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RECENT DEVELOPMENTS IN LIFE OFFICE FINANCIAL REPORTING

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1. INTRODUCTION

"Behind the most ancient part of Holborn ... is a little nook called Staple Inn. It is one of those nooks, the turning into which out of the clashing street, imparts to the relieved pedestrian the sensation of having put cotton in his ears ... "

1.1 A Little Nook

In recent years, the Valuation Actuary has resided in a nook of relative immunity from external pressure to change. Once the changes of 1981 - 1983 were bedded in, and minimum solvency margins and maximum rates of interest ceased to be a novelty, the Actuary could crank the handle on the sausage machine every year and satisfy himself, his Board and the DTI that all was well with his world.

He could largely sit on the sidelines when the Financial Services Act was introduced, possibly dipping his toes into those muddy waters so far as to contribute some pithy prose to the With-profits Guide. If his accounting colleagues carried the burden, he could even let most of the ramifications of the 1990 tax changes wash over him, although a few minor tweaks to bases might have been necessary.

Admittedly, some fairly serious thought had to be given to resilience testing, to AIDS and to policyholders' reasonable expectations - and to embedded values if you had shareholders whom you thought might value an A$ or DM in the hand more than 10% of future reversionary bonuses in the bush. However, these things tended to come one at a time and could mostly be catered for by minor tinkerings to the sausage machine. All in all then, a relatively peaceful decade for Valuation Actuaries.

1.2 All Change

But alas no longer. The Insurance Companies Regulations 1994 has introduced significant changes to the statutory minimum valuation bases for the 1994 Returns. Simultaneously, some changes have been made to the format of reporting, especially certification. Then there are DTI proposals for a major revamp of the Returns from 1996.

1995 Companies Act accounts will have to comply with the Insurance Accounts Directive, as a minimum by means of the so-called Modified Statutory Basis. Proprietary groups are also developing plans to report, either instead or in addition, on an Achieved Profits basis (if the approach and, indeed, even the nomenclature can be agreed).

Then we have the Institute and Faculty working up proposals to require Dynamic Solvency Testing (to answer the question of what happens to the fund in different future scenarios) and Financial Condition Reports (which are formalised - and possibly DTI-viewable - reports to the Board of the outcome of valuations and DST).

Last but not least we have a Working Party examining replacements for the Net Premium Valuation. This thorny topic, with a longevity only exceeded by the search for the philosophers stone, now seems closer to solution. The race is on to gain acceptance for a method before business requiring a net premium approach ceases to be written!

1.3 Objectives of this Paper

Our paper aims to summarise the changes that will be required to reporting practices as a result of the above measures. For those measures which are already implemented, this will serve as a record of the changes and, hopefully, as a basis for a sharing of practical experiences (although no shame will attach to admitting that your 1994 DTI Returns are not quite finished when this paper is presented in early March).

For changes still to come, we have tried to highlight those issues which we ourselves have found interesting - or just plain difficult - from a practical point of view. We hope that in setting out our opinion and approaches we will stir the reader's imagination and assist the clarification of their thinking.

Above all though, we hope to stimulate discussion (criticism is just as welcome as empathy in this regard) particularly amongst the younger members of the profession who will have to crank the handle of the sausage machine we bequeath them well into the next century.

As always, the opinions in the paper are ours alone and not necessarily those of our employer nor, unless explicitly stated, of the actuarial profession. The paper also reflects legislative and regulatory developments as they stood in January 1995. Further change is inevitable.

1.4 Acknowledgements

To Charles Dickens for the quotations at the head of each chapter (from "The Mystery of Edwin Drood", chapter XI).

To numerous professional working parties and others whose reports at such geographically diverse but actuarially relevant nooks such as Harrogate, Heathrow and Blackpool have been drawn upon liberally. Any failure to report their work correctly is our fault and not theirs.

To Chris George, Julian Hance, William Hewitson, Peter Nowell, Roger Skillin, Jamie Woods and Peter Wright for their very helpful comments on the paper. Any remaining errors should be blamed not on them but on the cotton in the authors' ears!

Finally, to Lindsay Smith, for coping with our handwriting and obscure marginal instructions through many drafts.

2. INSURANCE COMPANIES ACT REPORTING - THE 1994 CHANGES

"... it is one of those nooks where a few smoky sparrows twitter in smoky trees ... "

2.1 The New Legislation

On 1st July 1994, the following three items of legislation came into force:

(a) the Insurance Companies (Third Insurance Directives) Regulations 1994, which amends inter alia the Insurance Companies Act 1982 ("The 1982 Act"),

(b) the Insurance Companies (Accounts and Statements) (Amendment) Regulations 1994 ("the Accounts and Statements Amendment Regulations"), which amends the Insurance Companies (Accounts and Statements) Regulations 1983 ("the 1983 Regulations"), and

(c) the Insurance Companies Regulations 1994 ("the 1994 Regulations") which supersede the Insurance Companies Regulations 1981 ("the 1981 Regulations")

The first of these has little direct effect on financial reporting. However, it introduces new requirements for sound and prudent management of insurance companies and for asset and premium adequacy which are reflected in consequential reporting changes (see 2.2.4). It also exempts EC and certain other countries' companies from, inter alia, most of the requirements of Part II of the 1982 Act.

It also gives to the DTI a new power of intervention in cases of concern. This is to require a company to furnish a report by an "actuary or accountant or other person with relevant skills" (new para (2B) of s44 of the 1982 Act). Presumably the person referred to is intended to be independent of the company.

Full details of the relevant changes to reporting requirements introduced by the other two sets of regulations are given in 2.2 and 2.3 below. Many other changes are introduced by these pieces of legislation. These are not addressed in this paper where we do not consider them to impinge directly on reporting requirements. In particular, the revisions to permitted assets for linked funds are not discussed.

We have taken into account the amendments to the 1982 Act made by the Insurance Companies (Amendment) Regulations 1994 and to the 1994 Regulations and the 1983 Regulations by the Insurance Companies (Amendment No. 2) Regulations 1994, both of which came into effect on 31st December 1994.

2.2 The 1994 Accounts and Statements Regulations

2.2.1 Disapplication to EC Insurers

Previously, an EC company transacting business in the UK via a branch was subject to Part II of the 1982 Act and so had to submit returns to the DTI. The 1983 Regulations exempted such firms from having to include details of other than their UK business, however. Firms from all non-EC countries were required to submit returns covering all their business.

Now, as mentioned in 2.1, such EC companies are no longer subject to most of the provisions of Part II of the 1982 Act. This includes being exempted from having to submit returns covering even their UK branch business (being subject to their home state requirements only). However, the Secretary of State may direct that companies from certain states remain subject to Part II of the 1982 Act in respect of their UK branch business if their home states have not implemented the 3rd Life Directive.

2.2.2 Information on Derivatives

Each Form 13 which is required to be completed must now be accompanied by new Form 13A. This requires the value of derivative contracts to be given, separately as to:

- whether they are assets or liabilities
- whether they are future contracts, option or contracts for differences
- whether they relate to fixed interest, equities, property, currencies or "other".

Adjustments for margins must be disclosed separately, as must any provisions for adverse changes in contracts which are liabilities. Except for the first returns under the revised regulations, the position at the end of the previous year must also be shown.

Derivatives used in connection with linked long term contracts and those which the 1994 Regulations require to be left out of account should not be included.

All amounts must be shown gross unless there is a legal right of set-off.

The total of derivative assets is then transcribed to line 35 of the appropriate Form 13. The liability total is included in Form 14 or Form 15 as appropriate at line 47 ("other creditors").

A statement must also be appended to the returns which set out:

(i) the "investment guidelines operated by the company ... for the use of derivative contracts"

(ii) the extent to which Form 13 and Form 45 (expected income from assets) would have differed if all open futures contracts were fulfilled and all options which it is prudent to assume will be exercised were exercised at the year end

(iii) if material, the extent to which the statement in ii) would have differed had it been required at any other time during the past year

(iv) the maximum exposure to any one counterparty both under existing market conditions and in the event of other foreseeable market conditions, again stating whether the answer would have been materially different at some other time during the year

(v) "the circumstances surrounding the use of" derivatives or contracts having equivalent effect which are not a permitted link and which the 1994 Regulations require to be left out of account.

Schedule 4 (abstract of the actuarial report) must now include, for each internal linked fund (although, erroneously, the explanatory note accompanying the Accounts and Statements Amendment Regulations - which has no legal force - refers just to "the long term fund"), a description of the investment guidelines of the fund, including the use of derivatives. It must also include a description of the method by which allowance has been made for derivatives when valuing the liabilities.

2.2.3 <u>Form Changes</u>

Those completing returns should be careful to note the changes to the forms themselves and to certain of the accompanying instructions as set out in Regulations 15 and 16 of the 1994 Accounts and Statements Regulations. Whilst these changes are reflected in the blank forms issued by the DTI in November 1994, the further minor changes in the Insurance Companies (Amendment No. 2) Regulations 1994 are not.

Line 87 of Form 13 (previously blank) now comprises those deductions (if any) from the aggregate value of the admissible assets required by regulation 57 (see 2.3.5 (iii)).

Some changes to instructions are merely cosmetic, others may influence the way in which some figures are now derived. In particular, subordinate loan capital allowed by a Section 68 order to count towards the minimum margin must appear in Form 10 and not Form 15, as must cumulative preference shares allowed to be ignored by Regulation 23(3) of the 1994 Regulations.

Form 45 now requires a note appending if the expected income from the variable interest securities and debts is not equal to the weighted redemption yield of those assets.

Form 49 requires a note of the value of rights under derivative contracts held by each internal linked fund.

2.2.4 <u>Certificates</u>

The Certificate of the directors must now additionally list any "published guidance" with which the "systems of control established and maintained by the company" comply or "in accordance with which the return has been prepared". The guidance referred to is that published by the DTI, although it may be appropriate also to refer to guidance published by professional bodies. So far, the DTI have issued "prudential" guidance notes on investment controls and valuation of assets.

Further notes on linked funds and on use of derivatives were, at the time of writing, in the course of development.

All four notes are briefly described in Section 2.4. The DTI have stated that compliance with the note on investment controls will not be required as at 31st December 1994 (as the note was only issued during December 1994) but that a "progress report" on implementation of adequate controls must be submitted to them by 31st March 1995. It would appear that certification of compliance with the note on valuation of assets will, however, be necessary.

The actuary's certificate must additionally confirm that the premiums for contracts entered into during the year, income thereon and other financial resources of the company available for this purpose are sufficient to meet its liabilities in respect of those contracts, in particular to establish adequate mathematical reserves. This is, of course, already implicitly the case due to compliance with GN1. In this context, it is worth noting that a new Section, 35B, has been introduced into the 1982 Act which requires a company to satisfy itself of the adequacy of premiums (when taken together with the existing resources of the company) before entering into a long term contract.

The actuary's certificate must now just "list the professional guidance notes which have been complied with". GN1 and GN8 are obvious candidates for listing. GN25 may also be appropriate. It is understood at the time of writing that the Institute and Faculty of Actuaries are considering developing a 'recommended' list.

The auditors' report may contain an explanation that, if it is the case, the information which they have received is inadequate for them to express an opinion on whether it was reasonable for the directors to make the statement on compliance with published guidance referred to above.

2.2.5 Transitional Provisions

New format returns must be submitted for all financial years ending on or after 1st July 1994. For year ending before 1st July 1995, the prior year's figures required by Forms 10, 13 and 15 may be completed in the old way, provided that it is stated that the figures are not comparable where this is the case. Reporting of past derivative exposures also only extends back to 1st July 1994.

2.3 The Insurance Companies Regulations 1994

2.3.1 Solvency Margins

Part IV of the 1994 Regulations equate to Part II of the 1981 Regulations ("Margins of Solvency"), with the following differences:-

(i) Solvency margin calculations are specified for the two new classes of business which some UK companies could conceivably now write though branches in other EC countries (Class VIII "Collective Insurances, etc" and Class IX "Social Insurance"). Neither of these classes of business can be written in the UK.

(ii) When determining the extent to which assets exceed liabilities, liabilities in respect of cumulative preference shares shall now only be left out of account up to either 25% of the required margin of solvency (if the shares are redeemable) or 50% if not.

No other changes are made in this area, although it is worth noting that the Third Life Directive requires the European Commission to have reviewed these regulations by 1996.

2.3.2 Currency Matching and Localisation

Part V of the 1994 Regulations (Currency Matching, Localisation) largely echoes portions of existing Part IV. New Regulation 30 exempts a company from having to match liabilities in a particular currency if the amount involved would be 7% or less of its remaining assets.

Matched assets in sterling may now be localised in any EC country rather than just in the UK and those in any other currency either in the country of that currency or anywhere in the EC. Further, business carried on outside the UK was previously exempted from the localisation provisions. Now this exemption applies only to non-EC business.

2.3.3 Valuation of Assets

Part VIII of the 1994 Regulations covers valuation of assets. The changes from existing Part V are listed below:

(i) the definition of "approved financial institution" now refers only to EC central banks and certain specified international bodies.

All other banks, and building societies, are now excluded. They are instead included under the definition of "approved credit institution" (if eligible).

This impacts upon the definition of "approved securities" which includes, as before, loan to or deposits with approved financial institutions. Bank deposits are therefore no longer approved securities. This means that they become subject to admissibility limits for the first time. The previous long list of other approved securities is now shortened by cross-reference to securities of Zone A governments (essentially full OECD members plus some others - a list can be obtained from the Bank of England).

(ii) it is made clear that "index-linked benefits" are not "property linked benefits".

(iii) conditions are laid down defining when a debt may be regarded as being secured (reg. 44(3)).

(iv) property-linked assets are now only exempted from the valuation of asset regulations to the extent that they match property-linked benefits (reg 45(2)).

(v) regard must be had to the underlying security of assets and, where appropriate the credit rating of the issuer, when assessing whether an asset must be valued lower than the regulations would otherwise prescribe (reg. 45(5)). Whether or not the insurer is from a Zone A country is relevant in assessing its credit rating. This is to reflect Third Directive requirements to discriminate (the DTI have promised to publish a list of "lower status" issuers).

(vi) shares in dependants must be valued ignoring any value arising from holdings in the parent (reg. 46(2)). The definition of "dependant" is brought into line with the Companies Act definition. This may result in additional holdings now requiring to be treated in this way.

(vii) Premiums outstanding for more than three months (including inwards reinsurance premiums) and subordinated debt from a company of which the insurer is a dependant are now to be left out of account. Rights under stock lending transactions are to be regarded as debts (reg. 48).

(viii) unlisted shares may be valued at market price if they are dealt with on a "regulated market", which is defined in reg. 44(1) in considerably more detail than the current "recognised stock exchange ... or stock exchange of repute outside the UK". Unlisted shares otherwise valued as a multiple of the price earnings ratio shall now be left out of account if they are not realisable in the short term.

(ix) similarly, listed debentures and shares are now also defined relative to a "regulated market". The definition of "listed" requires, inter alia, regular dealings. This is not necessarily the case for some securities previously regarded as listed (e.g. eurobonds) resulting in lower admissibility limits. An amendment is now in place restoring 'listing' to its old definition until 1st September 1995 (for admissibility purposes). By that time, the DTI hopes to have a more permanent solution in place.

(x) all debt, including listed debentures, having the effect of a derivative contract which could not be taken into account, can only be taken to have any value if there is an unconditional right to a specified amount (when the value should be the immediate assignment value of that right).

(xi) changes are made to the definitions of allowable life and reversionary interests (Regs. 49(2) and 54).

(xi) unit trust schemes recognised (as opposed to authorised) under the Financial Services Act may now be taken into account.

(xii) regulations concerning the valuation of derivatives are considerably expanded (see 2.3.4 below).

A prudential guidance note was issued in December 1994 by the DTI (see 2.4).

2.3.4 Valuation of Derivatives

For the first time, derivatives (i.e. futures, options, etc) are permitted to form a material proportion of the admissible assets (previously they have been limited to 0.1% of the long term business amount). Regulations are therefore required for their valuation:

(a) the concept of an "approved counterparty" is introduced, being an approved credit institution, firms exempt by s43 of the Financial Services Act (i.e. authorised to engage in wholesale market activities) or firms authorised by that Act to enter into unlisted derivative contracts as a principal

(b) the concept of an "approved derivative contract" is also introduced. This is either:

- a futures contract or option on assets all of which are within the scope of the valuation regulations; or
- a contract for differences under which amounts payable are calculated either by reference to in some aspect of assets within the scope of the Regulations or to a national index of retail prices of a Zone A country.

(c) only approved derivative contracts held to reduce investment risk or for efficient portfolio management may be taken into account. Further, they must either:

- be held in connection with other assets, or
- have "the equivalent effect to an approved derivative contract held in connection with such assets".

An asset which satisfied the latter bullet point would be a 'deposit' which returned, say, the larger of 90% of the amount deposited or that amount adjusted in proportion to the change in some index. This can have the equivalent effect to holding in cash 90% of the amount deposited and purchasing an appropriate call option with the residue.

Additionally, and so far as can reasonably be foreseen, the company should have assets which match its obligations under each contract, if applicable in the appropriate fund. DTI guidance on these matters is referred to in 2.4 below.

(d) an unlisted derivative may only be taken into account if it is with an approved counterparty and the insurance company reasonably believes that it can be closed out by entering into a further approved derivative contract with an approved counterparty

(e) for a listed derivative contract, the value is to be market value. For an unlisted contract the value is to be the price reasonably paid for closing out the contract. Any cash or assets (e.g. margin payments) already received in respect of the contract must be deducted.

2.3.5 <u>Admissibility Limits</u>

These, too, are significantly changed in their new guise (Reg. 57).

(i) "Maximum admissible value" is calculated as before as a percentage of the "long term business amount", such percentage being specified for different types of asset in Part I of Schedule 12 (Appendix 1 sets out the new percentages and compares them with the former Part I of Schedule 8).

(ii) "Aggregate exposure" to any type of asset means the value of all assets of that type which would be held assuming

(a) that call and listed put futures contracts are fulfilled

(b) that, if prudent to do so, options are exercised

(c) that contracts for differences are assumed to be made up of an equivalent combination of future contracts or options which are dealt with according to (a) and (b) above

(d) that assets transferred under a stock lending transaction are included

However, unless an unlisted "put" futures contract or option is with an approved counterparty and has less than 12 months to run, it is not to be assumed to be fulfilled or exercised. It is also understood that the DTI will issue guidance that it would not be "prudent" to assume that a company would exercise an option which would reduce its admissible assets.

Contracts which have, even partially, an equivalent effect to the contracts referred to in (a), (b) or (c) above must be treated in the same way.

The regulations also cover exposure to derivatives not in themselves allowable and derivatives having a market value in excess of that allowed to be taken into account.

If assets which have been taken as security for a debt are added to the aggregate exposure (whether in respect of a type of asset or an approved credit institution) and the maximum admissible value is exceeded, then the debt is regarded as unsecured to the extent of the breach. (Reg 44 (3) (b) and (d) (ii)).

(iii) If the aggregate exposure to assets of any one description exceeds the maximum admissible value for that type of asset, then assets to the value of the excess must be left out of account. If there are insufficient assets of that type (e.g. because the adjustment referred to in (ii) above are substantial), then the excess should be deducted from the aggregate value of the remaining assets taken into account.

A deduction should also be made for margin payments received in respect of derivatives not themselves allowable.

For example, assume a company holds shares in XYZ Limited worth 1% of the long term business amount and has an open futures contract to purchase further such shares worth 3% of the business amount. If the contract was fulfilled, the exposure would be 4%, 1.5% of which would be inadmissible. The 1% actual holding must therefore be left out of account and a further 0.5% of the business amount must be deducted from the aggregate value of the remaining assets.

(iv) Limitations do not apply to approved securities and interest thereon (as before) nor, now, to:

- debts due from reassurers
- those outstanding premiums which may be taken into account (the previous 30% of premium limit is no longer needed as a result of the limitation of allowable outstanding premiums, referred to in 2.3.3 (vii) above)
- "monies due from the Crown or any public body"
- shares in or debts due from a dependant
- a unit-trust falling within the scope of the UCITs Directive.

(v) Only paragraphs 12 to 14 of Schedule 12 apply to assets matching index-linked benefits. This prevents what might otherwise have been a severe problem for this type of business which may no longer be treated as property-linked. Some residual difficulties may remain if single counterparty exposure if high.

2.3.6 Offshore Business

Form 85 ("Analysis of gross premiums by authorisation class"), introduced in 1993, is now to be used only for business provided in a non-EC EEA state through an establishment in the UK. Business provided on a services basis in another EC state must now be listed on the new, slightly simpler Form 94.

UK companies writing long term business in another EC state through a branch in that state (and now supervised from the UK) must complete new Form 93, an abbreviated income and expenditure statement, in respect of that business.

All these forms must be submitted to the DTI in triplicate within nine months of the end of the year to which they relate, not as part of the normal annual returns. One copy must be signed by a director, a chief executive or the secretary of the company. A separate form is needed for each state in which business is transacted.

2.3.7 Determination of Liabilities

(i) Derivative Contracts

New Regulation 61 requires prudent provision to be made for obligations or potential obligations under derivative contracts (or debts which mirror such contracts). Regard should specifically be had to past volatility and the possibility of adverse changes in volatility of the underlying assets.

(ii) Valuation Methods

As before, valuation should be on actuarial principles with prudent assumptions. Moreover, regard must now be had to policyholders' reasonable expectations and margins for adverse deviation in all relevant factors must be included.

A prospective calculation separately for each contract is specified as the primary valuation method. However, a retrospective method can be used where a prospective method cannot be applied or where the results would be no lower than if one were. Approximations or generalisations may also be used where they are likely to provide no lower a result than individual calculations. Additional amounts may be set aside on a collective basis for risks which are "not individualised".

Methods and assumptions used must not be subject to arbitrary change from year to year and must permit the appropriate distribution of surplus over the duration of each policy.

Liabilities under with-profits contracts must take account of the level of premiums under the contract, the assets held in respect of those liabilities and the practice of the company in the manner and timing of profit distribution.

The net premium method is specified as the primary method for regular premium policies with benefits guaranteed from outset. However, an alternative method may be used if it would result in reserves no less, in aggregate, than if the net premium method were used. It is not explained how broadly "in aggregate" can be interpreted (e.g. policy type by policy type or across all business to which this particular regulation applies).

(iii) Rates of Interest

Gross yields now only have to be reduced by 2.5% rather than 7.5%.

The yield on variable interest investments other than equities or property (e.g. index-linked gilts) is now to be calculated as a gross redemption yield rather than a running yield. Certain assumptions are laid down about the future interest and capital payments to be assumed (Reg. 69(6)).

The cap of the yield on 2½% Consols is dropped but the requirement to adjust the yield for the risk of non-maintenance or default remains.

Gross yields in sterling obtainable on sums to be invested more than three years in the future must not exceed the lowest of:

(a) the FT-Actuaries' UK Government fixed interest 15 year medium coupon yield (G%).

(b) 6% + 0.25 x (G% - 6%)

(c) 7.5% p.a.

Linear interpretation should be used to obtain the yield applicable to sums to be invested within three years of the valuation date. Previously, a simple cap of 7.2% applied to all future assumed yields more than 3 years in the future.

Where liabilities are denominated other than in sterling, similarly prudent assumptions shall be made about future yields.

The overall limit of the weighted average adjusted yield on the assets remains with hypothecation continuing to be possible.

(iv) Mortality and Disability

Rather than to published tables and own past experience, reference is now made to prudent rates of mortality and disability for the 'state of the commitment'. The legal interpretation of this phrase is the country of normal residence for an EC citizen (irrespective of whether the proposal was completed in the UK or not) and the UK for all others. Clearly, however, regard must also still be had to published tables and own experience, where relevant, to establish prudence.

(v) Expenses

It is now specifically stated that the costs to be allowed for must be those prudently expected to be incurred in fulfilling contracts if the company were to close to new business in one year's time. Regard must be taken of recent actual expenses (as before) and to the effect of future inflation.

The DTI have made it clear that the way the regulation as now worded implies that provision should be made for any expected acquisition expense overrun in the coming year.

(vi) Assets

Prudent provision must be made specifically against future changes in the value of assets on both the ability of the company to meet its obligations as they arise and the adequacy of the liabilities as determined according to the Regulations.

2.4 DTI Prudential Guidance Notes

2.4.1 Investment Controls

This guidance, issued on 1st December 1994, is stated to be of relevance in the satisfaction of three revised regulatory requirements:

(i) the sound and prudent management criteria contained in new Schedule 2A to the 1982 Act

(ii) new s35A of the 1982 Act, which requires assets to be of appropriate safety, yield and marketability and appropriately diversified and adequately spread.

(iii) the new framework for the use and reporting of derivatives (see 2.3.4 and 2.2.2 above)

The following procedures must be demonstrated for compliance:

(a) the Board of the company should determine, implement and monitor an investment strategy reflecting:

    (i) the requirements of s35A

    (ii) the matching and localisation requirements of the 1994 Regulations

    (iii) the implications of s16 of the 1982 Act (e.g. not trading in investments in a way which might not be deemed to be for the purposes of insurance business)

    (iv) s29 of the 1982 Act (application of the life fund assets)

    (v) DTI Prudential Guidance Notes.

(b) Management control and information systems should be established to carry out the strategy and to enable the Board to monitor its progress.

(c) The Board should be aware of the responsibilities of the Appointed Actuary to advise on investment policy in accordance with GN1 and should ensure that he or she is in a position to do so.

(d) The credit-worthiness of counterparties (including reinsurers) must be regularly verified and systems must be established to monitor aggregate exposure (both to counterparties and to specific categories of assets) and to set lower limits than implied by Schedule 12 of the 1994 Regulations if appropriate. Further detailed guidance is provided in the note on this latter issue.

(e) Systems should be in place to ensure that linked liabilities are properly covered with permitted assets.

(f) Terms of Reference of a fairly specific nature should be produced for investment managers, even where these are 'in-house'. These will probably need to include specific category limits and any legislative constraints but should also bring out the desired risk/reward balance, taking account of liabilities and policyholders' reasonable expectations. Particular care should be taken when different organisations have responsibility for managing different parts of the portfolio. Adequate monitoring of compliance must take place.

(g) Special attention should be paid to the use of derivatives. In particular, the risks involved in their use should be assessed and regularly reviewed and their use should be consistent with the investment strategy. Further detailed guidance is contained in the DTI note.

(h) Appropriate resources must be allocated to these tasks.

(i) Last but not least, the Board must discuss all these matters regularly so as to be satisfied of compliance.

2.4.2 Valuation of Assets

Extensive guidance is given on the proper interpretation of Part VII of the 1994 Regulations, especially regulation 57 (admissibility) in general and its approach to debts and aggregation in particular. A number of useful examples are provided. We have incorporated some of the points into 2.3.3 to 2.3.5 but frequent direct reference looks like being the order of the day.

2.4.3 Linked Funds

In the main, the guidance is expected to relate to issues outside the scope of the paper. However, further light is likely to be shed on the implications of the valuation rules for index-linked business and for excess assets held in a linked fund (only material excesses requiring revaluation, for example).

Solvency margin considerations will also be addressed, including making clear that business which is dependent upon a reinsurer meeting its obligation to provide an investment return can in some circumstances be regarded as carrying an investment risk, and hence subject to a non-zero first calculation solvency margin even where no guarantee is given to the policyholder.

2.4.4 Use of Derivatives

DTI guidance covering the valuation of derivatives is expected to include interpretations of "in connection with", "reducing the investment risk" and "efficient portfolio management". It is understood that the first of these would be failed if, for example a put option on a particular stock was bought without holding the underlying stock or an appropriate future or call option (but that a put on an index would be OK if a reasonable spread of index stocks were held). A call option would fail the "test" unless sufficient liquid assets were held.

Reduction in investment risk is to be determined independently of the nature of the insurance liabilities.

Efficient portfolio management is expected to be defined as a transaction which helps a company progress towards its investment objectives:

(a) more quickly, or

(b) more easily, or

(c) more efficiently, or

(d) more cheaply (including tax-efficiently), or

(e) more flexibly

However, there must be no increase in investment risk which could not have been achieved by transactions in the underlying assets.

In particular, it is likely to be made clear that any derivatives which 'gear' performance relative to an index will not be deemed to be for the purposes of efficient portfolio management. Nor, even if there is a matching liability, can they generally be deemed to be for the purposes of reducing investment risk. However, it appears possible that some limited upward gearing will be allowed provided that the only 'quid pro quo' is to be the loss of any element of investment return significantly in excess of that expected from gilts.

Guidance is also anticipated to be provided on the definition of 'covered', on valuation (including derivatives which are liabilities) and on admissibility. Copious examples are expected to be included.

2.5 Revisions to Actuarial Professional Guidance

2.5.1 Introduction

Revisions to GN1 and GN8 have been issued under the 'fast track' procedures. This means that they will be compulsorily revised (and possibly combined) within 18 months. Nevertheless, they are mandatory for Appointed Actuaries as they stand.

2.5.2 GN1

The main changes to GN1 relevant to financial reporting are:

(i) it is noted that the premium adequacy certificate does not pose any additional burden on Appointed Actuaries. This is because it relates purely to business written in the previous financial year and reserves should already have been set up to cover any expected inadequacies.

However, if new business continues to be written on such terms, a requirement is introduced to advise the Directors on the ability of the company's reserves to continue to provide support.

(ii) attention is drawn to the need to allow for the effect of derivatives. Reference is made to GN25 ("Investments - Derivative Instruments") which was issued on 30th December 1994. Among many other valuation considerations, GN25 draws attention to:

- the degree of matching of derivatives and policy liabilities (allowing for the possibility that the policy will terminate early)
- the volatility of derivative prices and the need always for up-to-date valuations. "Marking to market" is recommended where appropriate.
- the fact that derivatives could alter the yield of the assets and hence the maximum permitted liability valuation rate.

(iii) annual actuarial valuation reports should present the results in a way which does not hide the true, underlying position (i.e. no 'window dressing').

2.5.3 GN8

The main changes to GN8 relevant to financial reporting are:

(i) it is made clear that an Appointed Actuary's certificate must be qualified if the Actuary is unable to comply fully with the guidance.

(ii) the regulatory requirement to "have regard to the reasonable expectations of policyholders" is interpreted as requiring "proper provision for future reversionary bonus". Implicit margin will, however, where sufficient, satisfy this requirement. The Actuary must also be satisfied that the fund is able to support a "proper level" of terminal bonus.

(iii) specific guidance is given on meeting the new detailed regulations (65 to 75) of the 1994 Regulations. In particular, on:

(a) allowing an appropriate level of reversionary bonus to emerge

(b) discontinuities from year to year

(c) adjusting yields for risk (can leave a differential for marketability and other factors)

(d) yields in currencies other than sterling

(e) hypothecation of assets

(f) future expenses

(iv) Regulation 71(1) is interpreted as requiring a specific provision for acquisition expense overrun expected to be incurred in the following 12 months.

2.6 Comments

Our own experience is that the new regulations have proved helpful, rather than a hindrance. For example, the welcome reduction of the deduction from asset yields from 7.5% to 2.5% has added nearly 0.5% to maximum permitted yields.

The removal of the Consols test has focused our minds on the remaining need to adjust for risk of non-maintenance or default. Questions which arise include:

- is the current level of unoccupied property 'normal'?
- will leases be able to be renewed at current rentals?
- will dividends or rents fall across the market?
- what is the credit rating of issuers of unquoted stocks?

We are sure that readers will be able to think of others. However, we do not expect our conclusions to result in deductions as large as the Consols test would have required.

We have also not been particularly troubled by the removal of the previous requirements only to satisfy the liability regulations only in aggregate. The new approach provides almost as much flexibility and our only actions have been to examine a little more closely the prudence of each individual assumption (which generally resulted in no need for change).

We are in the course of preparing more specific guidelines for our group investment management company to enable our Directors to certify compliance with the DTI guidance referred to in 2.4.2. This has focused our thinking in this area, particularly on the issue of suitable risk profiles and performance targets for with- profits funds.

Derivatives have posed few problems to our Group, as it is not a great user. We would be interested in the experience of those who have run into problems with counterparty admissibility (we were close in our linked life subsidiary!) or acceptable usage.

Other admissibility problems would also be of interest. Long term solutions for the eurobond difficulties? Deposits? Outstanding premiums?

The requirement to provide for any anticipated acquisition expense overrun in the coming 12 months needs further interpretation. For example, how is an anticipated overrun quantified? Does it include new business strain? If it is relative to pricing assumptions, is this before or after profit margins? To what extent (if at all) can provision be said to have been made if release of new business strain from previous years is reasonably anticipated to offset the expected overrun?

An unfavourable interpretation is likely to affect all companies and to have a particularly serious impact upon unit-linked companies which are minimally capitalised. New capital may need to be raised unnecessarily. However, we recognise that where the only source of financing is an undertaking to inject capital when required, protection for existing and incoming policyholders will be enhanced.

3. UPDATING THE DTI RETURNS

"... it contains a Little Hall, with a little lantern in its roof: to what obstructive purposes devoted, and at whose expense, this history knoweth not."

3.1 Introduction

In August 1994, the DTI published a consultative document entitled 'Updating the DTI Returns'. This contains the outcome of a review by the DTI of the present form and content of the returns in the light of the Government's deregulation initiative, the EC Insurance Accounts Directive, the need to ensure compliance with the Insurance Companies Regulations 1994 and changes in the market since the last major revision in 1983.

The DTI sought comment on their proposed changes by 28 October 1994 and have stated their intention of issuing draft regulations in early 1995 with a view to their submission to Parliament later that year. The proposed changes are likely to come into effect in two stages; changes to Schedule 4 in time for the 1995 Returns and other changes for the 1996 Returns.

The proposals as currently formulated are set out in 3.2 to 3.8 below. For those unfamiliar with the purpose of the current forms which make up the returns, brief titles are set out in Appendix 2.

3.2 Schedule 1

It is proposed that Form 9 will remain unchanged.

On Form 10, admissible cumulative preference share and subordinate loan capital will appear as specific items. The net assets will be formally reconciled to the Companies Act reserves by means of adding back inadmissible assets and adjusting for valuation differences.

On Form 13, the categories within which the admissible assets must be shown are changed to coincide with the revised Companies Act descriptions. A number of existing sub-divisions disappear as a result and one completely new one, "deposits with ceding undertakings" is added. An "other" category also appears.

In several categories, the breakdown is more detailed than that required by the Companies Act. The DTI argue that this is necessary because the Companies Act breakdown alone is insufficient to enable them to verify compliance within the new s35A(1) of the 1982 Act (appropriate quality and diversity of assets). Thankfully, no attempt has been made to obtain sufficient detail to verify that the correct valuation procedures, especially on admissibility, have been applied. The DTI will continue to rely on auditors' certification of this.

On Form 14, the split between industrial and ordinary business is abolished. Otherwise, the long-term liabilities remain on the solvency basis rather than any which may be in future requested in the Companies Act accounts. The new Form 10 reconciliation will pick up the differences.

On Form 15, as on Form 13, the categories, this time of liabilities, are changed to reflect the Companies Act descriptions. Also inadmissible cumulative preference shares and subordinate loan capital are included explicitly. "Deposits received from reinsurers" is a completely new category. The Fund for Future Appropriations forms part of the long term fund and so must not be included on Form 15.

Form 16 will be revised to have similar form to the Companies Act non-technical account.

3.3 Schedule 3

It is proposed that Forms 45, 46, 47, 50 and possibly 43 will be moved, some in altered form, to Schedule 4, thus removing them from the requirement to audit but instead making them the appointed actuary's responsibility. No mention of any revised location for Forms 41, 42 and 44 is made. We would expect that 41 and 42 would remain in Schedule 3 and would hope that Form 44 would follow Form 43 into Schedule 4.

Form 40 will remain in Schedule 3 and will remain unchanged. It would have been possible to remodel it along the lines of the new Companies Act life technical account but the DTI concluded, thankfully, that this was not worth the considerable effort which would be involved in doing the conversion and reconciliation each year.

Form 41 will be modified to require non-acquisition expenses to be subdivided into "one-off" development costs and ongoing costs. The latter would be the level expected to be taken into account in the valuation. We wonder how rose-tinted a view of some offices and their auditors might take on the interpretation of "one-off".

Form 49 will be simplified to remove the need to provide a detailed breakdown of assets by type for each linked fund. A split between directly held assets and investments in other internal linked fields will still be required, as will the amount of "liquid assets" (i.e. cash, deposits and gilts). The amount of indexed unrealised gains (for net funds) will also now have to be stated.

The information on Form 51 (Revenue accounts for internal linked funds) will no longer have to be provided for each internal fund separately. Rather, aggregate accounts will be required for all life funds, all pensions funds and PHI funds.

Forms 45 and 46 will be replaced by new Forms 52, 52A and 53 (in Schedule 4) which provide additional information to demonstrate that maximum interest rates have not been exceeded.

Forms 52 and 52A reproduce existing Forms 45 and 46 with the addition of a column for the risk-adjusted yield. Form 53 ('Matching Rectangle') consists of tables (one for each significant category of contract - a definition of 'significant' for this and for the other occasions on which the term appears in the regulations would be helpful). The tables set out the types and amounts of assets hypothecated to that category of business and their risk-adjusted yields. The total of the risk-adjusted yields (i.e., their weighted average) is then compared with the valuation rate used.

3.4 Schedule 4

In addition to the forms 'transferred' from Schedule 3, it is proposed that quite a lot more information will have to be included in Schedule 4 to enable the DTI to verify compliance with the revised regulations, particularly the requirement that each regulation must be complied with individually rather than in aggregate. This will include:

(a) how the valuation assumptions compare with recent mortality and morbidity experience (presumably of relevant country or own experience depending upon credibility).

(b) the allowance made for future improvements in annuitants' mortality

(c) the allowance made for future expenses and how it relates to current expenditure as shown in Form 41

(d) details of the prudential margins for risk in the yield including the methodology used to assess risk

(e) how policyholders' reasonable expectations have been taken into account

(f) details of resilience testing, including the values of the liabilities and assets and any revision of asset hypothecation under different scenarios.

Hopefully, these additional requirements will be assimilated into a revised "numbered paragraph" structure for the non-table part of Schedule 4 in the eventual regulations.

Another proposed change to Schedule 4 is the 'slimming down' of the "voluminous" information required by paragraph 4(1) (information about linked products). However, the list of information still to be required does not seem all that diminished, except possibly to the extent that a listing of the funds which can be chosen is no longer explicitly required. Moreover, an explicit description of the surrender basis is now needed.

Forms 47, 50 and 57 are to be combined into one form (new Form 57). Separate Forms 57 will be required for life, pensions and PHI business and in respect of links to internal funds, unit trusts and indices. The simplicity of the new form is perhaps best described as being midway between that of existing Forms 47 and 50. Form 48 will remain unchanged.

Paragraph 4(2) will be amended to require more information about the unit pricing process followed by the office.

Paragraph 4(10) will be amended to require additional information about financial reassurance arrangements.

Further descriptions will be required of unitised with-profits business including information relating to guarantees and the provisions made in respect of them. The circumstances in which an MVA would be applied must be given as must details of MVAs actually applied since the last return was submitted. UWP business must be shown separately on Form 55, subdivided into single and regular premium.

It is proposed that submission of a copy of the company's With-Profits Guide will be an acceptable substitute for the information required by paragraphs 11 to 16. We are slightly surprised at this suggestion as the With-Profits Guide need refer only to bonus series open to new business and does not need to set out what even those bonus rates are. Non-UK business is not covered either. We understand, however, that dialogue has begun between the DTI and the PIA on possible revisions to the Guide which may go at least some of the way to overcoming these obstacles.

3.5 Schedule 5

Schedule 5 is currently required to be published every 5 years providing detailed information about the business in force. In theory, this should permit the DTI or any other interested person to carry out an independent valuation of the liabilities.

Schedule 5 could also be used by supervisors to examine the maturity profile of the business and so to consider the appropriateness of the investment strategy and the degree of cash-flow mismatching.

However, the DTI admits that they themselves make little use of the information, not the least because it can be up to 5 years out of date. This datedness, together with structural deficiencies, mean that it is of less than perfect value to those wishing independently to assess the liabilities.

The DTI propose to replace it with additional annual information on with-profits business. Sums assured, existing bonus and weighted (by the factor to which terminal bonus rates are applied) average original term must be given for each year of maturity tranche. Five year tranches may be used after the first 10. Data must be provided separately for endowment assurances (new Form 54), deferred annuities funding for cash (54A) and deferred annuities funding for pension (54B).

The proposed replacements appear to have been primarily designed to serve a third purpose - assessment of terminal bonus 'liabilities'. The addition of 'mean duration in force', should enable current terminal bonus rates to be applied to sums assured to give some idea of both the 'accrued' liability at the valuation date and the total prospective maturity payouts in future years.

The absence of a 'premium' column makes total cash flow projections problematic and lack of distinction between regular and single premium business renders even approximate independent net premium valuation impossible, even though 'mean duration in force' would have helped.

The measure to remove Schedule 5 is to be introduced under the Deregulation Act and we welcome it. We expect that most offices will experience a net cost saving over a 5 year period as a result. The process of laying regulations under the Act, which itself only came into force in November 1994, may take some time. For example, the requirement to prepare Schedule 5 still existed on 31st December 1994. However, the DTI have granted s68 orders to some offices, deferring submission of Schedule 5s in anticipation of the intended change, both for the 1993 and 1994 year ends.

3.6 Miscellaneous Changes

Directors' and Auditors' Certificates - the DTI intend to review these at a later stage in this review.

Instructions - these will no longer have to be reproduced in the Returns.

A requirement will be introduced from 1st January 1996 that Directors certify the adequacy of financial controls. Further details will be released in promised consultations.

3.7 Computerisation

The 1982 Act will be amended, using Deregulation powers, to allow submission of data in electronic form. Initially, this is likely to be on floppy disks. Not only would this obviate re-keying by the DTI but some primary validation could take place before submission, reducing subsequent correspondence.

The incentive to submit returns in this form would be reduced fees, although it seems reasonable to assume that at least two paper copies will still be required; one signed and one for public availability.

The DTI will issue guidance on the format in which the returns will be acceptable on disk. In the longer term, they will also be examining the feasibility of developing a standard software package to generate the Returns.

3.8 Implementation Schedule

Responses to the consultative document had to be sent to the DTI by 28 October 1994. A further consultative paper, this time with draft regulations, is promised for early 1995. The main elements of the subsequent timetable could look something like this:

- Abolition of Schedule 5 (as soon as possible)

- Revised Accounts and Statements Regulations laid before Parliament (Summer 1995)

- Changes to Schedule 4 apply to financial years ending on or after 30 June 1995

- All other changes to apply to returns for financial years ending on or after 31 December 1996

However, the DTI would be prepared to consider either earlier or later implementation dates than 31 December 1996 if companies generally felt strongly one way or another.

Appendix 2 shows the likely content of Schedules 3 and 4 after all the changes have been implemented.

The DTI also suggest that, if Schedules 4s for years ending prior to 30 June 1995 contain the new information voluntarily, then this may "minimise the need for subsequent correspondence to obtain information we are unable to manage without". Time is running short, however.

3.9 More Ideas for Schedule 4

At the Harrogate Convention in September 1994, a paper by William Hewitson exposed yet further machinations of the regulatory mind. These included

(i) more detailed expense disclosures (e.g. nature of expenses, allocation between classes of business and even reconciliation with Financial Services Act disclosure)

(ii) more details on investment mix (e.g. country, sector) and returns earned to both linked and with-profit funds.

(iii) standardised measures of persistency (consistent with the PIA approach).

We find ourselves asking if these are really matters for prudential supervision, although we recognise the possibility that some of this information should be available either publicly or to the Financial Services Act regulator.

3.10 Reaction to the Proposals

The ABI are generally supportive of the proposals but are sceptical of the value of reconciling Schedule 1 with the Companies Act accounts. We, too, welcome the proposals and are less sceptical about reconciliation, having personal experience of how far from clear the reason for divergence often is. We also favour the convergence of the two regimes (see Chapter 8).

We wonder, though, how much use the fairly voluminous additional details 3.4 above is likely to be in the public domain, particularly the finer details of the asset matching and resilience testing. We accept its relevance for regulatory purposes but wonder if it might better be passed to the DTI in a medium other than that of the Returns. Companies are also likely to consider much of this information commercially sensitive.

A Financial Condition Report (see Chapter 6) is the obvious alternative vehicle, particularly if it would contain the results of dynamic solvency testing anyway.

We are also concerned that effectively seeking to verify the Appointed Actuary's adherence to the regulations in such great detail could be seen as lack of trust in his or her professionalism and as devaluing the worth of actuarial certification. As they say, if it's not broke - don't fix it. And we are not aware of any other evidence that the DTI believes that the Appointed Actuary system is broke yet!

That said, we do welcome the increased reliance on actuarial certification implied by the shift of several forms from Schedule 3 to Schedule 4.

Similar comments apply to the proposal to require details of unit pricing mechanisms to be stated, particularly as Appointed Actuaries' existing responsibilities regarding policyholders' reasonable expectations in this area will become more explicit if specific guidance is brought into GN1 as is currently being considered.

The new 'matching rectangle' Form 53 could get very lengthy, particularly if an office needs to select particular stocks from one or more categories of asset; in order to justify the yields used to value one or more classes of liability. A definition of 'significant category of contract' (for each of which the DTI requires a separate Form 53) would be helpful here.

Finally, although some actuaries have expressed concern over the proposal to disclose additional information on UWP contracts, particularly regarding practice on MVAs, we cannot see that exposure of actual practice can be anything but beneficial, both to the discloser and to the policyholder or his adviser (to the extent that it helps PREs reflect reality - or vice versa!). However, this information would be better placed in an improved With-Profits Guide.

4. SATISFYING THE INSURANCE ACCOUNTS DIRECTIVE

"... I am besides totally unacquainted with the habits of birds, except the birds of Staple Inn ..."

4.1 Background

UK insurance companies (both Mutual and Proprietary) have in the past been exempted from reporting to shareholders on a completely true and fair basis (as otherwise required by the Companies Act 1985). This is because paragraph 28 (1) of schedule 9A to that Act previously permitted insurance companies to prepare only a limited form of balance sheet and profit and loss account. The main exemption was that technical provisions and other reserves did not need to be distinguished in the balance sheet. Further, only so much unrealised gain as was required to meet the cost of bonus and/or profit needed to be recognised in the revenue account.

Paragraph 28 (2) of Schedule 9A then went on to state that the accounts of a company taking advantage of the above exemption would, for that reason at least, not be considered not to be true and fair. Paragraph 28A then exempted the auditors from having to state that such accounts were true and fair, merely that they had been properly prepared in accordance with the Act.

The UK interpretation of the EC Insurance Accounts Directive means that these exemption will be removed, for financial years beginning after 22/12/1994. The changes are part of The Companies Act 1985 (Insurance Companies Accounts) Regulations 1993 ("the Regulations").

The Regulations introduce a replacement schedule 9A into the Companies Act 1985. For life assurers, this specifies the items to be included in company balance sheets and profit and loss accounts, the latter being subdivided into a long term business technical account and a non-technical account. Some notes and guidelines are given on how the various entries are to be determined. However, much is left to individual interpretation as guided by accounting practices.

The ABI have developed an accounting basis, the Modified Statutory Basis (MSB), to satisfy the requirements of the new regulations.

Revisions to the existing Statement of Recommended Practice (SORP) on Accounting for Insurance Companies have been drafted and may be submitted to the Accounting Standards Board (ASB). Auditors are likely to use the SORP as defining "best practice" for insurance company's accounts. As well as life business, the revised SORP covers general insurance and accounting for the investments of insurance companies. Quite a feat! Whether consistency across all three elements has been achieved is debatable, but we leave that to others for consideration.

At the time of writing (January 1995) the revised SORP is still in the final stages of development. Sections 4.2 to 4.4 are therefore based on the latest drafts rather than the final document, which will hopefully be available by the time the paper is discussed at Staple Inn. Section 4.5 reports on the bases we have used in our own experiments with MSB to date. Section 4.6 discusses the impacts on various parties in Companies Act reporting.

4.2 Basic Description of the Modified Statutory Basis

The MSB is a development of the existing Statutory Solvency Method (SSM) for reporting profits on long term business. The SSM profit is the amount of surplus transferred from the long term fund following an Actuarial Investigation under section 18 of the Insurance Companies Act 1982.

The revised MSB SORP seeks to remove two major features of current UK insurance company accounting:

(i) sales of products usually give rise to an accounting loss, in the year of sale. This is even though the products may well be profitable to the office.

(ii) offices do not have to recognise shareholders interest in all unrealised gains, but only in the gains which have been included in the revenue account.

The main distinctive features of the MSB, when compared with the SSM, are

1. MSB requires separate recognition of amounts previously combined within the life fund. The three distinct types of heading are:

   - Technical Provisions
   - Shareholder Reserves
   - Fund for Future Appropriations

2. To the extent that recognised amounts, other than Technical Provisions, have been determined to belong to shareholders at the balance sheet date, these will be recognised in published financial statements as Shareholders Funds.

3. The revised SORP recommends that, where the allocation of recognised amounts (other than Technical Provisions), to policyholders or to shareholders has not been determined at the accounting date then those recognised amounts should be shown in a specific liability item called the Fund for Future Appropriations.

4. MSB requires realistic deferral of acquisition costs and, where the deferral is explicit, recognition of the outstanding balance of Deferred Acquisition Costs (DAC) on in force business as an asset in the Balance Sheet.

5. Movements in unrealised gains and losses on assets will have to be identified. To the extent that these assets are attributable to with-profits or to linked business, the movements will have to be identified in the long term business technical account (the replacement for the revenue account). For other business, the movement can be taken to one only of the long term business technical account or the revaluation reserve.

Mutual offices will see a change to the format of this account as a result of 1 - 5, but will not see a change to the amount shown as surplus. For proprietary offices, the effects on recognised surplus in the accounts will be:

(i) for with profit business, movements in unrealised gains/losses will not appear in the non-technical account, but instead go to the Fund for Future Appropriations.

(ii) for linked business, movements in unrealised gains/losses will appear in the non-technical account to the extent that they are not matched by the consequent moves in the liabilities.

This should only make a material difference to profits in situations where the assets are not matched with the linked liabilities.

(iii) For other classes, the office has a choice of whether to fully recognise the movements as part of shareholder profits, or not to recognise them at all.

Offices which seek not to recognise this profit source could use the Revaluation Reserve option, or transfer amounts from the Technical Account to the Fund for Future Appropriations.

Assets held to cover the non-linked parts of a linked contact, such as guaranteed death benefits, would seem to fall into this category.

The MSB method will not change the amount transferable to shareholders from the Long Term Fund - that is still limited by the result of a valuation under Section 18 of the Insurance Companies Act 1982. Any additional amount recognised is not removed from the long term fund.

4.3 Further Aspects of the Revised ABI SORP

4.3.1 Defining Provisions

The Companies Act 1985 includes a definition of Provisions which reads "any amount retained as reasonably necessary for the purpose of providing for any liability or loss which is either likely to be incurred or certain to be incurred by uncertain as to amount or as to the date on which it will arise". The Regulations have a different definition.

The revised SORP adopts the definition in the Regulations, namely "The amount of technical provisions must at all times be sufficient to cover any liabilities arising out of insurance contracts as far as can reasonably be foreseen".

From an actuarial viewpoint, the latter definition seems to allow greater freedom to decide which future events could count under the heading than under the Companies Act 1985 definition. However, the accounting definition of "liability" only allows for amounts due as a result of past events and, for example, this could be taken to exclude deaths which the actuary anticipated in reserving. Thus the definition of the Technical Provisions, by excluding the words "or loss ...", could in theory cause a narrower definition to be applied, even than under the Companies Act 1985 definition!

4.3.2 <u>Calculating Provisions for Long Term Business</u>

The Regulations require the Long Term Business Provision of companies with UK Head Offices to be computed annually by a Fellow of the Institute or Faculty of Actuaries. The computation has to have due regard to the actuarial principles required to be followed to determine prudent provisions for policyholder security. The UK legislation defining these is now the Insurance Companies Regulations 1994 (see Chapter 2).

The revised ABI SORP allows the liabilities of overseas subsidiaries incorporated into Group Accounts to be computed on a local GAAP or regulatory basis provided that the revised SORP principles are followed. Their Long Term Business Provisions must be determined by an actuary or other specialist using recognised actuarial methods.

4.3.3 <u>Use of the Fund for Future Appropriations (FFA)</u>

The revised SORP permits use of the FFA "in line with the underlying Regulations". The underlying regulations say that the FFA is used when - "the allocation either to policyholders or shareholders has not been determined at the balance sheet date".

The definition would seem to allow non-profit funds to use the FFA, as it could be argued that until profit is actually distributed, the "allocation ... has not been determined". This would allow non-profit offices to continue to avoid recognising the source of profit. However, this could be an area for debate between companies and their auditors, as some audit firms at least have been strongly in favour of limiting use of the FFA to with-profit business, on the grounds that the allocation to policyholders of profit from non-profit funds is bound to be zero!

4.3.4 <u>Acquisition Costs</u>

The revised SORP defines acquisition costs to include "fixed and variable costs" associated with acquisition. This extends the definition in the Regulations.

Deferred Acquisition Costs (DAC) should be shown as an asset on the balance sheet, unless they are deferred by an implicit actuarial method (such as a Bonus Reserve valuation) which does not permit separate identification. As a result, DAC calculated by explicit actuarial methods are likely to have to be shown as an asset, with a corresponding increase in the amount of technical provisions.

The revised SORP requires that

(a) Acquisition costs must be deferred by one or more of the following:-

- creating an asset in the balance sheet, or

- an explicit actuarial method (e.g. Zillmer) which enables the costs so deferred to be separately identified and disclosed, or
- an implicit actuarial method which does not permit the separate identification of costs deferred

(b) Deferred acquisition costs carried forward as an asset in the balance sheet should be amortised "over the period in which they are expected to be recoverable out of margins in matching revenues .... at a rate which is commensurate with the pattern of such margins."

(c) acquisition costs should not be deferred to the extent that

- the costs in question have already been recovered;
- the contracts are not expected to generate enough margins over their lifetime to cover the acquisition costs after meeting other costs.
- the receipt of future premiums or future margins is insufficiently certain, based on prudent estimates of future expected discontinuance rates or other experience.

4.3.5 <u>Treatment of Movements in Unrealised Gains/Losses</u>

The basis recommended in the revised SORP is set out in section 4.2.5.

For non-participating long term business, the revised SORP anticipates that

(a) Offices which use the 'technical account' option will also use the FFA for that business as appropriate. As mentioned, auditors and offices will need to debate!

(b) Offices which instead use the 'Revaluation Reserve' option would, as the Regulations stand, have the ability to transfer amounts to the non-technical account on realisation of the gains. However, there is a risk that the ASB could decide to remove an exemption currently enjoyed by insurers from Financial Reporting Standards 3 (FRS 3). Removing the exemption would mean that unrealised investment gains taken to Revaluation Reserve could not then be transferred to the non-technical account on realisation.

4.3.6 <u>Smoothing of Asset Values</u>

Smoothing asset values would enable proprietary offices to reduce volatility of profits over time. Other types of business are not permitted to smooth asset values in their Companies Act accounts.

The DTI position here is that they do not believe smoothing of asset values is permitted by the Regulations. The revised SORP requires all realised and unrealised gains to be recognised as they arise; and so does <u>not</u> recommend smoothing.

4.4 Additional Disclosure

The revised SORP requires no analysis of MSB profits but, to satisfy the Regulations, does require significant additional disclosure. The requirements which we think will be of particular interest to actuaries are set out below.

4.4.1 Acquisition Costs

(i) the pre-tax amount deferred is shown as an asset in the Balance Sheet, unless the deferral uses an implicit actuarial method.

(ii) any limitation in actuarial deferral arising because the statutory policy liability may not be less than zero (or less than a guaranteed surrender value) is shown as a deferred acquisition cost asset, subject to the above constraints.

(iii) the method of deferral and the basis of amortisation should be disclosed.

4.4.2 Provisions

The notes to the accounts should cover

(i) the principal method of valuation

(ii) a summary of the principal assumptions underlying the long term business provisions (eg. interest, mortality/morbidity, allowance for future expenses).

(iii) a statement of whether provision is made (explicitly or implicitly) for future bonuses. If so, also a broad description of the means by which such allowance is made.

(iv) The reasons behind any significant mismatch between

- net assets held to cover linked liabilities at the balance sheet date; and
- the Technical Provision for linked liabilities

4.4.3 Fund for Future Appropriations

The notes to the accounts should cover

(i) the basis on which any FFA has been established; and
(ii) the policy for making transfers to or from the FFA

4.4.4 Taxation

Tax provisions are to be shown separately under liabilities item for "Creditors - other creditors including taxation and social security" to the extent they are not in the Long Term Business Provision or the Technical Provision for linked liabilities. The basis adopted for 'grossing up' after tax profits should be disclosed.

4.5 Experiments With MSB

In our office, we have 'experimented' during 1994 with accounting in accordance with earlier drafts of the MSB SORP. This section shows our conclusions to date. We will be developing the approach, so there is no guarantee that this is what we will use in the future!

4.5.1 Treatment of Technical Provisions

In looking at the various mathematical reserves within the long term funds to decide which qualify as Technical Provisions, our approach is to:

(i) exclude any reserve which holds increases in asset values which have not been brought into account in DTI Form 58.

(ii) exclude any reserve which does not meet a particular liability or loss (eg. contingency reserve). This approach is based on the Companies Act 1985 definition of 'provision', so we may have to look again at this aspect.

(iii) exclude amounts held to meet the Required Solvency Margin and the Resilience Reserve required under the Government Actuary's test, on the grounds that mathematical reserves excluding these should be sufficient to meet the Fund's obligations.

(iv) include all other reserves, including the Capital Gains Tax reserve.

4.5.2 Use of the Fund for Future Appropriations (FFA)

We have not used an FFA, except to ensure that the recognised profit from a with profit fund is limited to the shareholders' share of declared bonus (i.e. as was the case under the SSM).

4.5.3 Spreading Forward of Investment Gains

The approach we have used so far, is *not* to spread forward investment gains.

4.5.4 Movements in Unrealised Gains/Losses

In our experiments we made no use of the Revaluation Reserve, but instead put all movements through the Long Term Business Technical Account. Except for with profit business, where the movement then went to the FFA, all of the movement then appeared under the non-technical account (i.e. in shareholder profits).

This approach, at one stage the only option being considered by the ABI Steering Group, made our results very volatile from year to year. This was mainly because of a predominantly non-profit fund in our Group where the surplus assets held were mainly equities. The volatility of equity prices over 1992, 1993 and 1994 would have had significant impact on the recognised shareholder profit for this company. The volatility in the results has caused us to look closely at alternative accounting bases for this type of fund.

4.5.5 Deferred Acquisition Costs

In our experiments so far, our approach to deferral has been as follows:-

(i) only acquisition costs for regular premium business are deferred.

We excluded all single premium business on the assumption that acquisition costs cannot be recouped from future premiums, or clawed back on early death or surrender.

(ii) the definition of 'Acquisition Costs' used is that used in our accounts, including development costs associated with acquisition. All costs under this heading are then treated identically.

(iii) actual acquisition costs are recognised, but limited so that the amount recognised is not more than the sum of {generated acquisition costs + expected policy profits}, where the expected policy profits are calculated on a realistic (e.g. Embedded Value) basis. Simply put, we do not want to put more value on the DAC than we hope to earn from the policy.

(iv) deferred acquisition costs are amortised in the following way:-

All margins in the premiums (over and above that to finance benefits paid, renewal expenses and the increase in reserves in the period) are assumed to be *first* available to reduce the balance of deferred acquisition costs to zero; and only then to provide profits. No allowance for lapses is made at this stage.

This approach writes off acquisition costs against first available margins, assuming that experience is in line with the profit-test assumptions (differences in experience from the profit-test assumptions fall into profit, to the extent they are not swallowed up by changes in the valuation basis).

(v) if a policy lapses before its deferred acquisition cost has been written off, then the balance of deferred acquisition cost is written off at the time of lapse. Thus the balance is adjusted for actual lapse experience.

(vi) the period of time over which (and the rate at which) acquisition costs are written off is calculated separately for each major product type

(vii) the DAC balance is shown as an asset in the balance sheet.

For business valued with a Zillmer adjustment, we show the full amount of DAC as an asset; and show the technical provision with no Zillmer adjustment.

Current shareholder reports and accounts, plus the DTI Returns, may show the Zillmer in the Long Term Business Provision.

4.6 Repercussions of MSB

(i) For company actuaries and company accountants it imposes additional work both in development and in operation.

(ii) What of Finance Directors and Insurance Company Boards? In relation to profit recognition for proprietary life companies, the proposals put greater authority and responsibility in the hands of the directors (as distinct from the Appointed Actuary who was responsible for determining the maximum transferable amount under the SSM method). For proprietary companies, profits could be more volatile in the future, particularly if movements in unrealised investment gains and losses are included in the non-technical account.

(iii) What of appointed actuaries and company auditors? Well, it provides a challenge to auditors to understand valuation bases sufficiently to be confident that the technical provisions are "true and fair" (eg. not excessive and thus holding back recognisable profit). To actuaries, it sets a challenge to understand the auditor's requirements (which may be different to the actuary's traditional obligations). In other words, it sets the stage for delicate negotiation between fellow professionals to ensure that bases acceptable for both solvency and reporting purposes are achieved.

The new methods allow Companies and their auditors to expand the scope of audit investigations. For example, audit review of the company's recognition of DAC could be a new area. The responsibility for authorisation of the amount of Provisions also needs to be agreed.

(iv) What of readers of the accounts? These include shareholders and potential shareholders (of proprietary offices), but also policyholders and their advisors.

As different offices' practices develop, it's possible that a reader of insurance company accounts will find a wide range of practices being followed, e.g. on treatment of consolidated accounts, or accounting for unrealised investment gains. Whether accounts become any more true and fair, or comparable across companies, remains in considerable doubt.

(v) What of the Inland Revenue? Tax computations are currently based on DTI return accounts (which will not change as a direct result of the Regulations). So, introduction of MSB should not lead to accelerated tax - yet!

(vi) Finally, going back to the effects of the regulations, as mentioned in 4.2,

(i) by implementing DAC, sales of profitable products should now not give rise to an accounting loss in year of sale

(ii) with regard to recognising shareholders' interest in all unrealised gains, it remains to be seen whether offices will find legal ways to avoid doing so!

5. THE ACHIEVED PROFITS METHOD

"... in those days no neighbouring architecture of lofty proportions had arisen to overshadow Staple Inn"

5.1 Historic Background

Development of Achieved Profits has primarily arisen from the desire of UK Proprietary offices to inform shareholders of the true value of their interest in the business; and of the change in that value over time as a result of the management of the office's resources. This has both defensive and capital raising benefits.

Embedded Values techniques, measuring the present value of expected future transfers to shareholders from the inforce portfolio, were developed to address this desire. Profit can be defined as the change in Embedded Value over the reporting period plus the profit transfer.

In the case of companies transacting mainly long-term insurance business, there was a problem with acceptability of this reporting method within the audited statements. Auditors were reluctant to approve the method as it takes credit now for shareholder profits that will only be earned if future experience is in aggregate as favourable as the actuary anticipates in setting the basis. This approach is seen as imprudent is accounting terms. Often, therefore, Embedded Values were included as unaudited supplementary information. However, some Bancassurers (not being mainly insurance undertakings) have adopted the technique at group level, materiality removing many objections.

The first response to this problem was the concept of Accruals. The main difference compared with Embedded Values here is that assumed future experience allows for "Planned Margins" in the basis so that the profit recognised reflects the risk taken to date and the work done on the contract to date. On this basis, the directors could be reasonably confident that the recognised profit stream had already been earned. This concept was developed by the ABI to a draft proposal issued in July 1992.

Prudential Corporation, amongst others, subsequently published Accruals profits as supplementary information. The first publication was in November 1992 covering 1990 and 1991 results. As part of the publication, Prudential got formal confirmation from independent actuaries that their approach was in line with the ABI draft. On the basis of the independent actuaries' opinion, Prudential's auditors confirmed that the results were produced with due care and in conformity with the ABI draft. Subsequent publications have been accompanied only by an auditor's certificate.

However, Accruals did not gain complete acceptance. Most proprietary offices were reluctant to move onto Accruals basis in the published accounts - perhaps (but not exclusively) because it would reduce the recognised shareholder value, when compared with the previously quoted Embedded Value? However, most offices accepted that the SSM method did not address the offices desire to inform shareholders. They also agreed that an Embedded Value calculation with a risk margin in the discount rate had a similar effect to the Accrual risk adjustment.

To respond to these concerns, an informal Working Party was set up to produce a methodology for use in group level consolidated accounts which will satisfy the Insurance Accounts Regulations and which will command support from all UK proprietary offices.

That Working Party proposed a method called the Achieved Profits Method in March 1994, an explanation of which was circulated to interested parties. Subsequently a more formal ABI Steering Group was set up to carry matters forward and its current thinking is set out below. At the time of writing (January 1995) the Steering Group was still finalising its proposals.

5.2 Basic Description of Achieved Profits Method

The aim is to put a value on the estimated future transfers to shareholders arising from the inforce portfolio of assets and liabilities. No allowance is made for profits from estimated future sales.

The Steering Group's recommended approach is to:

1. Make prudent estimates of each element of future experience that will affect the transfers to shareholders, e.g. investment returns, claim and lapse rates, expenses

2. Estimate the future transfers to shareholders arising on the inforce business if the estimates in 1. above arise. The recommended approach reflects the effect of the statutory valuation basis in estimating the incidence of shareholder transfers (and the bonus rate for with profit business)

3. Discount the estimated future transfers to the balance sheet date, to give the shareholder value.

4. The APM profit in an accounting period is the change in shareholders value, plus the SSM profit transfer in the period. Any amount above the transfer is not removed from the long term fund.

The Steering Group recommends that offices use a combination of two techniques to control recognition of APM profit, i.e.

(a) including Risk Margins in each of the estimates of future experience, which reflect the uncertainty about that element of future experience; and/or

(b) including a margin for risk in the discount rate applied to the estimated future transfers. The Working Party recommends that the margin in the discount rate should have regard to the risks of the business, e.g. as in (a).

Option (a) above is very like the Accruals concept, but with no reference to the work done to date. Option (b) above is very like the Embedded Value concept - but with the new constraint that the margin in the discount rate needs to reflect the uncertainty about each of the elements of future experience. The APM proposal attempts to satisfy both "Accruals" offices and "Embedded Value" offices!

5.3 Further Aspects of APM Guidance

Other points in the proposed APM methodology

5.3.1 Smoothing of Investment Gains

The draft permits smoothing of investment gains for both linked and non-linked business. However, smoothing is not obligatory. The working party does not lay down a specific method or basis for smoothing, but recommends that the method chosen should be disclosed. The working party also recommends that the actual investment performance allowing for any smoothing should be compared with the assumed long term return for the purposes of calculating the investment related profit component.

5.3.2 With-profits - Bonus Assumptions, Shareholders' Proportion and Reserves

Bonus assumptions should be consistent with assumed investment returns, the company's bonus philosophy and anticipated practice. The future bonuses should be costed on the statutory valuation bases deemed appropriate for the long term and be consistent with other assumptions used.

The shareholders' proportion should be the current proportion except where an intended change has been announced or it would be inappropriate to use such a proportion. If a proportion other than the current proportion (or already announced changed assumptions) are used, the basis on which it is determined should be disclosed.

5.3.3 Taxation

The Steering Group recommends that all the projections on which profit recognition and measurement are based must allow for taxation, so the APM basis recognises after tax profit.

Allowance is needed for all taxes in the relevant jurisdiction, based on current legislation and practice together with known future changes. For presentation purposes, the Working Party recommends that the after tax profit should *normally* be grossed up at the full local company tax rate. The basis used should be disclosed.

5.3.4 Prudent Assumption and Risk Margins

The management of prudent assumptions and risk margins is at product level.

The Steering Group proposes that if a policy group is expected to make an overall loss, the whole of the loss should be recognised in the current year. When setting risk margins care should be taken to ensure that these reflect properly the risks attaching to the relevant policy group and that initial losses are not shown on business which, after allowance for these risks, is expected to be profitable.

5.3.5 Disclosure

The Steering Group recommends disclosure of the following items:-

- the basis for deriving assumptions, risk margins and discount rate
- a statement of the main economic assumptions and discount rates
- the basis for determining the shareholders' interest in undistributed surplus and investment reserves, plus the shareholders' proportion of profits
- the basis for grossing up after tax profits to pre tax levels
- the accounting policy for investment returns and investment valuation
- the profit or loss arising from changes in assumptions, in risk margins or in discount rates if they have a material effect on total reported profits.

5.3.6 Presentation of the Shareholders' Interest in Companies Act Accounts

The ABI Steering Group hopes to provide guidance on the presentation method. The amount of shareholder interest in the long term fund not already recognised as Shareholder Funds (for example, under the MSB), would be shown either as (i) a deduction for the Fund for the Future Appropriations, or (ii) as an accrual of income receivable in future accounting periods. The approach would apply to both the Technical Account (i.e. Revenue Account) and to the Balance Sheet.

The Companies Act 1985 (Insurance Company Accounts) Regulations 1993, as described in Chapter 4, require, recognition of Deferred Acquisition Costs as an asset (unless calculated by an implicit actuarial method). The Steering Group proposes that under profit reporting methods which recognise future cash flows, such as APM, deferral of acquisition costs will be inappropriate to the extent that the matching future revenues are already recognised in the financial statements. If enough matching future revenues are recognised, then this proposal should mean no Deferred Acquisition Cost asset in the APM Balance Sheet.

5.4 Some Considerations for an Office in Implementing the APM

This section is a list of issues we have identified to date. We don't claim it to be exhaustive and would welcome discussion of other areas of concern. Some of the issues may be relevant to you even if your office is not proprietary. For example, your office or an office with which you deal may use similar techniques to measure their Free Estate.

(a) How far to follow the MSB SORP in accounting policy at Group Level?

Auditors have raised the question of how far offices should use the revised MSB SORP; and how far use this APM draft guidance. The revised MSB SORP says nothing about the suitability of APM for consolidated audited accounts, leaving unanswered the question of how acceptable APM will be for audited consolidated accounts of company of groups that are mainly insurance undertakings.

(b) How will the result look to shareholders, compared with the EV or MSB?

The ABI proposes that companies report on APM as supplementary information for an experimental period. In other words, interested parties will see both MSB results and AEV results, at least at consolidated levels. Looking at major interested parties, we think that:

(i) research analysts will not be interested - many already assess their own Embedded Values of proprietary offices anyway!

(ii) institutional investors - as (i), as they are advised by research analysts.

(iii) individual investors - may find it interesting to know more about the profitability of the company - but will they expect higher dividends now as a result?

(iv) Predators - might be disconcerted by a stronger balance sheet or profit declarations - but a serious predator will not be put off by one!

(c) How will the result look to policyholders (especially with profit policyholders)?

After all, we are telling shareholders of their interest in the with profit business, but we do not tell with-profit policyholders of their interest. Will with-profit policyholders demand additional information as a result of APM?

(d) How will publication of APM affect an office subject to a takeover bid?

An office which is the target of a takeover bid will probably use an Appraisal Values (which includes an element for profit from future sales) as part of its defensive tools. The target office is likely to want a full value in the Appraisal value, i.e. with no risk margins.

How will the target office encourage shareholders not to accept a bid on the basis of an appraisal value with no risk margins, when it has spent (possibly) several years telling its existing shareholders that the uncertainty of future profits means it is necessary to include Risk Margins?

(e) How acceptable will different approaches to APM be in the marketplace?

Very simply, offices who have so far published APM results are not using uniform approaches or financial bases. As a result, it is hard for a reader to compare results across offices.

Looking ahead, the risk for an office is that its approach will not be in line with a "consensus approach", if such a thing ever develops among proprietary offices. What does such an isolated office do then? Move in line? Stick it out?

(f) How will companies and their auditors come to an acceptable compromise on audit standards for APM reporting?

(g) How to reflect the APM results in Consolidated Accounts which comply with the 1993 Accounts Regulations.

The ABI Steering Group's guidance (see 5.3.6) offers Groups the chance to use one or more of the fund for Future Appropriation or the Accrual of Income Receivable. The Guidance suggests the former approach for with profit funds; and the latter approach otherwise.

Depending on the make-up of the Group, this could offer a number of choices. The treatment of APM accounts will depend on the accounting policy used for consolidation of individual companies' MSB accounts. For example:

- a Group with no with profit company: will it have a FFA, if the company level accounting does not include a FFA?

- a Group with both with profit and non profit companies: will it want to use one of the choices only (say, the FFA option), or both choices?

(h) How far will an office use the APM as a management tool?

(i) How active should an office be in managing its assumptions for future investment return or risk margins over time, for example, to smooth results?

(j) How to derive and present a Budget? Interim Reports (e.g. at half year)?

The proposed approach suggests that offices will need to do full valuations each time; and may need audit approval if the results go to shareholders. How much work will that involve? Will Directors sanction the additional cost and resources required?

6. DYNAMIC SOLVENCY TESTING AND FINANCIAL CONDITION REPORTS

"... it was filled with fog, and candles shed murky and blurred rays through the windows"

6.1 What Is Dynamic Solvency Testing (DST)?

Dynamic Solvency Testing (DST) is a technique the Actuary can use to quantify the sensitivity of a life fund's progress (assets and liabilities) to different future outcomes. For example, how will the estimated levels of assets and of liabilities change if interest rates fall gradually over time? Or, if interest rates rise very quickly?

The technique involves projections of the fund's assets and liabilities allowing for future estimated cashflows. A 'central' set of assumptions gives a base for the fund's progress. By varying one or more of the assumptions the actuary can see how the fund is likely to be affected if experience does not follow the central assumptions.

For example, the actuary might project the liabilities on the permitted statutory basis; and then track the progress of the fund by estimating the progress of the Fund's Form 9 Ratio (calculated from an Office's DTI Returns and used by IFAs as a measure of financial strength) over time.

The actuary may choose to vary a single assumption in a deterministic manner; or may build a 'scenario' involving deterministic changes in several associated assumptions; or may "go the whole hog" and stochastically model one or more of the assumptions.

It is a good bet that experience will *not* be the same as the central assumptions - otherwise the actuary with such forecasting powers would be in great demand as a tipster for the horses! However, by looking at the variations, the actuary can identify which types of experience pose a threat to the fund's well-being; and quantify how onerous a threat it could prove.

If the actuary can quantify the effect upon the fund, then there are two potential benefits:-

1) The actuary can identify which scenarios could pose greatest threat - not only as an immediate threat, but also one that might gradually emerge in future years.

   Form these, the actuary may identify actions that could alleviate perceived threats.

2) The actuary has quantitative information to share with the company's directors which can help the directors to understand the financial risks associated with their strategy. The directors may further agreed an action plan to manage those risks (e.g. based on the actuary's proposals).

   This information may also be helpful in discussion of the company's affairs with the supervisory authorities.

6.2 What is the Financial Condition Report (FCR)?

To obtain the second potential benefit above the Actuary is required to inform the directors of his findings. At present, actuaries within an organisation may not have a formal opportunity to inform their directors in writing of the potential state of the fund in the future (as opposed to the requirement to report on the current state of the fund under the Insurance Companies Act). While many companies will seek the views of the actuary as part of formulating strategy, there is the prospect that a company could get itself into problems through not having sought the actuary's views, even though the actuary may well have had the information to provide useful advice.

A Financial Condition Report (FCR) gives the actuary a chance to inform the directors formally of his/her views on the future progress of the life fund.

6.3 How is the Profession in the UK Progressing the Ideas of DST and FCR?

A Working Party established by the Joint (GAD/Profession) Actuarial Working Party (JAWP) has investigated the usefulness of Dynamic Solvency Testing and the Financial Condition Report within the UK. The Working Party identified that, in countries such as Canada, Australia and the USA, 'near-relations' of these techniques have already become part of the statutory work which a life insurance office must prepare for the regulator (see Chapter 7).

The Working Party recommended that an annual Financial Condition Report (FCR) is presented by the Actuary to the directors. The FCR would include the results and the actuary's conclusions of DST. The Working Party also proposes that this report would initially not be available more widely, but that the FCR could usefully be discussed less formally at the periodic meetings between the office and the supervisors.

The Working Party has not prescribed the contents of the FCR, but does require the Actuary to include any DST test that he/she believes of importance to that office. The Working Party suggests that a typical time horizon might be 5 years, but also advises the Actuary to look beyond a 5-year horizon, if the Actuary has reason to believe any emerging problem might only arise after a longer period.

As part of its report the Working Party has suggested possible contents of an FCR and (by example) suggested a level of variation in assumptions which could be a start point for an office in deciding its DST parameters.

During August 1994, a further Working Party (this time reporting to the UK actuarial profession's Life Board) surveyed Appointed Actuaries of UK insurance companies, seeking their views on

- experience to date with DST
- the office's future plans for upgrading models for DST
- the office's views on topics and risks to be covered in that office's FCR
- what additional professional guidance is required on investigating and reporting the financial condition of a life fund

The preliminary results of the Survey were presented at the November 1994 'Current Issues' seminar. The preliminary conclusions at that time were based on responses from 29 with-profit offices:-

- Most offices were doing some sort of DST.
- The BRV was the main investigation tool for offices, after the statutory valuation. Few offices yet used stochastic projections for DST.
- The main results projected were the Revenue Account, Statutory Surplus, Profit and Loss Account and the Solvency Margin. The result least projected was the mismatch reserve.
- The most popular parameter to vary in DST were New Business levels, Persistency Levels, Expense Levels, Investment Earnings and Bonus rates.
- Most offices used scenario testing to look at the relationship of investment returns to bonuses.
- Respondents found DST a complex issue to communicate to the Board. The Appointed Actuary was usually responsible (at least partly) for presentations to the Board.
- The majority of respondents favoured professional guidance on DST/FCR. At least some of the respondents felt that introduction of guidance on an advisory basis should be attempted for end 1995.

6.4 How Have We Benefited from DST So Far?

To illustrate the benefits, here is how we have used DST in our office so far for our largest fund. This Fund mainly holds with-profits business together with annuities (about one third of total liabilities). So far, our work has concentrated on sensitivity of the statutory solvency position to investment conditions. We have looked at three types of sensitivity, i.e.

1) assumed future returns on each class of asset (equities, gilts, ...)

2) assumed investment of New Money between asset classes

3) effects of different strategies for reversionary bonus and terminal bonus

6.4.1 Assumed Future Returns

We have been able to demonstrate to our directors the estimated effects on the funds' financial strength if investment returns are lower than our assumed long-term average, as well as showing them the central estimate based on our assumed long-term average.

We also project the free asset ratio over a 12-month period assuming more significant one-off changes in equity and gilt market values. We also model the freedom of the actuary to adjust valuation bases - thus showing some upper limits to freedom on investment policy within the constraints of the Insurance Company Regulations.

Not only the actuary and the directors use the DST results. Our investment managers also use guidelines resulting from DST to estimate the year end Free Asset position given price movements in the year to date. They thus have a tool which helps them to judge the acceptability of a change in investment mix at a point in time.

6.4.2 Investment Strategies for New Money

We demonstrate the effect on statutory solvency of different investment strategies being followed over the medium term, for example, putting all new money into equities. Here, we vary the investment strategy based on our central estimates for investment return.

By doing this, we want to see whether continuation of a proposed investment strategy will be acceptable within the internal guidelines we use for our fund.

6.4.3 Reversionary and Terminal Bonus Strategies

We have quantified the effect of different reversionary and terminal bonus strategies on the estimated statutory solvency position. As a result, we have developed a benchmark for supportable reversionary bonus rates (now extended to bonus on our unitised with-profits product), and illustrated the estimated progress of terminal bonuses that arise from our long-term investment assumptions.

6.4 What Are The Issues We Might Face in Introducing FCR?

So far, we have not presented an FCR to the Board. We are confident that we are among the majority of offices in this respect!

This section is a list of issues we have identified to date. Please tell us about other issues that you feel may affect actuaries in this area -

1. System Development - an office needs to get its projection systems producing results sufficiently similar to the main valuation system, so that the directors may have confidence in the estimates produced by the projection system .

   Alternatively, the office could use one system for both projection and main valuation work. It would be advantageous if the office is able to do so already - but if not will the office sanction the development expenditure required?

2. Resourcing the work required to do DST and produce an FCR (once a year?)

3. Drawing up the format and contents of the FCR, in the absence of a prescribed document. In our case not just for one office, either, but determining a suitable template for the particular needs of four separate subsidiaries.

4. Ensuring that the directors understand the FCR and its conclusions: Our directors may see four FCRs, and will need to appreciate the (possibly different) risks that apply to each statutory company in turn. As a result, their strategy decisions could appear inconsistent between the companies.

   Thinking ahead a little, would FCR apply in other territories? In our Group, we have life operations in several EU territories and also further afield. The volume of information for a Board to take in could be staggering if each territory's actuary presented one or more reports. Consolidation might be a solution, albeit with some loss of information.

5. For the directors of an office, it represents an opportunity and (perhaps) a threat. It does offer a further chance to seek advice from the actuary and to make that advice-seeking a formal process. As a threat, the directors must be aware that the DTI can request the FCR, see the actuary's concerns about the progress of the fund, and draw conclusions about the suitability of the directors' strategy for the company in the light of the actuary's worry. At what stage would the DTI step in, once they begin to have access to FCRs?

7. ALTERNATIVES TO THE NET PREMIUM VALUATION FOR SUPERVISORY PURPOSES

"The westering sun bestowed bright glances on it ... ".

7.1 Introduction

Throughout its long and full life, the net premium method (NPM) of valuation has never been entirely free of criticism.

The main point of contention is its deliberate use of unrealistic assumptions: expenses and future bonuses are to be met implicitly out of interest rate and premium rate margins. Admittedly, when the rate of return is controlled, it does allow the right amount of interest surplus to emerge each year to meet a compound reversionary bonus - but the volatility of investment markets and the advent of terminal bonus make this of only passing practical interest. The passivity of the liability basis also sits uneasily with assets at market value, for resilience testing in particular.

For unit-linked business and for unitised with-profits business the technique is of little relevance.

The cynic would say that the NPM was a practical technique from the Dickensian era which has survived into the computer age through a combination of actuarial lethargy and regulatory tolerance. The adherent would say that it has served and continues to serve the profession well.

More active alternatives such as the gross premium bonus reserve method have been around for almost as long but have never found official favour for solvency purposes, largely because of their potential to anticipate profit. In the light of the need to recognise profits on a true and fair basis (which usually means earlier) such a method is generally preferable for accounting purposes. Its use also for solvency purposes, provided that an appropriate degree of prudence is injected, is highly desirable on consistency grounds.

7.2 The JAWP Working Group

In 1993, the JAWP established a working group which was set the task of recommending an alternative to the NPM, suitable for supervisory purposes and consistent with the 3rd Life Directive.

The working group issued an interim report in October 1993 which included an analysis of modern valuation methods in other countries. A recommendation of a method for the UK was also made.

In the light of subsequent comment, the proposal has been refined and continues to be developed. A more formal exposure is expected at Staple Inn in 1996.

7.3 Methods used in Other Countries

The working group noted that most other European counties still used passive methods too; either the NPM or a gross premium method on the historic premium basis. US GAAP suffers from similar problems.

Canada and Australia proved more fruitful. Both countries' methods centre on a best estimate gross premium valuation plus explicit margins as the statutory reserve. Australia requires the margins to be the 'planned margins' in the costs of policy servicing and risk (e.g. very much as was intended in the proposed UK Accruals Method) whereas Canada terms the margins 'provisions for adverse deviations' (PADs) and requires them to cover misestimation or movement of assumption means. In both countries, reserves for future bonuses on with-profit policies are required. In Australia these are 'supportable' bonuses, in Canada normally at the current level.

According to Adams and Scott (JIA 121, 441) the Australian 'margin of services' method is favoured by a majority of accountants and actuaries and is likely to form the basis of profit reporting as well as solvency supervision. The Canadian 'policy premium method' is also used for both purposes.

Both countries require additional demonstrations of solvency and capital adequacy. In Australia, this takes the form of a published Solvency Reserve, which is the excess over the statutory reserve of a valuation incorporating prescribed minimum margins (instead of planned margins) and providing for other contingencies such as the elimination of negative reserves, adverse asset performance (resilience reserve), etc. In addition, a Capital Adequacy Reserve (CAR) is calculated, being the excess over the solvency and statutory reserves of a valuation incorporating 'acceptable' margins rather than the prescribed minimum. Standards are laid down as to the additional strength required in the CAR. For example, more extreme resilience criteria are prescribed. The CAR is not published.

In Canada, additional strength is also demonstrated in two, slightly different ways. Appropriations of surplus must be made to cover such things as negative reserves. These are published. A confidential report to the supervisory authorities must additionally demonstrate the provision of additional resources sufficient to meet prescribed margins and resilience standards - Dynamic Solvency Testing forms an integral part of this tier of the Canadian regime.

On the asset side, Australia required Market Value whilst Canada requires amortised book value for fixed interest stocks and smoothing of investment movements on equity assets.

7.4 The UK Proposals

The Working Party recommends the adoption in the UK of a method similar to that in use in Australia described above.

A Basic Policy Liability (BPL) would be calculated on a best estimate basis, allowing explicitly for planned margins. For with-profit business, reserves would have to be held for supportable future bonuses.

The main assumptions underlying the BPL would be:

(i) interest - rate of return estimated to be earned on the assets at market value.

(ii) expenses - full going concern basis with allowance for inflation. Special considerations for start-ups.

(iii) decrements - own experience if sufficiently credible, otherwise latest appropriate industry basis.

(iv) bonuses - supportable rates to be assessed after cost of shareholders' share and any contribution to working capital. Split between reversionary and terminal if appropriate.

Next, a Statutory Minimum Reserve (SMR) would be calculated. This would be based on a valuation on prudent assumptions with margins for adverse deviations and incorporating a resilience test. The published reserves would then be the larger of the BPL and the SMR.

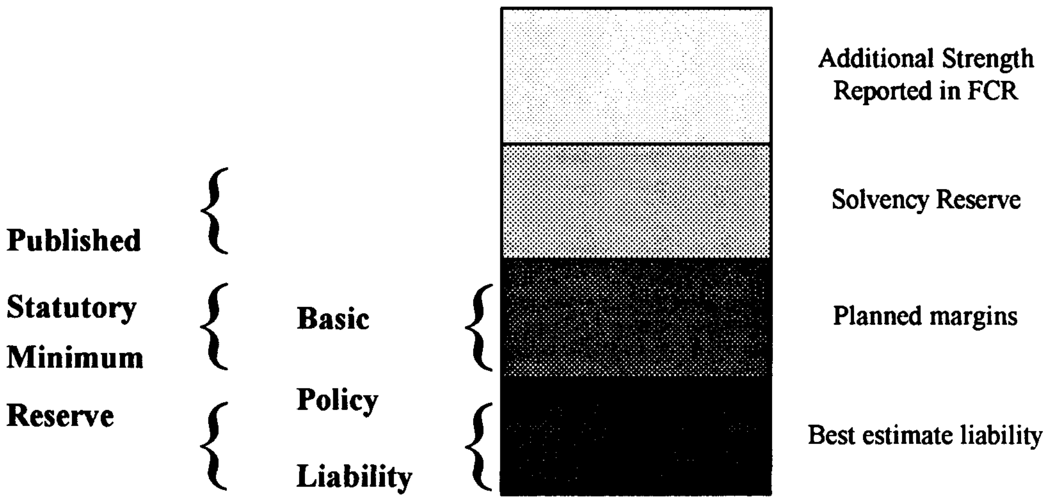
The SMR would be consistent with 3rd Life Directive requirements (i.e. broadly as described in 2.3 but obviously without reference to an NPM standard). This would require, inter alia, the following:

- maximum interest rate in line with s69 of the 1994 Regulations
- negative reserves to be eliminated
- elimination of future financing requirement

For both valuations, assets would be taken at market values.

Demonstrations of further strength would be required in an unpublished Financial Condition Report, including

- survival of a more extreme resilience test
- statement of the rates of bonus affordable in the resilience test scenarios
- dynamic solvency testing



7.5 Effect of Introduction

The proposed alternative would appear to avoid many of the shortcomings of the NPM in that it has broad applicability, lack of artificiality (at least in the BPL and in the SMP to the extent that Regulations permit) and responsiveness to investment market changes. If used wisely, in conjunction with DST to assess bonus rates supportability, it should prove a more than satisfactory replacement for the NPM.

The working group anticipates a lower published liability for non-profit business that under current regulations but that the further strength required to be demonstrated on the FCR would more than fill the gap, resulting in no overall weakening. Any adverse tax consequences of changes will need to be addressed. Any adverse tax consequences of change will need to be addressed.

For with-profit business, the published figures is anticipated to be close to actual asset share. This would lead to lower free asset ratios and an alternative 'common' measure of strength might be necessary.

The group also suggest that the BPL calculation could be "modified" to not fully take account of future bonuses. This would enable all offices to demonstrate some free assets and to satisfy minimum solvency margin requirement, even if they followed a 'revolving fund' philosophy which allows, in general, a lower free estate.

7.6 Issues

To deal with the problem of inconsistency between a prudential interest assumption and ability to meet policyholders expectations, the working group suggested at the 1994 Harrogate Convention that two valuations are actually necessary to arrive at an SMR which satisfies the 3rd Life Directive. One on a s69 restricted interest basis but valuing vested bonuses only to demonstrate solvency and one on a less constrained basis (allowing a market value adjuster when appropriate) but valuing future bonuses to demonstrate PRE.

The SMR would be the higher.

This would appear to require three separate valuations (BPL, SMR (Solvency) and SMR (PRE)) but the working group suggested that the BPL might suffice for SMR (PRE). This would be the case if the SMR (Solvency) could be taken to satisfy the requirements of the 3rd Life Directive with the exception of those relating to future bonuses and the BPL assumed to demonstrate satisfaction of those.

If the BPL would not suffice, we would be concerned about the multiplicity of different valuations which could be necessary.

As we mention in Chapter 5, consensus appear to be nearing on the Achieved Profits Method. This incorporates 'risk margins' rather than the 'planned margins' of the Accruals Method. We hope that the working group will align their approach with the former and incorporate risk margins, too.

8. CONCLUSIONS

"The fog was reported no clearer ... but he went out into it".

8.1 Distinct Strands

In writing the paper, it became clear to us that there were in fact three distinct developments in Financial Reporting proceeding simultaneously (we hesitate to say in parallel!), namely:

(i) EC-inspired (Chapters 2, 3 and (initially) 4)

(ii) accountant-inspired (Chapters 4 and 5)

(iii) actuary-inspired (Chapters 6 and 7)

Due to successful Euro-lobbying and fruitful discussion between DTI/GAD and the profession, (i) has proved mainly harmless, albeit challenging at the detailed level. However (ii) and (iii) both imply big changes to the picture that insurance companies present both internally and externally. Whether accountants or actuaries - or both together - take the lead role on their implementation will dictate the relative future roles of the two professions. It is therefore important that developments, particularly those described in Chapters 5 and 7, proceed hand-in-hand. We regret that development of the Achieved Profits method and work on a replacement for the net premium method are being pursued largely independently.

Some other countries have been able to develop solvency and profit reporting standards in relative harmony - we think that this should be the objective in the UK, too.

8.2 Facts of Life

Finally, we detect a lack of understanding by many actuaries of modern day accounting practices. We would encourage those involved in education and CPD to examine this knowledge gap to see if it cannot be filled. This will then ensure that it will be the actuarial profession which will lead the development of financial reporting into the 21st century - rather than be left behind to occupy a rapidly decaying 19th century nook.

ASSET ADMISSIBILITY LIMITS **APPENDIX 1**

	Category	Maximum Percentage
1.	Land. *Comment: Unchanged.*	5%
2.	Debts from individuals secured on residential property. *Comment*: *(1) Unchanged.* *(2) Secured debts are otherwise individually fully admissible, (unless due from individuals when 5 below applies) but subject to 12 and 13 below in aggregate.* *(3) Previously, a limit of 5% applied to mortgages with other than individuals.*	1%
3.	Unsecured debts (other than listed debentures or debts due from an approved counterparty) due from a regulated institution. *Comment*: *(1) Listed debenture and unsecured debts due from approved counterparty are fully admissible, subject to the aggregate limitations of paragraphs 12-13 (and 8 in the case of listed debentures). Previously debts from what are now known as approved counterparties would normally have been subject to this limit.* *(2) 'Regulated institutions' include UK and EEA insurance companies, approved credit institutions or investment firms and friendly societies authorised to transact insurance business.* *(3)Previously there was no distinction between debts due from regulated institutions and from others. Instead, a lower limit of 1% applied if the debts were due in more than 12 months time.*	2.5%
4.	Other unsecured debt from any one company or body. *Comment*: *(1) Previously 2.5% if due in 12 month's or less time.*	1%
5.	Other debts due from individuals, other than where secured on a policy (and not exceeding its surrender value). *Comment*: *Same effect as before.*	0.25%
6.	The aggregate of debts, other than debentures, of the type described in 4. and 5. above. *Comment*: *A new requirement (to comply with the 3rd Life Directive).*	5%
7.	Listed equity shares in any one company. *Comment*: *Unchanged, other than definition of listed.*	2.5%

	Category of Asset	Maximum Percentage
8.	Total of shares and listed debentures in any one company (not being an approved counterparty). *Comment*: *As before but now disapplied if counterparty is approved*	5%
9.	Unlisted shares in and unlisted subordinated debt due from any one company *Comments*: *(1) Previously just applied to unlisted shares.* *(2) A definition of 'subordinated debt' is given in regulation 44(1).*	1%
10.	The aggregate of unlisted debentures of the description in 3. and 4. above and of assets of the description in 9 above. *Comments*: *A new restriction.*	10%
11.	Authorised unit trusts or recognised schemes which are not UCITs. *Comments*: *(1) Previously inadmissible.* *(2) Most unit trusts will be UCITs and thus fully admissible.* *(3) The EC require that non UCIT unit trusts are less favourably regarded.*	5%
12.	Aggregate of all shares in and debts and the value of rights under derivative contracts due from any one individual, company or body of person). *Comments*: *(1) Subject to 13. below.* *(2) Previously a 7.5% limit applied to a narrower range of debt (e.g. listed debentures, certain insurance debts and debts secured on land) together with shares and options* *(3) The previous limitation of 0.1% for options is removed.*	5%
13.	Shares, debt and derivatives otherwise subject to a paragraph 12. limitation of 5% provided that the aggregate of such assets (whatever the counterparty) does not exceed 40% of the long term business amount. *Comment*: *Four exposures of 10% plus others of up to 5% will be admissible.*	10%
14.	Shares, debts and derivatives issued by any one approved credit institution together with deposits held in that institution. *Comment*: *Rightly restricts exposure to the default of any one counterparty.*	20%

	Category of Asset	Maximum Percentage
15.	Cash. *Comment: Literally cash 'in hand' only.*	3%
16.	Computer equipment. *Comment: Unchanged.*	5%
17.	Other office machinery, furniture, motor vehicles, etc *Comment: Unchanged.*	2.5%

Note: Reference to the shares or debt in one company also apply to any connected company and exclude any dependants of the insurer.

Until 1st January 1995, the connected company requirements do not apply to paragraphs 12 and 14.

APPENDIX 2

PROPOSED CONTENT OF REVISED DTI RETURNS

Form No	Contents
Schedule 1	
9	Statement of Solvency
10	Net assets
13	Admissible assets
14	Long term liabilities and margins
15	Other liabilities
16	Income and expenditure statement
Schedule 3	
40	Revenue Account
41	Premium and Expenses
42	Claims
49	Internal Fund Balance Sheet
51	Internal Fund Revenue Account
Schedule 4	
43+	Movements
44+	New business
52+	Expected income from assets (old Form 45)
52A+	Expected income from fixed interest assets (old Form 46)
53*	Matching Rectangle
54/A/B*	With-profits business by year of maturity
55	Non-linked valuation summary
56	Linked valuation summary
57	Analysis of unit liability
58	Valuation result
60/61	Required minimum margin

* Completely New Forms
\+ Forms moved from Schedule 3 to 4

It is not known where Form 48 (miscellaneous assets matching unit liabilities) will appear. Forms 47 and 50 (unit trusts and internal units matching unit liabilities) are subsumed in new Form 57.