will be based more closely on the age profile of the members. So instead of limiting compensation to the amount needed to bring the plan back to 90% of the MFR for all the plan's liabilities, it will be increased to 100% in respect of pensioner members and those who are within 10 years of the plan's pension age (who have to be identified already for the MFR valuation) and 90% for the remainder.

This means that, when the plan's assets are allocated to meet individual pension rights, there will be a greater chance of providing younger members with a fair value of their pension rights, whilst preserving in full the level of pensions that are already in payment.

In defined contribution plans, compensation will be limited to 90% of the loss, but claims may be made in respect of any misappropriation of assets, not just where the loss is worth more than 10% of the fund.

3. THE MINIMUM FUNDING REQUIREMENT (MFR)

3.1 Background to and rationale for the MFR introduced by the Pensions Act 1995

There were two distinct reasons for the recommendation of the PLRC in September 1993 that a "Minimum Funding Requirement" should be introduced for most defined benefit plans.

Firstly, at that time there was no general statutory requirement for pension plans to fund their liabilities at all.

Secondly, although most plans did in practice set aside assets on a regular basis to provide funding for their liabilities, the PLRC noted that the typical actuarial funding methods and assumptions were long-term in nature. In other words, they were directed towards providing the benefits which were likely to emerge on the assumption that the plan would *continue*, rather than, necessarily, ensuring sufficient liabilities to back the liabilities on *discontinuance* at all times. The PLRC were concerned that members' accrued pension rights needed to be protected in the event of the employer no longer being there to meet any balance of cost.

A funding policy which is based on the premise that a plan will *continue* is quite different from one which aims to ensure sufficient assets at all times to meet the discontinuance liabilities. For example, a funding objective which is based on the assumption that a plan will continue, may allow investments in more volatile assets such as equities rather than UK government bonds or other fixed interest or index-linked assets.

Until the mid-1980's, this long-term funding approach did not usually affect the ability of a plan to meet its discontinuance liabilities. This was because the funding policy for a plan which was assumed to continue provided for a significantly larger liability than the discontinuance liabilities.

A combination of changes during the 1980's acted to reduce this funding margin. These changes included the introduction of statutory revaluation of benefits for those leaving plans before normal retirement age (an 'early leaver') which applied also, of course, to the plan's discontinuance liabilities and so led to a significant increase in the amount of their liability relative to the long-term liabilities.

In addition, during this time there had been a widening of the gap between the levels of returns to be expected from the equity-based portfolio of most ongoing plans and the fixed interest and index-linked investments which determined the premium rates which insurance companies were required to offer plans for taking over their liabilities on discontinuance. In practice this divergence of returns between the different asset portfolios of pension plans and insurance companies had led to a significant increase in the cost to pension plans of buying guaranteed immediate and deferred annuities to buy out their discontinuance liabilities.

All this meant that even plans which were comfortably funded according to their long-term funding objectives could no longer be sure of meeting their objectives if the plan were forced, suddenly, to discontinue. While the evidence available suggested that plans which were well-funded on an ongoing basis would be able to meet their

discontinuance liabilities, plans which were more marginally funded would have more difficulties on discontinuance.

In considering the consequences for plan members in this new environment, the PLRC took the view that, whatever might happen to the fortunes of the sponsoring employer, that members should always have sufficient confidence that their accrued liabilities within the pension plan could be met in full.

Since that confidence no longer existed in the new funding environment, the PLRC concluded that there was indeed a need for a new statutory minimum funding requirement. The PLRC gave considerable thought as to how this requirement might operate. To give an absolute *guarantee* to plan members that their benefits could be met at all times would mean that plans would have to hold sufficient assets at all times to meet the annuity rates offered by insurance companies. As noted above, for plans which invest in equities, such annuity rates are very expensive, since insurance companies themselves are required by the solvency rules to which they are subject to invest quite differently, in secure fixed interest and index-linked assets.

A funding requirement which aimed to give an absolute guarantee to plan members would therefore have significantly increased the funding costs of *all* pension plans. Such a cost was not felt by the PLRC to be justified on the grounds that it would have given poor value for money. A contrast was made between the extra cost to *all* plans of such a funding requirement and the benefits to be gained for members of the small minority of plans, which would *actually* discontinue. A further important consideration was that many insurance companies were no longer willing to offer deferred guaranteed annuities or would only do so at considerable cost.

Therefore the PLRC concluded that such a funding standard, while giving maximum security to plan members, would be too high a price to pay. In the end, the price would be met by plan members themselves because the operation of a pension plan was an entirely voluntary act by an employer. If the cost to employers became too high, because of an unduly onerous funding standard, they would tend to reduce the benefits provided or even discontinue their plans, and the effects of such a reaction would be felt by a much greater number of members than those actually subject to the prospect of their plan discontinuing.

The PLRC therefore considered a slightly less onerous funding standard but one which, nevertheless, would improve the security of the benefits of plan members.

The result of this consideration was the forerunner of what has now become the Minimum Funding Requirement (MFR). It was based on providing an equivalent amount of the early leaver transfer value for all members who were not yet pensioners. For pensioners, the original concept of annuity purchase with an insurance company was retained, at least initially. Subsequently a slightly less onerous requirement was introduced for very large plans (broadly plans which have pensioner liabilities of more than £100 million), reflecting the fact that such plans would be very unlikely to buy out their pensioner liabilities if the plan discontinued. It was not even clear that there would be sufficient capacity in the insurance market to take on such liabilities should such plans wish to buy out the liabilities.

In summary, therefore, the thinking behind the MFR is that it will provide plan members with a reasonable assurance, but *not* a guarantee, that, if the sponsoring employer becomes insolvent, the plan will be able to deliver the accrued rights. If the plan is at least 100% funded on the MFR basis, pensioners could expect their pensions to continue to be met in full, while younger plan members would be entitled to a fair actuarial value of their rights which they can transfer to another company plan or to another pensions vehicle, for example an individual retirement arrangement. This fair actuarial value is determined to give those who have not yet retired an even chance of getting a pension as good as that which would have been paid by the plan if it had continued.

The methodology and assumptions to be used for MFR calculations are tightly-defined in regulations and in a guidance note (GN27), issued by the UK actuarial profession, which, in accordance with the legislation, is approved by the Secretary of State for Social Security. Its use is mandatory on all actuaries undertaking MFR valuations. Further technical details of the methodology and assumptions are set out in Section 3.4.

3.2 Practical operation of the MFR and action to be taken if the plan fails to maintain an adequate funding level

The trustees of plans which are subject to the MFR must obtain an actuarial report every three years and a schedule of contributions which indicates the rate of contributions to be paid by the employer and the members over the next five years and the date on which these contributions should be paid. The schedule must always be certified by the actuary as being adequate to ensure that the plan will meet the MFR over the period it covers, or if the plan was below the MFR at the outset, it will meet it by the end of the period.

The rates of contribution payable will normally be agreed between the employer and the trustees, but the ultimate responsibility to put in place a schedule rests with the trustees. Opra may impose sanctions on trustees who fail to comply with the MFR requirements.

If a valuation shows that the funding level is below 100%, the schedule of contributions should be sufficient to restore the funding level to 100% over the five year period covered by the schedule. If a valuation shows that the funding level is below 90%, the schedule of contributions should additionally be sufficient to restore the funding level to 90% within 12 months. Cash injections, and certain alternatives such as bank guarantees, are permitted, with the agreement of the trustees.

The schedule of contributions must be reviewed annually (within 21 days either side of the date of the previous certificate) by the actuary to check that the contributions payable will meet the MFR over the period of the schedule. If the actuary is unable to certify it, either the rates of contributions must be increased to a level such that the actuary is able to certify it or a fresh valuation must be obtained.

If the trustees become aware of any event which may have a significant effect on the value of the plan's assets or liabilities and there is a serious risk that this might cause the plan to fail the MFR, or, if the plan is already underfunded, cause the MFR not to be met by the end of the period covered by the contribution schedule, they must consult with the actuary. If he or she is in agreement with the trustees' assessment, a full valuation must be undertaken within six months of the actuary giving their opinion.

In addition, should an MFR valuation show that a plan is in deficiency and the overall funding position is worse than that shown by the previous MFR valuation, the trustees are required to prepare a report to explain the deterioration in the funding level of the plan. The purpose of this provision is to discourage funding or investment practices which risk the MFR being breached. This report must be made available to plan members on request.

The full range of the MFR requirements are to be introduced with effect from April 2002. In the meantime transitional arrangements are in place which allow any deficiencies to be eradicated over the period to April 2007 rather than the five year period and any serious underfunding to be made good by April 2003.

If contributions are not paid in accordance with the contribution payment schedule, the trustees must generally report this both to the members and to Opra.

3.3 Operation of the MFR to date and review of the MFR

The actuarial methodology underpinning the MFR in relation to the valuation of *pensioner* liabilities, where the easement for large plans does not apply (described in Section 3.4), may be viewed as a "market-related" valuation methodology, in that the discount rates used to value future pension payments are determined by prevailing market yields on conventional or index-linked UK government bonds. The methodology adopted for the UK equity-related element of the valuation of non-pensioner liabilities is somewhat different. The operation of the "market value adjustment" (MVA) effectively means that the liabilities are assessed by reference to the *long-term* rates of return specified in GN27, while the assets are valued by reference to the future income stream generated by the notional reinvestment of the market value of the plan's assets in the FT-SE Actuaries All-Share Index, the benchmark UK equity index. A similar methodology is used in relation to the UK government bond-related element of the valuation of non-pensioner liabilities, assuming reinvestment in a suitable bond index.

This approach may be described as a "discounted income approach", and has been a standard actuarial approach in the United Kingdom. This approach to valuing the assets by reference to the future stream of income generated by them is seen as being consistent with the approach to valuing the future stream of pension outgo which constitutes the liabilities. It also enables funding calculations to be made on long-term assumptions which are reasonably stable over time.

When the MFR originally came into force on 6 April 1997, the relevant long-term assumptions in GN27 in relation to this discounted income approach were as follows (these are also set out in Section 3.4):

- assumed long-term total rate of return on UK equities: 10% a year (reduced to 9% a year before retirement to take account of the costs of transferring to an individual retirement arrangement); and
- long-term assumption as to the gross dividend yield on the FT-SE Actuaries All-Share Index: 4.25%.

As the total assumed long-term equity return can be expressed as:

[Assumed long-term gross dividend yield] plus [Assumed long-term dividend growth]

it can be seen that the original implied assumption as to long-term dividend growth was 5.75% (i.e. 10% less 4.25%).

Over the period since the MFR came into force on April 6 1997, a number of factors have served to prompt a review of the methodology and assumptions used.

When the MFR was first introduced in April 6 1997, pension plans were able to obtain 100% recovery of the tax paid by UK companies in which shares were held, in respect of the dividend income received by pension plans from those UK companies: hence the use of the *gross* dividend yield in GN27. This is no longer the case, following a number of changes to corporate taxation announced by the Chancellor of the Exchequer (the UK Finance Minister) in his Budgets of 2 July 1997 and 17 March 1998.

Accordingly, it has been necessary to replace the *gross* dividend yield specified in GN27 with the corresponding *net* dividend yield.

The change to the equity MVA set out in Section 3.4 was therefore implemented by the government and the actuarial profession with effect from 15 June 1998.

In March 1999, the government asked the UK actuarial profession to undertake a review of the MFR. The UK actuarial profession reported to government in May 2000, and this report was published in September 2000, together with a government consultation paper seeking views on the actuarial profession's report. The government's consultation paper is appended to this paper.

3.4 Technical note on MFR valuation method and assumptions

Assets

Generally valued at market values according to the latest set of audited accounts.

Liabilities

Economic assumptions

Pensioner liabilities are discounted at rates of interest equal to the prevailing yields on conventional or index-linked UK government bonds, depending on the nature of the pension increase provided by the plan. An easement for very large plans provides that pension payments falling due more than 12 years ahead can be valued by reference to UK equity returns provided that the first £100 million of pensioner liabilities is valued by reference to UK government bond yields.

Non-pensioner liabilities are determined from the deferred benefits prospectively payable from retirement age, on the assumption on termination of pensionable service on the date of the valuation. The deferred benefits are discounted by reference to assumptions about the long-term rates of return from investment in UK equities, with blending of returns from UK equities and UK government bonds in the ten year period up to retirement age. The long-term rate of return on UK government bonds was set at 8% a year and on UK equities at 10% a year. The UK equity return was reduced to 9% a year to take account of the costs of transferring to an individual retirement arrangement.

The liabilities calculated in this way are then multiplied by a "market value adjustment" (MVA), which is designed to adjust the liabilities determined on the long-term assumptions to reflect the prevailing market conditions.

The MVA in relation to UK equities was originally set as the ratio of 4.25% to the gross dividend yield on the FT-SE Actuaries All-Share Index (the benchmark UK equity index). For MFR valuations signed on or after 15 June 1998, the MVA is the ratio of 3.25% to the net dividend yield on the FT-SE Actuaries All-Share Index (see Section A.3).

Discretionary benefits are excluded from the calculation of the MFR liabilities.

Expenses and associated administration costs: 4% of the first £50 million of liabilities, 3% of the next £50 million and 2% of the remainder.

Demographic assumptions

Mortality before and after retirement: standard UK mortality tables PA90, rated down two years;

Proportions married: for pensioners, consistent with 80% (men) or 70% (women) at age 60; for non-pensioners, 80% (men) or 70% (women) at the assumed date of retirement or earlier death; and

Age difference between husband and wife: 3 years.