# The Prudential Assurance Company Limited 

## Annual FSA Insurance returns for the year ended 31 December 2005

(Appendices 9.4 and 9.4A valuation reports)

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## VALUATION REPORT ON THE PRUDENTIAL ASSURANCE COMPANY LIMITED AS AT 31 DECEMBER 2005

## Structure of the long term business

## 1. Overview

The Prudential Assurance Company Limited (PAC) carries on ordinary branch and industrial branch business within its long-term fund. The industrial branch was closed to new business on 1 January 1995.

The long-term business of Scottish Amicable Life Assurance Society (SALAS) was transferred into PAC on 1 October 1997, and the long term business of Scottish Amicable Life plc (SAL) was transferred into PAC on 31 December 2002. The business transferred from SAL itself included business previously transferred into SAL from M\&G Life Assurance Company Limited (M\&G Life) and M\&G Pensions and Annuity Company Limited (M\&G Pensions).

The long term business is contained within the following four sub-funds:
(a) Non-Profit Sub-Fund (NPSF)
(b) Scottish Amicable Insurance Fund (SAIF)
(c) Defined Charge Participating Sub-Fund (DCPSF)
(d) With-Profits Sub-Fund (WPSF)

## 2. Non-Profit Sub-Fund

The business in this sub-fund comprises:
(1) Long term sickness and accident business, namely the directly written permanent health business in respect of which the directors have determined that profits should accrue $100 \%$ to shareholders.
(2) The linked business written directly by PAC, including linked business issued in France, in respect of which the directors have determined that profits should accrue $100 \%$ to shareholders.
(3) The credit life business transferred into PAC from SAL on 31 December 2002 and subsequently written directly by PAC, in respect of which the directors have determined that profits should accrue $100 \%$ to shareholders
(4) Defined Charge Participating business issued by PAC in France, and Defined Charge Participating business reassured into PAC by Prudential International Assurance plc (PIA) and Canada Life (Europe) Assurance Ltd, excluding the accumulated investment content of premiums paid, which is transferred to the DCPSF (see below).
(5) Ex-SAL business, namely the with-profits, non-participating and linked business (including internal linked funds) transferred into PAC from SAL on 31 December 2002 and any new premiums arising on those products, excluding Prudential Protection business written between 1 January 2003 and 25 July 2004 and the accumulated with-profits premiums which are held in the WPSF (see 5 below)

All profits in the NPSF accrue $100 \%$ to shareholders.

## 3. Scottish Amicable Insurance Fund

PAC acquired the business of Scottish Amicable Life Assurance Society (SALAS) on 1 October 1997. As a consequence a closed sub-fund SAIF and a memorandum account within the WPSF, the Scottish Amicable Account (SAA), were created. SAIF contains the pensions business, annuities and traditional with-profits life business transferred from SALAS and the accumulated investment content of with-profits business in SAA.

All profits in SAIF accrue to holders of with-profits contracts in SAIF and SAA.
The accumulated investment content of linked premiums is invested in the linked funds which were transferred from SAL to the NPSF on 31 December 2002.

The WPSF provides financial support to SAIF through a memorandum account, the Scottish Amicable Capital Fund (SACF), some of which may be drawn upon in adverse investment conditions to support the smoothing of bonuses within SAIF. No such drawings have yet been necessary. The WPSF receives an annual charge from SAIF for providing this financial support.

## 4. Defined Charge Participating Sub-Fund

This fund comprises the accumulated investment content of premiums paid in respect of the Defined Charge Participating with-profits business issued in France, and the Defined Charge Participating with-profits business reassured into PAC from Prudential International Assurance plc and Canada Life (Europe) Assurance Ltd. All profits in this fund accrue to policyholders in the DCPSF.

A bonus smoothing account is maintained in the WPSF (see below) so that whenever a claim payment is made from the DCPSF any excess of the claim amount over the policy's underlying asset share is transferred from the WPSF to the DCPSF and any shortfall is transferred from the DCPSF to the WPSF. On average, it is intended that these smoothing transfers should generate neither profit nor loss to either fund.

## 5. With-Profits Sub-Fund

The WPSF contains all other long term business, comprising:
(1) With-profits, non-participating and linked business (other than the categories defined above) written directly by PAC. This includes the Prudential Protection business written between 1 January 2003 and 25 July 2004.
(2) With-profits, non-participating and linked life business transferred to SAA from SALAS, excluding the accumulated investment content of with-profits premiums, which is held in SAIF, and also excluding the accumulated investment content of linked premiums, which is invested in the linked funds transferred from SAL to the NPSF on 31 December 2002.
(3) The accumulated with-profits premiums in respect of business transferred into the NPSF from SAL on 31 December 2002 and any new premiums arising on those products.
(4) Reassurance of accumulating with-profits business written in Prudential (AN) Limited.

Divisible profits from this business accrue to both shareholders and with-profits policyholders in the WPSF (other than with-profits policyholders in SAA who share in the profits of SAIF).

Transfers not exceeding $5 \%$ of divisible profits may be made to a common contingency fund. Not less than $90 \%$ of the remainder is allocated to the with-profits policyholders, and the balance to shareholders.

In the returns for 2004 and earlier years, the revenue account and other analyses of business in the WPSF were split into three: industrial branch, ordinary branch pensions business and other ordinary branch business. Following regulatory changes, this split has been discontinued.

## 6. Prudential UK Services Limited

As a result of the acquisition of SALAS a service company, Prudential UK Services Limited (formerly Craigforth Services Limited), was created to provide services to PAC and other companies within the Prudential Group.

Renewal expenses for all business transferred from SALAS are governed by the Insurance Services Agreement with Prudential UK Services Limited. This sets out a guaranteed fixed rate tariff (with annual inflation adjustments) applicable for ten years from the date of the Scheme of Transfer. Thereafter the charges revert to cost on a basis equivalent to that being charged for PAC's own business.

## 7. Reinsurance of linked business

Much of the linked business in PAC was transferred either from SALAS on 1 October 1997 or from SAL on 31 December 2002.

Most other property-linked business issued by PAC is linked, via reinsurance treaties, to the internal linked funds of other life assurance companies.

## 8. Reinsurance of pensions annuities in payment

Some annuities in payment originally written in SAL and transferred to the NPSF on 31 December 2002, are ceded to Prudential Retirement Income Limited. Most of the non-profit and index-linked annuities in payment issued by PAC are ceded to Prudential Annuities Limited, a wholly-owned subsidiary of the WPSF, or to Prudential Retirement Income Limited.

## VALUATION REPORT

## 1. Introduction

1.(1) The investigation relates to 31 December 2005.
1.(2) The previous investigation related to 31 December 2004.
b No interim valuations have been carried out for the purposes of rule 9.4 since 31 December 2004.

## 2. Product range

(a) New products

The Flexible Retirement Plan launched on 19 December 2005 is a property-linked individual pension, with an accumulating with-profits option (in the WPSF). Expense charges (from allocation percentages of contributions and fund-based annual management charge) are related explicitly to the commission package agreed between the intermediary and the customer. Policies may include life assurance payable on death before the selected retirement age. Life assurance is funded by cancelling units monthly at rates that may be reviewed in the light of changes in expected future mortality experience. There are no guaranteed investment returns. Under the accumulating with-profits option, an adjustment to reflect market conditions may be applied on surrender or on a switch of units from the fund.
(b) Products withdrawn

With the introduction of the Flexible Retirement Plan, the Premier pensions range was withdrawn except for top-ups and increments to existing contracts.
(c) New bonus series

No new bonus series have been introduced during the financial year.
(d) Changes to options or guarantees under existing products

A fifth anniversary capital guarantee option on PruFund, a with-profits bond, was introduced on 25 May 2005. If the value of the policy on the fifth anniversary is less than the initial investment (adjusted for any subsequent partial withdrawals) then the shortfall is removed by crediting the policy with additional with-profits units. The charge for the option is $0.5 \%$ per annum of the value of the policy deducted monthly for 60 months.

Unitised with-profits pensions business in SAIF sold prior to January 1996 contained a guarantee relating to the growth in the value of with-profits units. After discussions with the FSA, the following approach was implemented during 2005 in respect of this guarantee:

1. For all policies eligible for the guarantee, the guarantee will be interpreted as a minimum rate of growth in the offer price of accumulation units of $4 \%$ on a year-by-year basis.
2. A one-off adjustment to unit prices (and unit transactions) was made for the period from 1 April 2003 (when the rate of unit price growth first fell below $4 \%$ per annum).
3. Where the literature permits, the guaranteed rate of unit growth for units purchased after 31 December 2005 will be reduced (to $0.1 \%$ pa) or removed.

Guaranteed premium rates for critical illness have been introduced under the Prudential Protection product.

## 3. Discretionary charges and benefits

## 3.(1) Market value reduction

Market value reductions have been applied throughout 2005. The policy years of entry to which market value reductions were applied during 2005 are summarised below:

| Product | Policy years of entry |
| :--- | :--- |
| SAIF | $1985-2002,2004,2005$ |
| Prudence Bond | $1991-2002,2004,2005$ |
| PSA/PIB | $1994-2002,2004$ |
| Personal Pensions | $1987-2002,2004,2005$ |
| Corporate Pensions | $1988-2002,2004,2005$ |

## 3.(2) Reviewable protection policies

There was no review of premium rates for reviewable protection policies in 2005.

## 3.(3) Non-profit deposit administration benefits

There are no non-profit deposit administration contracts.

## 3.(4) Service charges on linked policies

Policy/member fees increased by $3.07 \%$ in 2005 for those linked products where the fees increase in line with Retail Price Index (RPI) inflation, based on the increase in RPI from September 2003 to September 2004.

## 3.(5) Benefit charges on linked policies

There have been no changes to benefit charges on linked policies during the financial year.
3.(6) Unit management charges and notional charges on accumulating with-profits policies

For accumulating with-profits business, changes to notional charges are shown in the table below:

|  | Reserves <br> $£ \mathrm{~m}$ | Old charge <br> $\%$ | New charge <br> $\%$ |
| :--- | :---: | :---: | :---: |
| PSA/PIB | 3,124 | 1.04 | 0.99 |
| Prudence Bond - Pre Mk9 and Establishment Charge <br> new business and top ups to this business up to 30/09/02 | 9,148 | 1.065 | 1.046 |
| Prudence Bond - Top ups to pre Mk7 and all <br> Establishment Charge options made after 30/09/02 | 210 | 1.215 | 1.196 |
| Prudence Bond - Mk9 new business and top ups to Mk7, <br> Mk8 and Mk9 after 30/09/02 | 186 | 1.315 | 1.296 |
| Prudence Bond - Pre NIC3 new business and top ups to <br> pre NIC up to 30/09/02 | 551 | 1.365 | 1.346 |
| Prudence Bond - NIC3 new business and top ups to <br> NIC1, NIC2 and NIC3 after 30/09/02 | 616 | 1.615 | 1.596 |
| Prospects Bond | 45 | 2.015 | 1.996 |

## 3. Discretionary charges and benefits (continued)

## 3.(7) Unit pricing of internal linked funds

## (a) Hong Kong PruLink policies - Prudential Money Fund

The unit issue price and redemption price are always 1.000 . Interest is credited to policies in the form of additional units not less frequently than once a month. The rate to be credited is determined from the value of the fund assets, any surplus being distributed by issuing new units on a pro-rata basis.

Hong Kong PruLink policies - all funds except the Prudential Money Fund
The funds are wholly invested in similarly named authorised Guernsey unit trusts managed by Prudential Fund Managers Guernsey. Units are allocated or cancelled on the next weekly valuation date at the prices determined by the unit trust manager. There is no bid/offer spread. PruLink policies provide that the fund unit prices may be varied from the corresponding unit trust price if a variation would be justified by, for example, a change in the basis of Hong Kong life office taxation.

## Other business written and retained by PAC

The company operates its internal linked funds on a forward pricing basis. The daily unit prices used for the allocation of units to and deallocation of units from policies are calculated by a valuation of the internal linked funds. The valuation point of each fund is 12 noon. The allocation and deallocation of units is carried out once the unit prices are available. The unit prices for a fund are determined using either a creation price basis or a cancellation price basis, depending on the net cash flow position of the fund. Creation of asset units is carried out at the creation price, which is based on the purchase cost of the underlying assets plus any associated costs. Cancellation of asset units is carried out at the cancellation price, which is based on the sale value of the underlying assets of the fund less any associated costs.

## Other

The unit pricing methods for all other contracts are described in the regulatory returns of the companies with which the linked liabilities are wholly reassured.
(b) Unit pricing bases are determined at fund level, so all policies invested in the same fund have the same basis applied.
(c) The price used for collective investment schemes and similar assets is the latest valuation at midday; deals placed before mid-day receive that price.

## 3.(8) Capital gains tax deductions from internal linked funds

Tax deductions are made on net realised gains as they arise, as well as for net unrealised gains on directly held assets. For holdings in collective investment schemes, allowance is made for the spreading over seven years of deemed disposals of net unrealised gains. Withdrawals from the fund for the payment of tax are made quarterly, the same frequency at which the company makes payments to the Inland Revenue.

Each unit fund is treated in principle as though it were a stand-alone taxable entity, so no credit is given for a net loss position, but no carry-back of losses is applied. Instead, credit is given for losses that would fall into the company's actual tax computation in a future year to the extent that they do not exceed the amount of deemed gains carried forward to that particular year. Net unrealised gains of directly held assets are not set off against any realised or deemed losses in the same fund, nor is credit given for net unrealised losses.

## 3. Discretionary charges and benefits (continued)

Allowance is made in determining the tax charge and provision for the time delay until the assets are assumed to be sold (for unrealised gains and losses) and between the date of calculation of the provision and the tax payment being made.

The tax rates applied in 2005 were as shown in 3.(9) below.

## 3.(9) Capital gains tax provisions for internal linked funds

## Guaranteed Equity Bond

Liabilities are matched by a combination of bonds and derivatives which ensure that at maturity the gross amount payable less tax at $22 \%$ on the chargeable gain from the derivatives equals the guaranteed maturity benefit. Capital gains tax is allowed for in the valuation by including the gross value of the derivatives in the mathematical reserves.

Linked contracts in France and Hong Kong
The funds are not subject to capital gains tax.

## Contracts with linked liabilities wholly reinsured

A full description of the capital gains tax provisions for these contracts can be found in the regulatory returns of the companies with which the linked liabilities are wholly reinsured.

Other business written by PAC - life business
As described in Section 3. (8) above, in determining the price of units in the internal linked funds relating to life business the value of assets is adjusted by a provision to reflect, on a fund by fund basis, the capital gains tax on indexed gains on the assets held within the funds. On certain funds some credit has been given in respect of chargeable losses. The provision for tax is calculated on a daily basis allowing for the movement in unrealised gains, after any indexation, and losses, using a tax rate reflecting the expected tax payable by the Company as these gains and losses are realised. For investments in non loan relationship unit trusts and OEICs, the tax rate used allows for the deemed disposal of the investments at the end of the year and the spreading of the tax payable over 7 years.

The mathematical reserves make allowance for the losses for which no credit is currently given that will be carried forward and offset against future gains or deemed disposals carried forward to future years.

The following percentages were deducted or provided for during the year:

|  | Realised gains/losses | Unrealised gains/losses |
| :--- | :---: | :---: |
| Equities and properties | $20 \%$ | $17 \%$ to $20 \%$ |
| Unit trusts and OEICS | $20 \%$ | $15 \%$ to $20 \%$ |
| Gilts and bonds | $20 \%$ | $20 \%$ |

For those policies that are linked directly to unit trusts, a terminal deduction from benefits payable to policyholders is made in respect of any past or potential liabilities to corporation tax on chargeable gains relating to the units allocated to the policy.

Other business written by PAC - pensions business
The funds are not subject to capital gains tax.

## 3. Discretionary charges and benefits (continued)

## 3.(10) Discount and commisssion on buying and selling units

## Linked contracts in France

The company receives rebate commission of $0.6 \%$ per annum of funds under management from the Réactif and Carmignac external unit-linked funds. Corresponding rebate commission of $0.4 \%$ and $0.3 \%$ respectively is payable to distributing agents. Policyholders do not benefit from this rebate.

Linked contracts in Hong Kong
No special terms apply when units are purchased from the unit trust manager.
Business written by PAC
For investment in unit trusts and OEICs the Company receives a discount equal to the managers' initial charge. The internal linked funds also benefit from the rebate of the annual management charge. All of the benefits of annual management charge rebates are passed on to policyholders.

Other
The unit pricing methods for all other contracts are described in the regulatory returns of the companies with which the linked liabilities are wholly reassured.

## 4. Valuation methods and bases (other than for special reserves)

4.(1) For the purpose of reporting valuation methods, interest rates and mortality and morbidity bases, the following product groups are defined:

| Product group | Form | Sub-fund | $\begin{gathered} \hline \text { OS/ } \\ \text { UKL/ } \\ \text { UKP } \end{gathered}$ | WP/NP | Product code | Product description | Gross mathematical reserves at 31/12/05 fm | Gross annual premiums at 31/12/05 fm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 51 | WPSF | OS | WP | 100 | Conventional whole life with-profits OB (Hong Kong Cash Bonus Plan) | 19 | 18 |
| 2 | 51 | WPSF | OS | WP | 100 | Conventional whole life with-profits OB (Hong Kong other) | 981 | 179 |
| 3 | 51 | WPSF | OS | WP | 120 | Conventional endowment with-profits OB savings (Malta and Channel Islands) | 35 | 2 |
| 4 | 51 | WPSF | OS | WP | 120 | Conventional endowment with-profits OB savings (Hong Kong) | 237 | 51 |
| 5 | 51 | WPSF | OS | WP | 165 | Conventional deferred annuity with-profits | 74 | 2 |
| 6 | 51 | WPSF | OS | NP | 325 | Level term assurance | 18 | 14 |
| 7 | 51 | WPSF | OS | NP | 345 | Accelerated critical illness (reviewable premiums) | 72 | 16 |
| 8 | 51 | WPSF | OS | NP | 395 | Annuity non-profit (PLA) (group business) | 31 | - |
| 9 | 51 | WPSF | OS | NP | 395 | Annuity non-profit (PLA) (individual business) | 52 | - |
| 10 | 51 | WPSF | UKL | WP | 100 | Conventional whole life with-profits OB | 315 | 12 |
| 11 | 51 | WPSF | UKL | WP | 105 | Conventional whole life with-profits IB | 49 | 12 |
| 12 | 51 | WPSF | UKL | WP | 120 | Conventional endowment with-profits OB savings | 1,993 | 88 |
| 13 | 51 | WPSF | UKL | WP | 125 | Conventional endowment with-profits OB target cash | 1,696 | 93 |
| 14 | 51 | WPSF | UKL | WP | 130 | Conventional endowment with-profits IB | 170 | 4 |
| 15 | 51 | WPSF | UKL | NP | 300 | Regular premium non-profit WL/EA OB | 225 | 2 |
| 16 | 51 | WPSF | UKL | NP | 310 | Non-profit IB | 59 | 0 |
| 17 | 51 | WPSF | UKL | NP | 325 | Level term assurance | 63 | 22 |
| 18 | 51 | WPSF | UKL | NP | 340 | Accelerated critical illness (guaranteed premiums) | 19 | 7 |
| 19 | 51 | WPSF | UKL | NP | 395 | Annuity non-profit (PLA) | 49 | - |
| 20 | 51 | WPSF | UKP | WP | 155 | Conventional pensions endowment with-profits | 56 | - |
| 21 | 51 | WPSF | UKP | WP | 165 | Conventional deferred annuity with-profits | 5,501 | 77 |
| 22 | 51 | WPSF | UKP | WP | 175 | Group conventional deferred annuity with-profits | 22 | - |
| 23 | 51 | WPSF | UKP | WP | 200 | Annuity with-profits (CPA) (valued by 0\% rate of interest) | 55 | - |
| 24 | 51 | WPSF | UKP | WP | 200 | Annuity with-profits (CPA) (other) | 903 | - |
| 25 | 51 | WPSF | UKP | NP | 325 | Level term assurance | 43 | 12 |
| 26 | 51 | WPSF | UKP | NP | 390 | Deferred annuity non-profit (reassured to PAL in GPDA system) | 14 | - |
| 27 | 51 | WPSF | UKP | NP | 390 | Deferred annuity non-profit (reassured to PAL - other) | 260 | - |

4. Valuation methods and bases (continued)

| Product group | Form | Sub-fund | $\begin{gathered} \hline \text { OS/ } \\ \text { UKL/ } \\ \text { UKP } \end{gathered}$ | WP/NP | Product code | Product description | Gross mathematical reserves at 31/12/05 £m | Gross annual premiums at 31/12/05 fm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | 51 | WPSF | UKP | NP | 390 | Deferred annuity non-profit (retained in PAC) | 155 | - |
| 29 | 51 | WPSF | UKP | NP | 400 | Annuity non-profit (CPA) (reassured to PRIL) | 947 | - |
| 30 | 51 | WPSF | UKP | NP | 400 | Annuity non-profit (CPA) (Ex-SAL business reassured to PRIL) | 295 | - |
| 31 | 51 | WPSF | UKP | NP | 400 | Annuity non-profit (CPA) (reassured to PAL) | 8,467 | - |
| 32 | 51 | WPSF | UKP | NP | 405 | Annuity non-profit (CPA impaired life) | 10 | - |
| 33 | 51 | SAIF | UKL | WP | 100 | Conventional whole life with-profits OB | 57 | 1 |
| 34 | 51 | SAIF | UKL | WP | 120 | Conventional endowment with-profits OB savings | 459 | 15 |
| 35 | 51 | SAIF | UKL | WP | 125 | Conventional endowment with-profits OB target cash | 3,216 | 111 |
| 36 | 51 | SAIF | UKL | NP | 330 | Decreasing term assurance | 34 | 14 |
| 37 | 51 | SAIF | UKP | WP | 155 | Conventional pensions endowment with-profits (FlexiPension) | 900 | 10 |
| 38 | 51 | SAIF | UKP | WP | 155 | Conventional pensions endowment with-profits (other) | 261 | 1 |
| 39 | 51 | SAIF | UKP | WP | 165 | Conventional deferred annuity with-profits | 22 | 0 |
| 40 | 51 | SAIF | UKP | WP | 175 | Group conventional deferred annuity with-profits | 114 | 1 |
| 41 | 51 | SAIF | UKP | NP | 300 | Regular premium non-profit WL/EA OB | 17 | - |
| 42 | 51 | SAIF | UKP | NP | 325 | Level term assurance | 17 | 3 |
| 43 | 51 | SAIF | UKP | NP | 390 | Deferred annuity non-profit | 83 | 0 |
| 44 | 51 | SAIF | UKP | NP | 400 | Annuity non-profit (CPA) | 609 | - |
| 45 | 51 | NPSF | UKL | NP | 340 | Accelerated critical illness (guaranteed premiums) | 33 | 8 |
| 46 | 51 | NPSF | UKP | NP | 400 | Annuity non-profit (CPA) (reassured to PRIL) | 327 | - |
| 47 | 51 | NPSF | UKP | NP | 400 | Annuity non-profit (CPA) (other) | 1,126 | - |
| 48 | 52 | WPSF | OS | WP | 500 | Life UWP single premium (PRUsaver - US) | 150 | - |
| 49 | 52 | WPSF | OS | WP | 500 | Life UWP single premium (PRUsaver - HK) | 645 | - |
| 50 | 52 | WPSF | OS | WP | 505 | Life UWP whole life regular premium | 13 | 4 |
| 51 | 52 | WPSF | OS | WP | 525 | Individual pensions UWP | 58 | 3 |
| 52 | 52 | WPSF | OS | WP | 555 | Group deposit administration with-profits (fund with 4.75\% guarantee) | 32 | - |
| 53 | 52 | WPSF | OS | WP | 555 | Group deposit administration with-profits (other) | 11 | - |
| 54 | 52 | WPSF | UKL | WP | 500 | Life UWP single premium | 13,272 | - |
| 55 | 52 | WPSF | UKL | WP | 505 | Life UWP whole life regular premium | 608 | 63 |
| 56 | 52 | WPSF | UKL | WP | 510 | Life UWP endowment regular premium - savings | 15 | 3 |

4. Valuation methods and bases (continued)

| Product group | Form | Sub-fund | $\begin{gathered} \hline \text { OS/ } \\ \text { UKL/ } \\ \text { UKP } \end{gathered}$ | WP/NP | Product code | Product description | Gross mathematical reserves at 31/12/05 £m | ```Gross annual premiums at 31/12/05 fm``` |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57 | 52 | WPSF | UKL | WP | 515 | Life UWP endowment regular premium - target cash (Ex-SAL) | 179 | 33 |
| 58 | 52 | WPSF | UKL | WP | 515 | Life UWP endowment regular premium - target cash (other) | 35 | 0 |
| 59 | 52 | WPSF | UKP | WP | 525 | Individual pensions UWP (IFA business) | 468 | 30 |
| 60 | 52 | WPSF | UKP | WP | 525 | Individual pensions UWP (all except for IFA and direct salesforce (DSF) business) | 592 | 11 |
| 61 | 52 | WPSF | UKP | WP | 525 | Individual pensions UWP (DSF business) | 12,305 | 251 |
| 62 | 52 | WPSF | UKP | WP | 535 | Group money purchase pensions UWP (IFA business) | 39 | 7 |
| 63 | 52 | WPSF | UKP | WP | 535 | Group money purchase pensions UWP (other) | 1,737 | 82 |
| 64 | 52 | WPSF | UKP | WP | 555 | Group deposit administration with-profits (fund with 0\% guarantee) | 942 | 289 |
| 65 | 52 | WPSF | UKP | WP | 555 | Group deposit administration with-profits (fund with 2.5\% guarantee) | 2,211 | - |
| 66 | 52 | WPSF | UKP | WP | 555 | Group deposit administration with-profits (fund with 4.75\% guarantee) | 1,088 | - |
| 67 | 52 | WPSF | UKP | WP | 570 | Income drawdown UWP | 67 | - |
| 68 | 52 | WPSF | UKP | WP | 571 | Trustee investment plan UWP | 105 | - |
| 69 | 52 | WPSF | UKP | WP | 575 | Miscellaneous UWP | 28 | - |
| 70 | 52 | SAIF | UKL | WP | 510 | Life UWP endowment regular premium - savings | 29 | 4 |
| 71 | 52 | SAIF | UKL | WP | 515 | Life UWP endowment regular premium - target cash | 837 | 85 |
| 72 | 52 | SAIF | UKP | WP | 525 | Individual pensions UWP (FlexiPension) | 792 | 20 |
| 73 | 52 | SAIF | UKP | WP | 525 | Individual pensions UWP (other) | 3,153 | 39 |
| 74 | 52 | SAIF | UKP | WP | 535 | Group money purchase pensions UWP | 26 | 1 |
| 75 | 52 | DCPSF | OS | WP | 500 | Life UWP single premium (French business) | 83 | - |
| 76 | 52 | DCPSF | OS | WP | 500 | Life UWP single premium (fund in Euro) | 342 | - |
| 77 | 52 | DCPSF | OS | WP | 500 | Life UWP single premium (fund in GBP) | 259 | - |
| 78 | 52 | DCPSF | OS | WP | 500 | Life UWP single premium (fund in HKD or USD) | 198 | - |
| 79 | 52 | DCPSF | OS | WP | 525 | Individual pensions UWP | 57 | 23 |
| 80 | 52 | DCPSF | OS | WP | 575 | Miscellaneous UWP (fund in Euro) | 53 |  |
| 81 | 52 | DCPSF | OS | WP | 575 | Miscellaneous UWP (fund in GBP) | 31 |  |
| 82 | 52 | DCPSF | OS | WP | 575 | Miscellaneous UWP (fund in USD) | 115 | - |
| 83 | 53 | WPSF | UKL | NP | 700 | Life property linked single premium | 15 | - |
| 84 | 53 | WPSF | UKP | NP | 725 | Individual pensions property linked | 39 | 1 |

## 4. Valuation methods and bases (continued)

| Product group | Form | Sub-fund | $\begin{gathered} \hline \text { OS/ } \\ \text { UKL// } \\ \text { UKP } \end{gathered}$ | WP/NP | Product code | Product description | Gross mathematical reserves at 31/12/05 £m | Gross annual premiums at 31/12/05 £m |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 85 | 53 | WPSF | UKP | NP | 735 | Group money purchase pensions property linked | 820 | 11 |
| 86 | 53 | SAIF | UKP | NP | 725 | Individual pensions property linked | 18 | 0 |
| 87 | 53 | NPSF | OS | NP | 710 | Life property linked whole life regular premium | 168 | 58 |
| 88 | 53 | NPSF | OS | NP | 775 | Accelerated critical illness rider | 15 | 7 |
| 89 | 53 | NPSF | UKL | NP | 700 | Life property linked single premium (PruBond) | 1,528 |  |
| 90 | 53 | NPSF | UKL | NP | 700 | Life property linked single premium (PruFund, PruTrust) | 152 |  |
| 91 | 53 | NPSF | UKL | NP | 700 | Life property linked single premium (other) | 917 |  |
| 92 | 53 | NPSF | UKL | NP | 710 | Life property linked whole life regular premium (PruFund) | 15 | 1 |
| 93 | 53 | NPSF | UKL | NP | 710 | Life property linked whole life regular premium (other) | 354 | 14 |
| 94 | 53 | NPSF | UKL | NP | 715 | Life property linked endowment regular premium - savings (PruFund) | 46 | 1 |
| 95 | 53 | NPSF | UKL | NP | 715 | Life property linked endowment regular premium - savings (other - with disability benefits) | 17 | 3 |
| 96 | 53 | NPSF | UKL | NP | 715 | Life property linked endowment regular premium - savings (other - without disability benefits) | 58 | 1 |
| 97 | 53 | NPSF | UKL | NP | 720 | Life property linked endowment regular premium - target cash (with disability benefits) | 196 | 35 |
| 98 | 53 | NPSF | UKL | NP | 720 | Life property linked endowment regular premium - target cash (without disability benefits) | 29 | 2 |
| 99 | 53 | NPSF | UKP | NP | 725 | Individual pensions property linked (IFA business) | 2,123 | 101 |
| 100 | 53 | NPSF | UKP | NP | 725 | Individual pensions property linked (other) | 220 | 5 |
| 101 | 53 | NPSF | UKP | NP | 735 | Group money purchase pensions property linked (Ex-SAL) | 206 | 11 |
| 102 | 53 | NPSF | UKP | NP | 735 | Group money purchase pensions property linked (Stakeholder) | 265 | 63 |
| 103 | 53 | NPSF | UKP | NP | 750 | Income drawdown property linked | 123 |  |
| 104 | 53 | NPSF | UKP | NP | 755 | Trustee investment plan | 54 |  |
| 105 | 53 | NPSF | UKP | NP | 795 | Miscellaneous property linked | 32 |  |
| 106 | 54 | WPSF | UKP | NP | 905 | Index linked annuity (reassured to PRIL) | 17 | - |
| 107 | 54 | WPSF | UKP | NP | 905 | Index linked annuity (reassured to PAL) | 457 | - |

## 4. Valuation methods and bases (continued)

## 4.(1), 4.(2) and 4.(4) Valuation methods, interest rates and mortality bases

The valuation methods, interest rates and mortality bases used are shown in the table below:
(Valuation interest rates shown for UK life business are net of tax)

| Product group | Valuation method at 31/12/05 | $\begin{array}{\|c} \hline \text { Interest rate at } \\ 31 / 12 / 05 \\ \% \\ \hline \end{array}$ | $\begin{gathered} \text { Interest rate at } \\ 31 / 12 / 04 \\ \% \\ \hline \end{gathered}$ | Mortality basis at 31/12/05 | Mortality basis at 31/12/04 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Modified NPV | 3.1 | 3.4 | 125\%HKA93 | 125\%HKA93 |
| 2 | Modified NPV | 3.1 | 3.4 | 90\%AM92 / 90\%AF92 | AM92 / AF92 |
| 3 | Modified NPV | 3 | 3 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 4 | Modified NPV | 3.1 | 3.4 | 90\%AM92 / 90\%AF92 | AM92 / AF92 |
| 5 | Modified NPV | 4.25*/4.25** | 5.0*/4.5** | In deferment: AM92 rated down 3 years for men and 7 years for women In possession: modified PMA92/ PFA92 (see note 1) | In deferment: AM92 rated down 3 years for men and 7 years for women In possession: modified PMA92/ PFA92 (see note 2) |
| 6 | Modified NPV | 3.1 | 3.4 | 90\%AM92 / 90\%AF92 | AM92 / AF92 |
| 7 | Modified NPV | 3.1 | 3.4 | none | none |
| 8 | Present value of future benefits and expenses | 4.203*/4.203** | 4.734*/4.734** | modified PMA92 / PFA92 (see note 3) | modified PMA92 / PFA92 (see note 4) |
| 9 | Present value of future benefits and expenses | 4 | 4.5 | modified PMA92 / PFA92 (see note 3) | modified PMA92 / PFA92 (see note 4) |
| 10 | Modified NPV | 3 | 3 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 11 | NPV | 3 | 3 | A1967/70 rated up 1 year | A1967/70 rated up 1 year |
| 12 | Modified NPV | 3 | 3 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 13 | Modified NPV | 3 | 3 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 14 | NPV | 3 | 3 | A1967/70 rated up 1 year | A1967/70 rated up 1 year |
| 15 | NPV | 3 | 3 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 16 | NPV | 3 | 3 | A1967/70 rated up 1 year | A1967/70 rated up 1 year |
| 17 | NPV | 3 | 3 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 18 | GPV | 3 | 3 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |

## 4. Valuation methods and bases (continued)

| Product group | Valuation method at 31/12/05 | $\begin{array}{\|c\|} \hline \text { Interest rate at } \\ 31 / 12 / 05 \\ \% \\ \hline \end{array}$ | $\begin{gathered} \hline \text { Interest rate at } \\ 31 / 12 / 04 \\ \% \\ \hline \end{gathered}$ | Mortality basis at 31/12/05 | Mortality basis at 31/12/04 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | Present value of future benefits and expenses | 4 | 4.5 | Modified PMA92 PFA92 tables (see note 5) | Modified PMA92 PFA92 tables (see note 4) |
| 20 | Present value of future benefits and expenses | 0 | 0 | Modified PMA92 PFA92 tables (see note 6) | Modified PMA92 PFA92 tables (see note 7) |
| 21 | Modified NPV | 4.25*/4.25** | 5.0*/4.5** | $\left.\begin{array}{\|l}\text { In deferment: } \\ \text { AM92 rated down } 3 \text { years for men } \\ \text { and } 7 \text { years for women }\end{array}\right\}$ | In deferment: AM92 rated down 3 years for men and 7 years for women <br> In possession: modified PMA92 / PFA92 (see note 2) |
| 22 | Present value of future benefits and expenses | 3.0*/3.0** | $3.0 * / 3.0$ ** | In deferment: AM92 / AF92 both rated down 4 years In possession: modified PMA92 PFA92 tables (see note 1) | In deferment:AM92 / AF92 both rated down <br> 4 years <br> In possession: <br> modified PMA92 PFA92 tables <br> (see note 2) |
| 23 | Present value of future benefits and expenses | 4 | 4.5 | Modified PMA92 PFA92 tables (see note 5) | Written before 2004: <br> Modified PMA92 PFA92 tables (see note 8) <br> Written in 2004: <br> Modified PMA92 PFA92 tables (see note 9) |
| 24 | Present value of future benefits and expenses | 0 | 0 | Modified PMA92 PFA92 tables (see note 6) | Modified PMA92 PFA92 tables (see note 7) |
| 25 | NPV | 3 | 3 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 26 | Present value of future benefits and expenses | 4.203*/4.203** | 4.734*/4.734** | In deferment: AM92 / AF92 both rated down <br>  4 years, <br> In possession: modified PMA92 PFA92 tables <br>  (see note 15) | Written before 2004: <br> In deferment: AM92 / AF92 both rated down 4 years, <br> In possession: modified PMA92 PFA92 tables (see note 8); <br> Written in 2004: <br> In deferment: AM92 / AF92 both rated down 4 years, <br> In possession: modified PMA92 PFA92 tables (see note 9) |

## 4. Valuation methods and bases (continued)

| $\begin{array}{\|l\|} \hline \text { Product } \\ \text { group } \end{array}$ | Valuation method at 31/12/05 | $\begin{array}{\|c\|} \hline \text { Interest rate at } \\ 31 / 12 / 05 \\ \% \\ \hline \end{array}$ | $\begin{gathered} \hline \text { Interest rate at } \\ 31 / 12 / 04 \\ \% \\ \hline \end{gathered}$ | Mortality basis at 31/12/05 | Mortality basis at 31/12/04 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27 | Present value of future benefits and expenses | 4.203*/4.203** | 4.734*/4.734** | In deferment: AM92 / AF92 both rated down 4 years <br> In possession: 80\%PMA92c2004 / <br> 87.3\%PFA92c2004 <br> Life expectancy: <br> For annuities in payment: at 65 (M) 20.1 (F) 22.5; at 75 (M) 12.4 (F) 14.5 <br> For deferred annuity at 65 : for current age 45 (M) 21.6 (F) 24.1; for current age 55 (M) 20.9 (F) 23.3 | In deferment: AM92 / AF92 both rated down <br> 4 years  <br> In possession: $88.8 \%$ PMA92 c2004 / <br> $87.3 \%$ PFA92 c2004;  <br> Life expectancy:  <br> For annuities in payment: at 65 (M) 19.3 (F) 22.5  <br> at 75 (M) 11.7 (F) 14.5  <br> For deferred annuities at 65:  <br> for current age 45 (M) 20.7 (F) 24.1  <br> for current age 55 (M) 20.0 (F) 23.3  |
| 28 | Present value of future benefits and expenses | 4.0*/4.0** | 5.0*/4.0** | In deferment: AM92 / AF92 both rated down 4 years; <br> In possession: Modified PMA92 PFA92 tables (see note 1) | $\left.\begin{array}{\|l}\text { In deferment: }\end{array} \begin{array}{l}\text { AM92 / AF92 both rated down } \\ 4 \text { years, }\end{array}\right]$In possession: <br> Modified PMA92 PFA92 tables <br> (see note 2) |
| 29 | Present value of future benefits and expenses | 4.226 | 4.601 | Modified PMA92 / PFA92 (see note 10) | Modified PMA92 / PFA92 (see note 11) |
| 30 | Present value of future benefits and expenses | 4.226 | 4.601 | 75\% PMA92 c2004 / 69\% PFA92 c2004 ${ }^{(3)}$ Life expectancy: at 65 (M) 20.7 (F) 24.7 at 75 (M) 12.8 (F) 16.4 | $82 \%$ PMA92 c2004 / $80 \%$ PFA92 c2004 ${ }^{(3)}$ Life expectancy: at 65 (M) 19.9 (F) 23.3 at 75 (M) 12.2 (F) 15.2 |
| 31 | Present value of future benefits and expenses | 4.203 | 4.734 | Modified PMA92 / PFA92 (see note 5) | Written before 2004: <br> Modified PMA92 PFA92 tables (see note 8) <br> Written in 2004: <br> Modified PMA92 PFA92 tables (see note 9) |
| 32 | Present value of future benefits and expenses | 4.203 | 4.734 | Modified PMA92 PFA92 tables (see note 5) | Written before 2004: <br> Modified PMA92 PFA92 tables (see note 8); <br> Written in 2004: <br> Modified PMA92 PFA92 tables (see note 9) |

## 4. Valuation methods and bases (continued)

| Product group | Valuation method at 31/12/05 | $\begin{array}{\|c\|} \hline \text { Interest rate at } \\ 31 / 12 / 05 \\ \% \\ \hline \end{array}$ | $\begin{gathered} \text { Interest rate at } \\ 31 / 12 / 04 \\ \% \\ \hline \end{gathered}$ | Mortality basis at 31/12/05 | Mortality basis at 31/12/04 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 33 | Modified NPV | 3 | 3 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 34 | Modified NPV | 3 | 3 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 35 | Modified NPV | 3 | 3 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 36 | NPV | 3 | 3 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 37 | Modified NPV | 4.5 | 4.5 | AM92 / AF92 both rated down 4 years | AM92 / AF92 both rated down 3 years |
| 38 | Modified NPV | 4.5 | 4.5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 39 | Modified NPV | 4.5 | 4.5 | In deferment: AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 <br> In possession: Modified PMA92 PFA92 tables (see note 12) | $\left.\begin{array}{\|ll\|}\text { In deferment: } & \text { AM92 / AF92 both rated up 1 year } \\ \text { plus 1/3 of projection R6A of the } \\ \text { Institute of Actuaries AIDS Working }\end{array}\right\}$Party Bulletin No. 5 <br> In possession:Modified PMA92 PFA92 tables <br> (see note 13) |

## 4. Valuation methods and bases (continued)

| Product group | Valuation method at 31/12/05 | $\begin{gathered} \text { Interest rate at } \\ 31 / 12 / 05 \\ \% \end{gathered}$ | $\begin{gathered} \text { Interest rate at } \\ 31 / 12 / 04 \\ \% \end{gathered}$ | Mortality basis at 31/12/05 | Mortality basis at 31/12/04 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 40 | Modified NPV | 4.25 | 4.5 | In deferment: AM92 / AF92 both rated up 1 year <br>  plus 1/3 of projection R6A of the <br>  Institute of Actuaries AIDS Working <br>  Party Bulletin No. 5 <br> In possession: Modified PMA92 PFA92 tables <br> (see note 12) | In deferment: AM92 / AF92 both rated up 1 year <br> plus 1/3 of projection R6A of the  <br>  Institute of Actuaries AIDS Working <br> Party Bulletin No. 5  |
| 41 | NPV | 3.75 | 4 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 42 | NPV | 3.75 | 4 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 43 | NPV | 3.75 | 4 | In deferment: AM92 / AF92 both rated up 1 year <br> plus 1/3 of projection R6A of the  <br>  Institute of Actuaries AIDS Working <br>  Party Bulletin No. 5 <br> In possession: Modified PMA92 PFA92 tables <br> (see note 12) | In deferment: AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5; <br> In possession: Modified PMA92 PFA92 tables (see note 13) |
| 44 | NPV | 3.75 | 4.5 | Modified PMA92 PFA92 tables (see note 10) | Modified PMA92 PFA92 tables (see note 11) |
| 45 | GPV | 3 | 3 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 46 | Present value of future benefits and expenses | 4.226 | 4.601 | Modified PMA92 PFA92 tables (see note 10) | Modified PMA92 PFA92 tables (see note 11) |
| 47 | Present value of future benefits and expenses | 4.14 | 4.609 | Modified PMA92 PFA92 tables (see note 12) | Modified PMA92 PFA92 tables (see note 13) |

4. Valuation methods and bases (continued)

| Product group | Valuation method at 31/12/05 | $\begin{array}{\|c\|} \hline \text { Interest rate at } \\ \mathbf{3 1 / 1 2 / 0 5} \\ \% \\ \hline \end{array}$ | $\begin{gathered} \hline \text { Interest rate at } \\ \mathbf{3 1 / 1 2 / 0 4} \\ \% \\ \hline \end{gathered}$ | Mortality basis at 31/12/05 | Mortality basis at 31/12/04 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 48 | AWP methodology | 2.9 | 2.9 | 180\% of HKA93 | 180\% of HKA93 |
| 49 | AWP methodology | 3 | 2.5 | 180\% of HKA93 | 180\% of HKA93 |
| 50 | AWP methodology | 3 | 2.5 | 180\% of HKA93 | 180\% of HKA93 |
| 51 | AWP methodology | 2 | 4 | AM92 rated up 1 year for men and 3 years for women | AM92 rated up 1 year for men and 3 years for women |
| 52 | AWP methodology | 4.25 | 5 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 53 | AWP methodology | 4 | 4 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 54 | AWP methodology | 1.6 | 3.2 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 55 | AWP methodology | 1.6 | 3.2 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 56 | AWP methodology | 1.6 | 3.2 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 57 | AWP methodology | 1.6 | 3.2 | 85\% of AM80 / 85\% of AF80 | 85\% of AM80 / 85\% of AF80 |
| 58 | AWP methodology | 3.2 | 3.2 | 85\% of AM80 / 85\% of AF80 | 85\% of AM80 / 85\% of AF80 |
| 59 | AWP methodology | 2 | 4 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 60 | AWP methodology | 2 | 4 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 61 | AWP methodology | 2 | 4 | AM92 rated up 1 year for men and rated down 3 years for women | AM92 rated up 1 year for men and rated down 3 years for women |
| 62 | AWP methodology | 2 | 4 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 63 | AWP methodology | 2 | 4 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 64 | AWP methodology | 2 | 4 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 65 | AWP methodology | 4 | 4 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 66 | AWP methodology | 4.25 | 5 | AM92 / AF92 both rated up 1 year | AM92/AF92 both rated up 1 year |
| 67 | AWP methodology | 2 | 4 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |

4. Valuation methods and bases (continued)

| Product group | Valuation method at 31/12/05 | $\begin{array}{\|c\|} \hline \text { Interest rate at } \\ \mathbf{3 1 / 1 2 / 0 5} \\ \% \\ \hline \end{array}$ | $\begin{gathered} \hline \text { Interest rate at } \\ 31 / 12 / 04 \\ \% \\ \hline \end{gathered}$ | Mortality basis at 31/12/05 | Mortality basis at 31/12/04 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 68 | AWP methodology | 2 | 4 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 69 | AWP methodology | 4 | 4 | Modified PMA92 PFA92 tables (see note 14) | Modified PMA92 PFA92 tables (see note 7) |
| 70 | AWP methodology | 3.2 | 3.2 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 71 | AWP methodology | 3.2 | 3.2 | 85\% of AM80 / 85\% of AF80 | 85\% of AM80 / 85\% of AF80 |
| 72 | AWP methodology | 4.5 | 4.5 | AM92 / AF92 both rated down 4 years | AM92 / AF92 both rated down 3 years |
| 73 | AWP methodology | 3.75 | 0\% guarantee: <br> 4.0 <br> 4\% guarantee: <br> 4.125 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 74 | AWP methodology | 3.75 | $\begin{array}{\|c} \hline 0 \% \text { guarantee: } \\ 4.0 \\ 4 \% \text { guarantee: } \\ 4.125 \\ \hline \end{array}$ | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 75 | AWP methodology | 2.75 | 2.75 | TV8890 / TD8890 both rated down 3 years | TV8890 / TD8890 both rated down 3 years |
| 76 | AWP methodology | 2.75 | 2.75 | AM92 / AF92 | AM92 / AF92 |
| 77 | AWP methodology | 2 | 4 | AM92 / AF92 | AM92 / AF92 |
| 78 | AWP methodology | 3 | 3 | AM92 / AF92 | AM92 / AF92 |
| 79 | AWP methodology | 2.75 | 2.75 | AM92 / AF92 | AM92 / AF92 |
| 80 | AWP methodology | 2.75 | 2.75 | AM92 / AF92 | AM92 / AF92 |
| 81 | AWP methodology | 2 | 4 | AM92 / AF92 | AM92 / AF92 |
| 82 | AWP methodology | 3 | 3 | AM92 / AF92 | AM92 / AF92 |
| 83 | Unit value + sterling reserves | 3 | 3.2 | AM92 / AF92 both rated down 3 years | AM92 / AF92 both rated down 3 years |

## 4. Valuation methods and bases (continued)

| Product group | Valuation method at 31/12/05 | Interest rate at 31/12/05 \% | $\begin{gathered} \hline \text { Interest rate at } \\ \mathbf{3 1 / 1 2 / 0 4} \\ \% \\ \hline \end{gathered}$ | Mortality basis at 31/12/05 | Mortality basis at 31/12/04 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 84 | Unit value + sterling reserves | 4 | 4 | AM92 / AF92 both rated down 3 years | AM92 / AF92 both rated down 3 years |
| 86 | Unit value + sterling reserves | 3.75 | 4 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 87 | Unit value + sterling reserves | 6.84 | 6.9 | 90\% of AM92 / 90\% of AF92 | 90\% of AM92 / 90\% of AF92 |
| 88 | Modified NPV | 3.4 | 3.4 | None | None |
| 89 | Unit value + sterling reserves | 3 | 3.2 | AM92 / AF92 both rated down 3 years | AM92 / AF92 both rated down 3 years |
| 90 | Unit value + sterling reserves | 3 | 3.2 | Single life: AM92 rated down 3 years for men and rated down 8 years for women <br> Joint lives: AM92 rated up 3 years | Single life: AM92 rated down 3 years for men and rated down 8 years for women <br> Joint lives: AM92 rated up 3 years |
| 91 | Unit value + sterling reserves | 3 | 3.2 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 92 | Unit value + sterling reserves | 3 | 3.2 | Single life: AM92 rated down 3 years for men and rated down 8 years for women <br> Joint lives: AM92 rated up 3 years | Single life: AM92 rated down 3 years for men and rated down 8 years for women <br> Joint lives: AM92 rated up 3 years |
| 93 | Unit value + sterling reserves | 3 | 3.2 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 94 | Unit value + sterling reserves | 3 | 3.2 | Single life: AM92 rated down 3 years for men and rated down 8 years for women <br> Joint lives: AM92 rated up 3 years | $\begin{aligned} & \text { Single life: AM92 rated down } 3 \text { years for men and } \\ & \text { rated down } 8 \text { years for women }\end{aligned}$ Joint lives: AM92 rated up 3 years |
| 95 | Unit value + sterling reserves | 3 | 3.2 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |

## 4. Valuation methods and bases (continued)

| Product group | Valuation method at 31/12/05 | $\begin{array}{\|c\|} \hline \text { Interest rate at } \\ 31 / 12 / 05 \\ \% \\ \hline \end{array}$ | $\begin{gathered} \hline \text { Interest rate at } \\ \mathbf{3 1 / 1 2 / 0 4} \\ \% \\ \hline \end{gathered}$ | Mortality basis at 31/12/05 | Mortality basis at 31/12/04 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 96 | Unit value + sterling reserves | 3 | 3.2 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 97 | Unit value + sterling reserves | 3 | 3.2 | 85\% of AM80 / 85\%AF80 | 85\% of AM80 / 85\%AF80 |
| 98 | Unit value + sterling reserves | 3 | 3.2 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 99 | Unit value + sterling reserves | 4 | 4 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 100 | Unit value + sterling reserves | 4 | 4 | AM92 / AF92 both rated down 3 years | AM92 / AF92 both rated down 3 years |
| 101 | Unit value + sterling reserves | 4 | 4 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 102 | Unit value + sterling reserves | 4 | 4 | AM92 / AF92 both rated down 3 years | AM92 / AF92 both rated down 3 years |
| 103 | Unit value + sterling reserves | 4 | 4 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |
| 104 | Unit value + sterling reserves | 4 | 4 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 | AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5 |

## 4. Valuation methods and bases (continued)

| Product group | Valuation method at 31/12/05 | Interest rate at 31/12/05 \% | Interest rate at 31/12/04 \% | Mortality basis at 31/12/05 | Mortality basis at 31/12/04 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 105 | Number of units x valuation unit price x annuity factor | 3.75 | 4 | In deferment: AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5; <br> In possession: Modified PMA92 PFA92 tables (see note 12) | In deferment: AM92 / AF92 both rated up 1 year plus $1 / 3$ of projection R6A of the Institute of Actuaries AIDS Working Party Bulletin No. 5; <br> In possession: Modified PMA92 PFA92 tables (see note 13) |
| 106 | Present value of future benefits and expenses | 1.282 | 1.452 | $75 \%$ of PMA92c2004 / 69\% of PFA92c2004 ${ }^{(3)}$ Life expectancy: at 65 (M) 20.7 (F) 24.7 at 75 (M) 12.8 (F) 16.4 | $82 \%$ of PMA92c2004 / 80\% of PFA92c2004 ${ }^{(3)}$ Life expectancy: at 65 (M) 19.9 (F) 23.3 at 75 (M) 12.2 (F) 15.2 |
| 107 | Present value of future benefits and expenses | 1.334 | 1.693 | Modified PMA92 PFA92 tables (see note 5) | Written before 2004: $\quad$ Modified PMA92 PFA92 tables (see note 8 ) Written in 2004: $\quad$ Modified PMA92 PFA92 tables (see note 9) |

* in deferment
** in possession
*** The ex-SAL individual annuities in payment business reassured to PRIL have been valued using percentage of single entry mortality tables with calendar year 2004, such that the rates used are comparable to appropriate double entry tables with future mortality improvement factors.

The mortality bases for impaired life annuities are those for standard lives adjusted by an age-rating on a case-by-case basis
The valuation interest rates shown above are stated after deducting investment management expenses (see 4(6) below).

## 4. Valuation methods and bases (continued)

4.(1). 1 Unless specified to the contrary in 4.(1). 6 below, the mathematical reserve for assurances and annuities reported in Form 51 is the difference between the present value of the benefits and the present value of the future valuation net premiums (a "net premium valuation" method (NPV)), both calculated with provision for immediate payment of claims. To ensure conformity with PRU 7.3.24R, policies where negative reserves could arise have been valued individually, and the mathematical reserves increased to zero where necessary. Otherwise, contracts with a common attained age and number of years to run to maturity or premium cessation are grouped together.

For some classes of non-profit business, a gross premium valuation (GPV) method is used, being the difference between the present value of future benefits and the present value of future office premiums, with an explicit allowance for expenses.
4.(1). 2 The mathematical reserve for accumulating with-profits business in SAIF and SAA, and for accumulating with-profits business previously written in SAL and in respect of new business on those products, is taken as the lower of:
(a) the value at the bid price, excluding terminal bonus, of the notional number of units allocated to policyholders, and
(b) the surrender or transfer value which, having regard to the duty to treat customers fairly, would be payable at the valuation date,
or, if greater, the value of the guaranteed liabilities, excluding final bonus, calculated on a gross premium bonus reserve method making no allowance for future annual bonus interest.

A further non-unit reserve is held in respect of mortality or morbidity, as appropriate, and expenses (including investment management expenses and other outgo associated with payments to third parties).

The comparison of the value of units allocated, the surrender or transfer value and the bonus reserve liability is carried out on a policy-by-policy basis.

For contracts where actuarial funding is used, the value of the units is net of the present value of future annual establishment charges, recurrent management charges or additional management charges which are used to recoup initial expenses.

In the base scenario the surrender or transfer value is taken as the accumulated fund, including final bonus and less a market value reduction where appropriate, at the valuation date, less any explicit charge that would apply on immediate surrender. In the resilience scenarios, the surrender or transfer value described above is, where appropriate, reduced to reflect the market value reductions that would be applied consistent with movements in the underlying asset values over the lifetime of the policy.

The non-unit reserves are adequate, on the valuation basis, to eliminate any future negative cash flows which would otherwise arise.

Specific provision is made for the Guaranteed Minimum Pension under Section 32 Buy Out contracts.

## 4. Valuation methods and bases (continued)

4.(1).3 The mathematical reserve for all other accumulating with-profits business is taken as the lower of:
(a) the accumulated fund or the value at the bid price of the notional number of units allocated to policyholders, in both cases excluding final bonus, and
(b) the surrender or transfer value which, having regard to the duty to treat customers fairly, would be payable at the valuation date,
or, if greater, the value of the guaranteed liabilities, excluding final bonus, calculated on a gross premium bonus reserve method making no allowance for future annual bonus interest.

The comparison of the accumulated fund or value of units allocated, the surrender or transfer value and the bonus reserve liability is carried out on a policy-by-policy basis.

For contracts where initial expenses are recouped by an annual cancellation of units allocated in the first year, the number of units valued is reduced appropriately. In cases where a higher benefit would be payable on early death, due allowance has been made.

In the base scenario the surrender or transfer value is taken as the accumulated fund, including final bonus and less a market value reduction where appropriate, at the valuation date, less any explicit charge that would apply on immediate surrender. In the resilience scenarios, the surrender or transfer value described above is, where appropriate, reduced to reflect the market value reductions that would be applied consistent with movements in the underlying asset values over the lifetime of the policy.
4.(1). 4 The mathematical reserve for property-linked contracts consists of a unit liability together with a non-unit liability (a "sterling reserve") to cover expenses, mortality, morbidity, options and guarantees and, where appropriate, capital gains tax.

For linked life annuities transferred from M\&G Pensions, the reserve is the number of units payable per annum multiplied by an annuity factor and by the valuation unit price

The unit liability is based on the value at the date of valuation of the units allocated to policyholders. For contracts where actuarial funding is used, the value of the units is net of the present value of future annual establishment charges, recurrent management charges or additional management charges which are used to recoup initial expenses.

The non-unit liability for mortality and expenses is determined using a discounted cash flow method, with a prudent allowance for conversion to paid-up status, and is adequate on the valuation basis to ensure that any future negative cash flows which would otherwise arise are eliminated, including ensuring that the reserve for an individual policy both currently and at any future date was at least equal to the surrender value. Specific reserves are also set up for tax on capital gains, for outstanding premiums and, where relevant, for premiums received in respect of policies not yet accepted.
4.(1).5 The mathematical reserve for RPI linked annuities is determined without an explicit allowance for future increases in annuity payments, which is consistent with the treatment of the matching assets.

## 4. Valuation methods and bases (continued)

4.(1). 6 Exceptions to the above:

Mathematical reserves for with-profits whole life assurances issued by the Company before 1978 are calculated on the assumption that each policy is converted on its next anniversary to an endowment assurance maturing after ten years, this being the most onerous option.

Specific provision is made for guaranteed early maturity options under Flexidowment and certain other miscellaneous assurances and deferred annuities in SAIF, and for early maturity options and annuity options under FlexiPension (Series 1) contracts, by valuing them at the earliest maturity option date and holding additional reserves for maturity options thereafter.

Specific provision is made for guaranteed cash options under pension assurance and pure endowment contracts in SAIF by valuing the greater of the cash option and the present value of the annuity benefit.

Individual permanent health insurance are valued using the claims inception and disability annuity (CIDA) gross premium method.

The mathematical reserve for some individual deferred annuities is obtained by accumulating the premiums paid at the greater of a rate of interest guaranteed at the date of issue and a concessionary rate of interest declared for each year, these concessionary rates being the rates of interest used in determining the benefits payable.

For contracts written by SAL, including new business on these contracts post transfer to PAC, the following exceptions to the general methods of valuation described above apply:-

## Investment linked contracts

For investment-linked contracts, the reserve held is the value of units allocated together with a non-unit reserve for, where appropriate, mortality, morbidity and expenses. The reserve for each policy is subject to a minimum of the surrender value.

For Capital Investment Bond (Series 2), Distribution Bond and Trustee Investment Plans the value of units allocated allows for an element of the establishment and annual management charges over the period during which the establishment charge applies. For MaxiPension (Series 2), OmniPension (Series 2), FlexiPension (Series 6) and IndePension (Series 4), the value of units allocated is net of the future $1.8 \%$ per annum recurrent charge on units already purchased. The reserve in respect of capital units under other contracts is taken as the number of units allocated multiplied by a single premium assurance factor and by the unit price.

## Mortgage Protection Policies

For Mortgage Protection Policies sold prior to 1 August 2000, an additional reserve is held to eliminate all future negative reserves which arise under the net premium method.

For Prudential Protection policies sold from 1 August 2000 the reserve was calculated using a gross premium valuation method allowing for the repayment of financing from Swiss Re Life and Health Limited (where applicable).

For Mortgage Protection (Home Protect) the reserve was calculated using a gross premium valuation method.

## 4. Valuation methods and bases (continued)

## Loan Protection Policies

The reserve for single premium loan protection policies is the sum of the unearned premium reserve, any accrued profit commission and reserves for claims incurred but not reported and claims in payment. The unearned premium is net of initial commission but gross of all other loadings for expenses and profit. The reserve for regular premium loan protection policies is taken as three times the monthly premium. For the life element of loan protection business, a reserve is held to provide for the reduction of future tax relief on commission where premiums would be rebated based on prudent assumptions for future policy lapses. A check is carried out to assess whether the unearned premium reserve will be sufficient given claims experience to date and, if necessary, a further unexpired risk reserve is held.

## Unit Linked Annuities

For linked life annuities transferred from M\&G Pensions, the reserve is taken as the number of units payable per annum multiplied by an annuity factor and by the valuation unit price.
4.(2) See the tables on pages 14 to 23.

## 4.(3) Fixed interest securities

Yields have been adjusted to allow for potential default on fixed interest securities (other than approved securities assessed as risk-free by the firm's investment manager).

The default allowance is determined from data supplied by the firm's investment manager, which itself is based upon research carried out by one of the major rating agencies. This analysis, based on actual default experience over a 35 -year period, produces distributions of default rates according to credit quality and term to redemption. Means and standard deviations of the rates for each credit quality are calculated from these distributions.

In the event of default it may be possible to recover some capital, especially if the loan is secured. The allowance for recovery (or partial recovery) of the loan varies according to the level of security and the following recovery rates are assumed:

```
First Mortgage Debenture/Senior Secured 75%
Senior Unsecured 45%
Subordinated Debt 20%
```

To calculate the overall default provision, the corporate bond portfolio is broken down according to credit rating and level of security. The default rate for each category is assumed to vary between $100 \%$ and $200 \%$ of the appropriate mean default rate, reduced by the expected recovery, plus a further amount for credit risk.

## 4. Valuation methods and bases (continued)

The derived credit risk adjustments for each category in basis points per annum are set out below:

| Term to <br> Redemption | Seniority | AAA | AA | A | BBB | BB | B <br> and <br> lower |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 0 to 10 years | Senior Secured | 8 | 8 | 11 | 24 | 136 | 276 |
|  | Senior Unsecured | 18 | 18 | 25 | 54 | 300 | 607 |
|  | Subordinated | 27 | 27 | 36 | 79 | 437 | 883 |
| 20 to 20 years | Senior Secured | 6 | 6 | 10 | 28 | 97 | 196 |
|  | Senior Unsecured | 14 | 14 | 22 | 62 | 214 | 433 |
|  | Subordinated | 20 | 20 | 32 | 91 | 311 | 629 |
| 20 to 30 years | Senior Secured | 5 | 8 | 15 | 30 | 97 | 196 |
|  | Senior Unsecured | 13 | 19 | 34 | 66 | 214 | 433 |
|  | Subordinated | 18 | 28 | 50 | 97 | 311 | 629 |
| 30 years | Senior Secured | 5 | 10 | 17 | 30 | 97 | 196 |
|  | Senior Unsecured | 12 | 22 | 39 | 66 | 214 | 433 |
|  | Subordinated | 18 | 32 | 56 | 97 | 311 | 629 |

Regard is also paid to the yield differential between corporate and government bonds, and prevailing economic circumstances.

Aggregate yields on the backing assets have been adjusted by the rates shown in the table below to allow for potential credit risk within the fixed and variable interest bond portfolios. These credit risk adjustments include margins for prudence.

| Sub-Fund | Fixed/Variable <br> Interest | Credit risk adjustment (in basis points) |
| :--- | :--- | :---: |
|  | Fixed | 75 |
|  | Variable | 70 |
| SAIF | Fixed | 59 |
|  | Variable | 61 |
| Defined Charge Participating Sub-Fund | Fixed | Between 36 and 51 (depending on fund) |
|  | Variable | 32 |
| Non-Profit Sub-Fund | Fixed | Between 26 and 29 (depending on product) |
|  | Variable | 31 |

## Property

Yields on individual properties were subjected to a cap equal to the risk-adjusted yield on the Merrill Lynch over 10 years corporate bond index. The risk adjustment was calculated by applying the methodology described above to the constituents of the index.

## UK Equities

Yields on individual equities were subjected to a cap equal to $90 \%$ of the yield on the Merrill Lynch over 10 years corporate bond index less the assumed default rate.

## Overseas Equities

Yields on individual equities were subjected to the same cap used for property.

## 4. Valuation methods and bases (continued)

## 4.(4) Mortality bases

See the tables on pages 14 to 23
For modified mortality bases (all PMA92/PFA92), the table below shows the expectation of life at different ages:

|  | Basis description | Life expectancy for annuities in payment |  | Life expectancy for deferred annuities |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | At 65 | At 75 | At 65 for current age 45 | At 65 for current age 55 |
| Note 1 | $70 \% \text { PMA92c2004 / 68\%PFA92c2004; }$ <br> with mortality improvement being allowed by a reduction of $0.35 \%$ p.a. in valuation of interest | male: $21.2^{* * * *}$ female: $24.8^{* * * *}$ | male: 13.3**** female: $16.5^{* * * *}$ | male: $22.8^{* * * *}$ female: $26.6^{* * * *}$ | male: $22.0^{* * * *}$ <br> female: $25.6^{* * * *}$ |
| Note 2 | 75\%PMA92c2004 / 68\%PFA92c2004; <br> with mortality improvement being allowed by a reduction of $0.35 \%$ p.a. in valuation of interest | male: $20.7^{* * * * *}$ female: $24.8^{* * * * *}$ | male: $12.8^{* * * * *}$ female: $16.5^{* * * * *}$ | male: $22.2^{* * * * *}$ <br> female: $26.6^{* * * * *}$ | male: $21.4^{* * * * *}$ female: $25.6^{* * * * *}$ |
| Note 3 | 93\%PMA92c2004+mcf2.0\% / 84\%PFA92c2004+mc | $\begin{gathered} \text { male: } 22.6 \\ \text { female: } 25.0 \end{gathered}$ | male: 13.5 <br> female: 16.4 | not applicable | not applicable |
| Note 4 | 102\%PMA92c2004+mcf2.0\% / 84\%PFA92c2004+mc | male: 21.7 <br> female: 25.0 | male: 12.7 <br> female: 16.4 | not applicable | not applicable |
| Note 5 | 93\%PMA92c2004+mcf1.25\% / 84\%PFA92c2004+75\%mcf0.75\% | male: 21.6 <br> female: 25.0 | male: 13.0 <br> female: 16.3 | male: 24.2 <br> female: 26.6 | male: 22.9 <br> female: 25.8 |
| Note 6 | 84\%PMA92c2004+mcf1.25\% / 78\%PFA92c2004+75\%mcf0.75\% | $\begin{gathered} \text { male: } 22.6 \\ \text { female: } 25.7 \end{gathered}$ | male: 13.8 <br> female: 16.9 | not applicable | not applicable |
| Note 7 | 102\%PMA92c2004+mcf2.0\% / 84\%PFA92c2004+mc both rated down 6 months | male: 22.3 <br> female: 25.7 | male: 13.2 <br> female: 17.0 | not applicable | not applicable |
| Note 8 | 103\%PMA92c2004+mcf1.25\% / 92\%PFA92c2004+75\%mcf0.75\% | male: 20.7 <br> female: 24.1 | male: 12.3 <br> female: 15.5 | male: 23.2 <br> female: 25.7 | male: 21.9 <br> female: 25.0 |
| Note 9 | 97\%PMA92c2004+mcf1.25\% / 84\%PFA92c2004+75\%mcf0.75\% | male: 21.2 <br> female: 25.0 | $\text { male: } 12.7$ <br> female: 16.3 | $\begin{gathered} \text { male: } 23.8 \\ \text { female: } 26.6 \end{gathered}$ | $\begin{gathered} \text { male: } 22.5 \\ \text { female: } 25.8 \\ \hline \end{gathered}$ |
| Note 10 | 89\%PMA92c2004+mcf1.25\% / 84\%PFA92c2004+75\%mcf0.75\% | $\begin{gathered} \text { male: } 22.1 \\ \text { female: } 24.9 \end{gathered}$ | male: 13.4 <br> female: 16.2 | not applicable | not applicable |
| Note 11 | 90\%PMA92c2004+mcf1.25\% / 86\%PFA92c2004+75\%mcf0.75\% | male: 21.9 <br> female: 24.8 | male: 13.3 <br> female: 16.1 | not applicable | not applicable |
| Note 12 | 98\%PMA92c2004+mcf1.25\% / 84\%PFA92c2004+75\%mcf0.75\% | male: 21.1 <br> female: 25.0 | male: 12.7 <br> female: 16.3 | male: 23.7 <br> female: 26.6 | male: 22.4 <br> female: 25.8 |
| Note 13 | 82\%PMA92c2004+mcf1.25\% / 80\%PFA92c2004+75\%mcf0.75\% | male: 22.8 <br> female: 25.5 | male: 14.0 female: 16.7 | male: 25.4 <br> female: 27.1 | male: 24.1 <br> female: 26.3 |
| Note 14 | 94\%PMA92c2004+mcf1.25\% / 78\%PFA92c2004+75\%mcf0.75\% | $\begin{gathered} \text { male: } 21.5 \\ \text { female: } 25.7 \end{gathered}$ | male: 13.0 <br> female: 16.9 | not applicable | not applicable |
| Note 15 | 100\%PMA92c2004+mcf1.25\% / 105\%PFA92c2004+75\%mcf0.75\% | $\begin{gathered} \text { male: } 21.0 \\ \text { female: } 22.9 \end{gathered}$ | male: 12.5 <br> female: 14.5 | male: 23.5 <br> female: 24.5 | male: 22.2 <br> female: 23.7 |

## 4. Valuation methods and bases (continued)

In the table above, the CMIR17 mortality improvement factors from 1992 to 2004 are applied to PMA92 and PFA92 mortality tables. Future improvement factors from 2005 onwards are in line with the medium cohort projections (Working Paper 1: An interim basis for adjusting the ' 92 ' series mortality projections for cohort effects published by the CMI mortality subcommittee in 2002). In the table entries above, "mc" refers to medium cohort improvement factors and "mcf" refers to those factors but subject to a minimum of the stated percentage.
**** These figures apply to cases where the valuation rate of interest is $4.25 \%, 4.0 \%$ or $3.0 \%$. ***** These figures apply to cases where the valuation rate of interest is $4.5 \%, 4.0 \%$ or $3.0 \%$.

## 4.(5) Morbidity bases

Where the product group has been valued using morbidity assumptions, the bases used are shown in the table below:

## For product groups 7 and 88

(i) Hong Kong business - specimen critical illness and total and permanent disability (TPD) rates (per $£ 10,000$ sum assured)

The following table shows the specimen morbidity rates for the contracts that cover 12 dread diseases. Such business is closed to new business.

| Age next <br> Birthday | Critical illness rates |  |  | TPD rates |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male Non <br> Smoker | Male Smoker | Female Non <br> Smoker |  |  |
| 25 | 7.74 | 6.93 | 4.32 | 6.21 | 0.72 |
| 35 | 7.92 | 9.45 | 10.08 | 11.61 | 1.08 |
| 45 | 20.97 | 28.44 | 22.77 | 30.33 | 2.70 |
| 55 | 55.80 | 75.24 | 49.59 | 61.29 | 7.02 |

The following table show the specimen morbidity rates for the contracts that cover 30 dread diseases except for the new version of the contracts that cover 40 dread diseases.

| Age next <br> Birthday | Critical illness rates |  |  | TPD rates |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male Non <br> Smoker | Male Smoker | Female Non <br> Smoker |  |  |
| 25 | 7.74 | 7.65 | 8.73 | 10.44 | 0.72 |
| 35 | 9.18 | 10.44 | 10.98 | 11.34 | 1.08 |
| 45 | 21.51 | 28.71 | 20.43 | 30.24 | 2.70 |
| 55 | 55.62 | 75.42 | 61.83 | 80.64 | 7.02 |

(ii) Hong Kong business - specimen rates for Lady Prudence (per $£ 10,000$ sum assured)

| Age next <br> Birthday | Morbidity rates (for female only) |  |
| :---: | :---: | :---: |
|  | Basic benefit | Extra benefit |
| 35 | 12.4 | 40.1 |
| 45 | 23.9 | 57.0 |
| 55 | 25.2 | 90.0 |

## 4. Valuation methods and bases (continued)

For product groups 18 and 45
(iii) Prudential Protection - specimen life and basic critical illness rates (per $£ 10,000$ sum assured)

| Age next <br> Birthday | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 8.95 | 8.95 | 6.90 | 6.90 |
| 35 | 14.07 | 22.08 | 12.59 | 12.59 |
| 45 | 29.28 | 58.03 | 27.26 | 27.26 |
| 55 | 80.51 | 148.44 | 63.77 | 80.79 |

(iv) Prudential Protection - specimen top-up critical illness rates (per $£ 10,000$ sum assured)

| Age next <br> Birthday | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Non Smoker |  | Smoker | Non Smoker |
| Smoker |  |  |  |  |
| 25 | 4.82 | 4.82 | 5.68 | 5.68 |
| 35 | 9.63 | 14.92 | 11.64 | 11.64 |
| 45 | 23.64 | 46.30 | 26.42 | 26.42 |
| 55 | 68.82 | 125.65 | 61.57 | 77.89 |

There are different rates for females, for contracts with critical illness benefit, for other occupation classes and other deferred periods.

For Prudential Protection business written on or after 14 March 2005 the critical illness and mortgage benefit rates are further loaded by $14 \%$, covering possible future changes in morbidity.

For product groups 56, 57, 95 and 97
(v) Home Purchaser (Series 3) version 2 issued on or after 29 July 1996 - specimen level top-up critical illness rates (per $£ 10,000$ Sum Assured)

| Age next <br> birthday | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 3.84 | 6.29 | 4.39 | 7.12 |
| 35 | 8.45 | 14.01 | 11.87 | 19.71 |
| 45 | 35.57 | 59.50 | 27.27 | 45.44 |
| 55 | 83.87 | 140.44 | 61.77 | 103.36 |

(vi) Home Purchaser (Series 3) other than those above and Amicable Savings Plan - specimen level critical illness rates (per $£ 10,000$ sum assured)

| Age next <br> Birthday | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 2.73 | 4.42 | 3.38 | 5.45 |
| 35 | 6.49 | 10.64 | 8.43 | 14.01 |
| 45 | 27.87 | 46.41 | 17.77 | 29.69 |
| 55 | 47.70 | 79.71 | 37.34 | 62.48 |

## 4. Valuation methods and bases (continued)

(vii) Home Purchaser (Series 3) - specimen decreasing top-up annual critical illness rates (per £10,000 sum assured)

| Age next <br> Birthday | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 4.14 | 6.79 | 4.74 | 7.68 |
| 35 | 9.11 | 15.11 | 12.80 | 21.26 |
| 45 | 38.36 | 64.17 | 29.41 | 49.00 |
| 55 | 90.45 | 151.46 | 66.61 | 111.47 |

(viii) Home Purchaser (Series 3) and Amicable Savings Plan - specimen total and permanent disability rates (per $£ 10,000$ sum assured)

| Age next <br> Birthday | Basic | Version 2 <br> Level top-up | Version 2 <br> Decreasing top-up |
| :---: | :---: | :---: | :---: |
| 25 | 0.78 | 0.98 | 1.06 |
| 35 | 0.91 | 0.86 | 0.92 |
| 45 | 2.33 | 2.20 | 2.38 |
| 55 | 7.91 | 8.69 | 9.37 |

(ix) Home Purchaser (Series 3) - specimen annual mortgage interest benefit rates (per $£ 1,200$ annual benefit) without critical illness, occupation classes 1,2 and 3 , deferred period 6 months

Men

| Age Next <br> Birthday | Policy Term Remaining |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | 10 | 20 | 25 |
| 25 | 2.88 | 3.84 | 4.44 | 4.68 | 4.68 |  |  |  |  |  |  |  |  |  |
| 35 | 4.44 | 6.24 | 7.20 | 7.44 | 7.56 |  |  |  |  |  |  |  |  |  |
| 45 | 11.52 | 16.32 | 18.72 |  |  |  |  |  |  |  |  |  |  |  |
| 55 | 36.36 |  |  |  |  |  |  |  |  |  |  |  |  |  |

Women

| Age Next <br> Birthday | Policy Term Remaining |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 10 |  |  |  |  | 20 | 6.96 |
| 25 | 4.32 | 5.88 | 6.72 | 6.96 | 11.40 |  |  |  |  |  |  |  |  |
| 35 | 6.72 | 9.36 | 10.80 | 11.04 |  |  |  |  |  |  |  |  |  |
| 45 | 17.16 | 24.48 | 27.96 |  |  |  |  |  |  |  |  |  |  |
| 55 | 54.48 |  |  |  |  |  |  |  |  |  |  |  |  |

There are different rates for contracts with critical illness benefit, for occupation class 4 and for other
deferred periods.
No recovery rates are shown as the claim inception and recovery are not modelled. Instead an inception annuity approach based on rates from the reinsurer is used. Rates provided for MIB therefore allow implicitly for both probability of a claim and expected length of a claim.
4. Valuation methods and bases (continued)
4.(6) Valuation expense bases
4.(6).1 Zillmer adjustments (\% of sum assured) for modified net premium valuation method

|  | 31 December 2005 | 31 December 2004 |
| :--- | :---: | :---: |
| UK - With-profits Life | $3.00 \%$ | $3.00 \%$ |
| UK - With-profits Pensions | $2.00 \%$ | $2.00 \%$ |
| UK - Non-profits | Nil | Nil |
| Hong Kong - With-profits | $3 \%$ Zillmer / 1.5 year Sprague | $3 \%$ Zillmer / 1.5 year Sprague |
| Hong Kong - Non-profits | 1.5 year Sprague | 1.5 year Sprague |

4.(6). 2 Renewal expense assumptions for linked, AWP and annuities business (per policy per year, except where shown)
(Per policy expense assumptions for UK life business are net of tax relief assumed at 20\%.)

|  |  |  | 31 December 2005 |  | 31 December 2004 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Business covered | Product group | Non- premium paying | Premiumpaying | Nonpremium paying | Premiumpaying |
| Assurances |  |  |  |  |  |  |
| Conventional Life | SAIF and SAA contracts | 33, 34, 35, 36 | £12.59 | £20.61 | £11.21 | $£ 18.37$ |
|  | Ex-SAL contracts | 18, 45 | £20.36 | £26.37 | $£ 11.07$ | $£ 14.76$ |
| Conventional Pensions | Personal pensions contracts in SAIF and SAA | 37, 38, 39, 41 | £25.48 | £39.85 | $£ 19.84$ | $£ 33.08$ |
|  | Company pensions contracts in SAIF and SAA | 40, 43 | £37.69 | £60.14 | £49.44 | £86.54 |
|  | Standalone term assurance contracts in SAIF and SAA | 42 | N/A | £39.85 | N/A | £33.08 |
| AWP Life | SAIF and SAA contracts | 58, 70, 71 | £15.03 | £24.68 | £12.08 | £19.71 |
|  | Ex-SAL contracts | 56,57 | £20.36 | £33.87 | £11.07 | $£ 18.45$ |
|  | Prudential contracts except for PruBond | 54, 55 | £23.09 | £27.17 | $£ 17.70$ | £20.82 |
|  | PruBond | 54 | £41.52 | N/A | £35.20 | N/A |

## 4. Valuation methods and bases (continued)

|  |  |  | 31 December 2005 |  | 31 December 2004 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Business covered | Product group | Nonpremium paying | Premiumpaying | Non- premium paying | Premiumpaying |
| AWP Pensions | Personal pensions contracts in Ex-SAL | 59, 67 | £30.55 | $£ 48.90$ | £28.29 | $£ 45.51$ |
|  | Company pensions contracts in Ex-SAL | 59, 62, 68 | £43.18 | £69.89 | £59.04 | £98.40 |
|  | Personal pensions contracts in SAIF and SAA | 72, 73 | £24.86 | $£ 39.79$ | £21.44 | $£ 35.78$ |
|  | Company pensions contracts in SAIF and SAA | 73, 74 | $£ 37.48$ | £60.78 | $£ 53.32$ | $£ 93.34$ |
|  | Prudential defined benefits contracts | 63, 64, 65, 66 | £94.44 | £472.21 | £84.70 | $£ 423.46$ |
|  | Prudential group additional voluntary contributions contracts | 63, 64, 65, 66 | £28.66 | $£ 143.31$ | £32.88 | $£ 164.38$ |
|  | Prudential money purchase pensions contracts | $\begin{aligned} & 52,53,63,64,65, \\ & 66 \\ & \hline \end{aligned}$ | $£ 37.79$ | $£ 188.97$ | £28.98 | $£ 144.88$ |
|  | Prudential free-standing additional voluntary contributions contracts | $\begin{aligned} & 52,53,63,64,65, \\ & 66 \end{aligned}$ | £24.18 | $£ 120.91$ | £25.63 | $£ 128.16$ |
|  | Prudential personal pensions contracts | $\begin{aligned} & 52,53,63,64,65, \\ & 66 \end{aligned}$ | $£ 53.17$ | £265.85 | £63.91 | £319.54 |
|  | Prudential executive pensions contracts series 1 | $\begin{aligned} & 52,53,63,64,65, \\ & 66 \end{aligned}$ | $£ 172.61$ | £298.08 | $£ 156.63$ | $£ 270.49$ |
|  | Prudential executive pensions contracts series 2,3 and 4 , and exempt investment bonds | 60 | $£ 92.43$ | £159.61 | $£ 112.12$ | $£ 193.62$ |
|  | Midas Bond 32 and section 32 (101 version) contracts | 63, 64, 65, 66 | £84.38 | N/A | $£ 49.63$ | N/A |
|  | GPDA Bond 32 (pre 101) | 28, 52, 53 | £83.92 | N/A | £54.60 | N/A |
|  | Prudential personal pension plans, individual personal pension accounts and free-standing additional voluntary contributions | 60 | £28.34 | $£ 48.37$ | $£ 34.42$ | $£ 58.73$ |
|  | Other | 61 | £36.79 | $£ 43.28$ | $£ 25.98$ | £30.56 |
| AWP Overseas | Contracts in DCPSF | $\begin{aligned} & 75,76,77,78,79, \\ & 80,81,82 \end{aligned}$ | $\begin{aligned} & \text { actual* } \\ & \text { expenses } \end{aligned}$ | N/A | $\text { actual }^{*}$ expenses | N/A |

## 4. Valuation methods and bases (continued)

|  |  |  | 31 December 2005 |  | 31 December 2004 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Business covered | Product group | Non- premium paying | Premiumpaying | Non- premium paying | Premiumpaying |
| Unit-linked Life | Bonus bonds in Ex-SAL | 91 | $£ 14.14$ | $£ 33.87$ | $£ 7.38$ | $£ 18.45$ |
|  | Ex-SAL contracts except for bonus bonds | $\begin{aligned} & 91,93,95,96,97, \\ & 98 \end{aligned}$ | £20.36 | $£ 33.87$ | $£ 11.07$ | $£ 18.45$ |
|  | PruBond | 83, 89 | £26.62 | N/A | $£ 42.34$ | N/A |
|  | PruFund, PruTrust and Guaranteed Equity Bond | 90, 92, 94 | $£ 16.00$ | £24.00 | $£ 12.00$ | £18.00 |
| Unit-linked Pensions | Personal pensions contracts in SAIF and SAA | 86 | £24.86 | £39.79 | £21.44 | $£ 35.78$ |
|  | Company pensions contracts in SAIF and SAA | 86 | £37.48 | £60.78 | £53.32 | £93.34 |
|  | Personal pensions contracts in Ex-SAL | $\begin{aligned} & 99,101,103,104, \\ & 105 \end{aligned}$ | £30.55 | £48.90 | £28.29 | £45.51 |
|  | Executive pensions contracts in Ex-SAL | 99 | $£ 43.18$ | £69.89 | $£ 59.04$ | £98.40 |
|  | Prudential money purchase pensions contracts, grouped personal pensions contracts and additional voluntary contributions in WPSF | 84 | $£ 4.4 \mathrm{~m}$ total** |  | $£ 2.57 \mathrm{~m}$ total** |  |
|  | Prudential personal pensions accounts, executive investment bonds and free-standing additional voluntary contributions in NPSF | 102 | £33.15 | £165.74 | $£ 25.58$ | £127.90 |
|  | Prudential executive pensions contracts | 100 | £175.34 | £270.93 | £178.80 | £322.35 |
|  | Prudential personal pensions contracts | 100 | £23.27 | £35.04 | $£ 58.00$ | $£ 87.75$ |

* Business in DCPSF is administered by a third-party and the renewal expenses allowed for in valuation are based on the actual tariff in the service agreement.
** This figure is the renewal expense assumption for the whole block of business.

|  | Business covered | Product group | 31 December 2005 |  | 31 December 2004 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Nonpremium paying | Premiumpaying | Nonpremium paying | Premiumpaying |
| Annuities |  |  |  |  |  |  |
| With-profits Deferred annuities |  | 5,20,21,22 | 5\% of annuity payment |  | 5\% of annuity payment |  |
| With-profits Immediate annuities |  | $\begin{aligned} & 52,53,63,64,65, \\ & 66 \end{aligned}$ | $£ 514.70$ | £2,573.49 | £466.22 | £2,331.10 |
| Non-profits Deferred annuities | Contracts retained in PAC WPSF | 28 | $5 \%$ of annuity payment**** |  | $5 \%$ of annuity payment**** |  |
|  | Contracts reassured to PAL | 26,27 | £20.00 |  | 4\% of annuity payment |  |
| Non-profits Immediate annuities | SAIF and SAA contracts | 44 | £27.45 | N/A | $£ 26.52$ N/A <br> $2 \%$ of annuity payment  |  |
|  | Contracts retained in PAC WPSF | 8, 9, 19, 23, 24 | 1.74\% of annuity payment |  | 2\% of annuity payment |  |
|  | Contracts retained in PAC NPSF | 47 | £22.42 |  | $£ 16.50$ |  |
|  | Contracts reassured to PAL | 31, 32, 107 | £20.00 |  | 2\% of annuity payment |  |
|  | Contracts reassured to PRIL (ex-SAL) | 30, 106 | £22.42 |  | $£ 16.50$ |  |
|  | Contracts reassured to PRIL (other) | 29, 46 | $£ 23.93$ |  | $\underset{\text { payment*** }}{1.75 \% \text { of annuity }}$ |  |

*** In the 2004 FSA Returns, this was shown as $2 \%$ of annuities in payment or a specific expense loading for reassurance accepted from Royal London. This was equivalent to $1.75 \%$ of all annuities in payment (including business reassured from Royal London).
**** Expenses in deferment allowed for by a reduction of $1 \%$ in the valuation rate of interest.

## 4. Valuation methods and bases (continued)

4.(6). 3 Termination expense assumptions

Termination expenses are only explicitly modelled for certain policy types. For other policy types they are included within the maintenance expense assumptions.

|  | Business covered | 31 December 2005 | 31 December 2004 |
| :--- | :--- | :---: | :---: |
| UK - Life | Prufund, Prutrust, <br> Guaranteed Equity Bond | $£ 62.00$ | $£ 46.00$ |
|  | Ex-SAL contracts | $£ 53.81$ | $£ 62.73$ |
|  | SAIF, SAA contracts | $£ 64.54$ | $£ 51.06$ |
|  | Standalone term assurance | $£ 64.54$ | $£ 51.06$ |
|  | Personal pensions contracts <br> in SAIF, SAA | $£ 184.76$ | $£ 118.06$ |
|  | Personal pensions contracts <br> in Ex-SAL | $£ 171.54$ | $£ 98.97$ |
|  | Company pensions contracts <br> in SAIF, SAA | $£ 108.83$ | $£ 156.21$ |
|  | Executive pensions and <br> Company pensions contracts <br> in Ex-SAL | $£ 97.93$ | $£ 123.00$ |
|  | Other pensions contracts in <br> ExSAL | $£ 171.54$ |  |

4.(6). 4 Investment management expense assumptions (basis points per annum)

|  | Business covered | 31 December 2005 | 31 December 2004 |
| :--- | :--- | :---: | :---: |
| Non-linked Non- <br> profits Assurances | Ex-SAL in NPSF | 11 bps | 11 bps |
|  | Other | 10 bps | 10 bps |
|  | Retained in PAC WPSF | 13 bps | 15 bps |
|  | Retained in PAC NPSF | 6 bps | 10 bps |
|  | Reassured to PAL | 10 bps | 10 bps |
|  | Reassured to PRIL | 6 bps | 11 bps |
| With-profits | WPSF | 13 bps | 14.8 bps |
| With-profits | SAIF | 14.8 bps | 14.8 bps |
| Unit-linked | PruBond | 15 bps | 15 bps |
|  | Business sold via direct <br> salesforce and the <br> Flexible Retirement <br> Income Accounts | 18 bps | 18 bps |
|  | Other business written by <br> M\&G | 25 bps | 25 bps |
|  | Other business not <br> written by M\&G |  |  |

4.(6).5 Unit growth rates for linked business before management charges (net of tax for UK life business)

|  | 31 December 2005 | 31 December 2004 |
| :--- | :---: | :---: |
| UK - Life | $4.00 \%$ | $4.00 \%$ |
| UK - Pensions | $5.00 \%$ | $5.00 \%$ |
| Overseas - Hong Kong | $6.84 \%$ | $6.90 \%$ |
| Overseas - other | $5.00 \%$ | $5.00 \%$ |

## 4. Valuation methods and bases (continued)

4.(6).6 Expense inflation assumptions and future increase in policy charges

|  | 31 December 2005 | 31 December 2004 |
| :--- | :---: | :---: |
| UK - conventional IB and OB business sold via <br> direct sales-force | $3.50 \%$ p.a. | $5.50 \%$ p.a. |
| UK - other | $3.50 \%$ p.a. | $3.50 \%$ p.a. |
| Overseas - Hong Kong | $2.25 \%$ p.a. | $2.25 \%$ p.a. |
| Overseas - other | $3.50 \%$ p.a. | $3.50 \%$ p.a. |

4.(7) No conventional with-profits business is valued using a gross premium methodology.

For unitised with-profits business the future annual bonus rates are assumed to be the higher of zero and any guaranteed rate.
4.(8) There were no other material assumptions not stated elsewhere.
4.(9) In determining the long-term liabilities, allowance has been made for derivative contracts and contracts or assets having the effect of derivative contracts, by adjusting the existing assets attributed to the long-term business to reflect the underlying investment exposure.

SAIF and the WPSF hold US dollar/sterling and euro/sterling currency forwards in connection with fixed interest securities denominated in US dollars and euros respectively. Taking in aggregate these combinations of currency forwards and fixed interest securities could be considered to be sterling assets and, as such, the yields should be comparable with sterling yields. To achieve this, the yields on the US dollar and/or euro assets are reduced if the US dollar riskfree yield curve or the euro risk-free yield curve respectively exceeds the sterling risk-free yield curve.

## 5. Options and guarantees

5.(1) Guaranteed annuity rate options
(a) The mathematical reserves for guaranteed annuity options are calculated assuming a $100 \%$ take-up of available options, and are determined as follows:

## Group cash accumulation contracts

For valuation purposes, it is assumed, in line with current practice, that if the guaranteed rates are higher than current rates on the valuation date, the guarantee will be revised with 6 months' notice from the next scheme renewal date. As a result, it is assumed that retirements for at most a further 18 months will be subject to the guarantee prior to its amendment. Any additional amount of annuity payable as a result of the guarantee is calculated assuming that the recent profile of retirements (age, sex and purchase money) continues. The resulting annuity is valued on the basis used for non-profit group deferred annuities.

## EPP Mark 1

The fund in respect of the first 5 years' premiums for each scheme is calculated. The additional amount of annuity payable as a result of the guarantee is then calculated by age groups assuming that the recent profile of retirements by age and sex continues (all assumed to be at an age at which a guarantee applies). The distribution of long-term interest rates at retirement was provided by the economic scenario generator used to derive market-consistent returns for use in the Peak 2 valuation and a zero valuation interest rate was assumed in deferment.

## 5. Options and guarantees (continued)

## SAIF products

- $\quad$ Flexipension (Series 1 and Series 2)
- Series 1 and Series 2 pension contracts written up to and including 26 July 2000 as increments to Flexipension (Series 1) contracts
- Individual Endowment/Pure Endowment - Series 1 and Series 2
- Individual Pension Account

For accumulating with-profits and linked business, an additional reserve is calculated by rolling up the existing unit reserve with future premiums to the selected retirement date, and calculating the present value of the excess of the annuity guarantee over the projected fund value. The value of the annuity guarantee at retirement is calculated assuming a mortality basis in possession of $75 \%$ PMA92/70\% PFA92 ( $\mathrm{c}=2004$ ) and a valuation interest rate of $3.50 \%$ p.a. in possession. For linked business, the projected fund is calculated assuming a fund growth rate of $7.125 \%$ (i.e. $8.0 \%$ less an annual management charge). The present value of the excess of the annuity guarantee over the projected fund value is calculated at a discount rate of $4.5 \%$. For accumulating with-profits business, no future bonus is allowed for. The projected fund is calculated assuming a fund growth rate of $4.0 \%$ (representing the $4.0 \%$ guarantee on SAIF pension policies). The present value of the excess of the annuity guarantee over the projected fund value is calculated at a discount rate of $3.75 \%$.

For conventional business, the benefit included in the net premium reserve is the greater of the cash benefit and the value of the annuity guarantee. The mortality basis in deferment is AM92/AF92 +1 (for Individual Endowment/Pure Endowment) and AM92/AF92 - 4 (for FlexiPension (Series 1)), and in possession is 75\% PMA92/ 70\% PFA92 (c=2004). Allowance is made for mortality improvement in deferment by reducing the valuation interest rate in deferment by $0.40 \%$. The valuation interest rate (before the $0.40 \%$ reduction for mortality improvements) is $4.5 \%$ in deferment, and $3.50 \%$ in possession.

For the purpose of determining the valuation interest rate, swaptions held were assumed to be non-yielding.

The adequacy of the reserve has been verified using stochastic modelling.
In addition a separate expense reserve of $£ 84.7 \mathrm{~m}$ is held to meet the cost of administering the future annuities in payment under the guaranteed annuity options in SAIF.
(b) See the table on the following page.

## 5. Options and guarantees (continued)

Table 5.(1)(b) - Guaranteed annuity rate options

| Product name | Basic reserve £m | Spread of outstanding durations | $\begin{gathered} \hline \text { Guarantee } \\ \text { reserve } \\ £ m \\ \hline \end{gathered}$ | Guaranteed annuity rate for a male aged 65 | Are increments permitted? | Form of the annuity | Retirement ages |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WPSF |  |  |  |  |  |  |  |
| Group cash accumulation | 543 | 0-18 months | 0 | 6.22\% | No | Single life, monthly in advance, guaranteed for 5 years | $50-70$ |
| Executive Pension Plan Mark 1 | 196 | $0-35 \mathrm{yrs}$ | 52 | 10.29\% | Yes - in first 5 yrs of scheme | Single life, monthly in advance, without guarantee | $\begin{gathered} 60-70(\mathrm{M}) \\ 55-70(\mathrm{~F}) \end{gathered}$ |
| SAIF |  |  |  |  |  |  |  |
| Flexipension | 1,006 | $\begin{aligned} & 0-40 \mathrm{yrs} ; \\ & \text { average } 10 \mathrm{yrs} \end{aligned}$ | 536 | 11.30\% | $\begin{aligned} & \text { Yes - up to } \\ & 26 / 07 / 05 \end{aligned}$ | Single life, yearly in arrears, without guarantee | 60-75 |
| Individual Endowment/Pure Endowment | 261 | $\begin{aligned} & 0-40 \mathrm{yrs} \text {; } \\ & \text { average } 10 \mathrm{yrs} \end{aligned}$ | 113 | 10.00\% | No | Single life, monthly in advance, guaranteed for 5 years | $\begin{gathered} 60-70(\mathrm{M}) \\ 55-70(\mathrm{~F}) \end{gathered}$ |
| Individual Pension Account | 127 | $\begin{aligned} & 0-40 \mathrm{yrs} \\ & \text { average } 10 \mathrm{yrs} \end{aligned}$ | 55 | 10.00\% | No | Single life, monthly in advance, guaranteed for 5 years | $\begin{gathered} 60-70(\mathrm{M}) \\ 55-70(\mathrm{~F}) \end{gathered}$ |

(If the form of annuity taken is different to that shown in the above table, an actuarial equivalent rate is given by concession.)

## 5. Options and guarantees (continued)

## 5.(2) Guaranteed surrender and unit-linked maturity values

(a) The method and bases used for guaranteed surrender values were as follows, there being no guaranteed unit-linked maturity values.

## Pru Fund Investment Plan:

This is a single premium whole-life accumulating with-profits contract written in the With-Profits Sub-Fund.

At the $5^{\text {th }}$ anniversary of a premium payment, the smoothed fund value is increased by the value of additional units credited, if necessary, to give a total value equal to the guaranteed fund minimum fund value (the initial premium adjusted for withdrawals). Policies sold up to 31 July 2005 received this guarantee for no extra cost. After that date, policyholders choosing that guarantee pay an additional annual management charge for 5 years.

The reserve for the guarantee was taken as $6 \%$ of current fund value and was set having based on a calculation using the Black-Scholes option pricing formula.

## Prudential Europe Vie:

This is a single premium whole-life accumulating with-profits contract denominated in euros and written as overseas life assurance business in the Defined Charge Participating Sub-Fund.

The surrender value at any time is guaranteed to be no less than $75 \%$ of the initial investment, net of the initial charge, after allowing for any partial surrender and withdrawals made.

As at 31 December 2005, the basic policy reserves exceeded the minimum guaranteed surrender values to the extent that no additional reserve was considered necessary.

## Hong Kong:

Some products issued in Hong Kong have guaranteed surrender values based on a net premium valuation on specified bases. The valuation reserve is tested against the guarantee basis on a policy-by-policy basis and no additional reserve is required.

## 5. Options and guarantees (continued)

Table 5.(2)(b) - Guaranteed surrender and unit-linked maturity values

| Product name | Basic reserve £m | Spread of outstanding durations | Guarantee reserve £m | Guaranteed amount £m | MVA free conditions | In force premiums £m | Are increments permitted? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{\text { WPSF }}{\text { PruFund Investment Plan }}$ | 39.55 | $3.75-5 \mathrm{yrs}$ | 2.45 | Fund increased to initial premium (adjusted for withdrawals) after 5 years | N/A | 39.31 | No |
| DCPSF <br> Prudential Europe Vie | 89.48 | Whole-Life | 0 | $56.10$ | Regular withdrawals up to $5 \%$ per annum | 90.30 | Yes |
| Hong Kong |  |  |  |  |  |  |  |
| Better Life | 894.45 | Whole-Life | 0 | 448.20 | N/A | 141.30 | No |
| Better Life Assurance II | 14.10 | Whole-Life | 0 | $0$ | N/A | 18.63 | No |
| With Profit Endowment - $1^{\text {st }}$ \& $2^{\text {nd }}$ Series | 132.61 | $0-60 \mathrm{yrs} ;$ <br> average 19 yrs | 0 | 85.75 | N/A | 5.90 | No |
| With Profit Whole Life - $1^{\text {st }}$ $\& 2^{\text {nd }}$ Series | 56.72 | Whole-Life | 0 | 41.17 | N/A | 3.07 | No |
| PruFlexLife | 16.45 | Whole-Life | 0 | 6.90 | N/A | 16.43 | No |
| PRUsave Plus | 103.32 | $\begin{gathered} 0-20 \mathrm{yrs} ; \\ \text { average } 11 \mathrm{yrs} \end{gathered}$ | 0 | 0 | N/A | 43.05 | No |

## 5. Options and guarantees (continued)

## 5.(3) (a) Guaranteed insurability options

A number of insurability options exist for which no additional reserve is considered necessary due to margins in the valuation mortality/morbidity bases. These options are:

## Amicable Savings Plan:

Extension Option which allows the term of the plan to be extended by a period of at least ten years from the original maturity date.

## Home Purchaser;

Mortgage Alteration Option provides a limited facility, subject to conditions, to increase the life cover at ordinary rates of premium for the amount of any increase to the loan. If the term of the loan is also increasing, the term of the existing plan may also be extended to match the maturity date of the new plan.

## Flexible Ten Plan \& Variable Investment Plan (Ex M\&G Life)

There is an option at maturity to extend the term for a further ten years or to convert to a whole life assurance with a nominal premium.

Maximum Investment Plan and Flexible Investment Plan (ex M\&G Life):
On Maximum Investment Plans there is an option at maturity to extend the term for a further ten years or to convert to a whole life assurance with a nominal premium. On Flexible Investment Plans there is an option to extend the premium paying term.

Investment Mortgage Plan (Ex M\&G Life):
There is an option to increase the sum assured without medical evidence if the policyholder increases his or her mortgage.

## Personal Security Plan (Ex M\&G Life):

On most policies there is an option to increase the benefits each year in line with the Retail Prices Index without medical evidence either to age 65 or throughout life. Benefits other than Keyman Disability Benefit may also be increased by up to $20 \%$ without medical evidence on marriage, house purchase or birth of children. On some policies the death benefit can be increased without medical evidence following changes in Inheritance Tax legislation. If any of these options is exercised the Company recommends an appropriate increase in premium.

Prudential Protection policies issued at ordinary rates include an option to increase cover without evidence of health in the event of mortgage increase, marriage, childbirth or adoption. The option can be exercised only before the life assured's $50^{\text {th }}$ birthday and within 3 months of the event occurring.

Some UK policies issued between September 1975 and April 1984 and some policies issued in Hong Kong contain an option, in return for an additional premium, to effect further assurances without evidence of health.

Some assurance policies contain options to effect further assurances without evidence of health at specific ages, on marriage or on the adoption or birth of a child. Under some assurances in Hong Kong, a guaranteed insurability option of up to five times the basic sum assured is offered at the maturity of the pure endowment part of the assurance.

Some assurance policies issued between October 1973 and July 1979 on the life of a parent or guardian for the benefit of a child contain an option to permit the child, after attaining a specified age, to effect a whole life or endowment assurance without evidence of health for a sum assured not exceeding four times that of the original policy. On the marriage of a female child, the option may be exercised on her husband's life if he is under age 45.

Some individual level temporary assurance policies contain an option, in return for an additional premium, to convert wholly or partially to a whole life or endowment assurance for a sum assured not exceeding the original sum assured.

## 5. Options and guarantees (continued)

Some individual temporary assurance policies contain an option to renew the assurance every 5 or 10 years without evidence of health subject to a maximum age at renewal of 55 ( 65 in Hong Kong). The sum assured under this option can be increased by up to one half of the sum assured remaining at the end of the 5 or 10 year period. There is also an alternative option to convert at the end of the term to any other ordinary branch single life assurance, for a sum assured of up to $150 \%$ of that under the temporary assurance policy.

Under a few group life assurance policies, premium rates are guaranteed for employees in respect of current levels of sum assured. Group life assurance premium rates are generally guaranteed for 2 or 3 years.

Employees leaving group pension schemes, where it has not been possible to remove the option, may replace any temporary life assurance cover with an individual assurance at the relevant rates of premium then in force, based on the original underwriting decision. The continuation option was withdrawn for new schemes during 1988.

On payment of an additional premium, individual permanent health insurance policies issued in the United Kingdom between January 1982 and July 1988 carry an option to increase the original benefit by up to $25 \%$ (subject to the total benefit being no greater than $75 \%$ of earnings) on every fifth policy anniversary without medical evidence. This option cannot be exercised whilst incapacitated or within 10 years of the termination date of the policy.

Prufund: Protection Plan:
If the original policy was issued on normal terms, a new policy may be effected without evidence of health every 5 years before the attainment of age 50 for a sum assured of up to $50 \%$ of the sum assured under the original policy at the time each option is exercised. The option lapses if it is not exercised in whole or part. The new policy may be a with-profits whole life or endowment assurance.

Prufund: Savings Plan:
At the end of the premium payment term, premiums may be continued for a further 10 years. Under Series 1 plans there is also an option after 10 years to continue the policy for a further 10 years without further payment of premiums.

Permanent Health Insurance:
On payment of an additional premium, individual permanent health insurance policies issued in the United Kingdom between January 1982 and July 1988 carry an option to increase the original benefit by up to $25 \%$ (subject to the total benefit being no greater than $75 \%$ of earnings) on every fifth policy anniversary without medical evidence. This option cannot be exercised whilst incapacitated or within 10 years of the termination date of the policy.

Series A \& Premier Pensions plan holders who have Waiver Benefit or Comprehensive Waiver Benefit on their plan:
Long Term Care Double Cover benefit entitles the plan holder to buy a Long Term Care Bond from Prudential International (or another contract approved by the PAC Actuary as a reasonable equivalent) at ordinary rates at retirement. Personal Pension and Group Personal Pension Plan holders with Waiver Benefit may increase the contributions covered by the benefit with no additional underwriting provided the increased contribution is no more than twice the previous contribution.

## Mortgage Protection (Home Protect):

Policies issued at ordinary rates may include an option to increase cover without evidence of health in the event of mortgage increase, marriage, childbirth or adoption. The option can be exercised only before the life assured's 50th birthday and within 3 months of the event occurring. The increase can be up to $50 \%$ of the benefit for the mortgage option or $25 \%$ for the other options both subject to maxima of $£ 150,000$ (life and critical illness) or $£ 1,000$ a month (premium waiver and mortgage payment benefits).

## 5. Options and guarantees (continued)

## Mortgage Protection (Ex M\&G Life):

There are options for each life to continue cover for a further 5 years up to a date specified at the outset of the original cover, and, if the life assured increases his mortgage, to increase the benefit by the lower of $50 \%$ of the increase or $£ 50,000$ on rates in force at the time. Neither option requires medical evidence. Two schemes incorporate options for each life to add Critical Illness, Waiver of Contribution and PHI benefits. These options are offered subject to provision of satisfactory medical evidence.
(b) There are no conversion or renewal options where the total sum assured exceeds $£ 1 \mathrm{bn}$.

## 5.(4) Other guarantees and options

(a) FSA personal pensions review

The mathematical reserve for guarantees issued under the FSA personal pensions review is calculated by valuing the pension scheme benefits to which the policyholder would otherwise have been entitled and subtracting the value of the personal pension policy. Where relevant, each policyholder is assumed to be in a scheme providing an RPI-linked pension of two thirds of final earnings after 40 years' service with a $50 \%$ continuation to a surviving spouse and equivalent death-in-service benefits.

The valuation interest rates are $4.9 \%$ in deferment and $4.5 \%$ in possession, both inclusive of assumed $3.5 \%$ per annum increases in the Retail Prices Index (RPI). In deferment, allowance is made where appropriate for salaries to increase by $2.0 \%$ per annum in excess of RPI and by a further $1 \%$ per annum up to age 50 .

The basic policy reserve held at 31 December 2005 was $£ 226.4 \mathrm{~m}$ and the guarantee reserve was £522.5m.

The adequacy of the guarantee reserve has been verified using stochastic modelling.
(b) Guaranteed Minimum Pensions (GMP's) under Section 32 contracts

Under early versions of Section 32 contracts, some or all of the GMP was secured by a non-profit deferred annuity. Those benefits are valued using the methodology described in paragraph 4 above. Any remaining GMP was covered by the excess premium not required to purchase the non-profit deferred annuity and this was invested in a cash accumulation or with-profits fund.

Under later versions of Section 32 contracts, the whole of the GMP was covered by the with-profits fund.

The reserves for that part of the GMP covered by the with-profits have been calculated using stochastic modelling. The distributions of investment returns over the remaining period to retirement and longterm interest rates at retirement were provided by the economic scenario generator used to derive market-consistent returns for use in the Peak 2 valuation.

The guarantee reserve for a small number of accumulating with-profits contracts (ex-SAL) was calculated by a deterministic method, being the excess value on a policy-by-policy basis of the GMP liability (allowing for revaluation) over the basic policy reserve. The GMP liability is valued at a discount rate of $3.75 \%$, with future increases in National Average Earnings assumed to be at $5 \%$ per annum.

The total basic reserve for Section 32 contracts was $£ 351.6 \mathrm{~m}$ and the guarantee reserve was $£ 238.5 \mathrm{~m}$.
(c) PLCE100 - Mortgage endowments

Product PLCE100, a conventional with-profits low cost endowment assurance written in the WPSF was designed to repay a mortgage if annual bonuses continued at the rate current at the date of issue. The policies included a provision that if the declared bonus rate were to fall, causing the projected claim value to fall, then the sum assured and premium would be increased accordingly. The Company has guaranteed that, once the premium has been increased to twice its initial level, and provided that the policy has not been assigned absolutely to a third party, then the maturity value will not be less than the mortgage the policy was intended to cover.

## 5. Options and guarantees (continued)

The guarantee reserve is determined by projecting current benefits to maturity using a $4 \%$ growth assumption and discounting any shortfall against the mortgage amount at a valuation rate of $3 \%$. Where policies are not at their maximum level of premium, allowance is made for the present value of additional premiums that could be payable up to twice the initial level.

The basic reserves for these policies amount to $£ 31.2 \mathrm{~m}$ and a guarantee reserve of $£ 0.8 \mathrm{~m}$ is held.
(d) Home Purchaser (Second Series)

Home Purchaser (Second Series) is a mortgage endowment product written in SAIF, for which the company has undertaken to guarantee that the maturity value will be no less than the original target amount if the experienced investment growth rate is greater than or equal to the growth rate assumption selected by the investor at outset.

The guarantee reserve calculated based on a sample of policies by projecting policy benefits to maturity and discounting any shortfall against the mortgage amount at a valuation rate of $3 \%$. The projections to maturity had regard to the distributions of investment returns over an assumed average outstanding term obtained from the economic scenario generator used to derive market-consistent returns for use in the Peak 2 valuation. Prudent allowance was made for an immediate rise/fall in policy values.

The basic reserves for these policies amount to $£ 569.3 \mathrm{~m}$ and a guarantee reserve of $£ 8.9 \mathrm{~m}$ is held.

## 6. Expense reserves

6.(1) Expense loadings of $£ 713 \mathrm{~m}$, grossed up for tax, are expected to arise during the 12 months from the valuation date. This comprises $£ 266$ million of explicit and $£ 459$ million of implicit loadings.

Maintenance and other expenses (as defined for Form 43) are forecast to be $£ 615$ million including $£ 278$ million of investment expenses.
6.(2) Implicit allowances are calculated as follows:

- For contracts valued by the net premium method, $90 \%$ of the excess of office over net premiums for ordinary branch with-profits contracts and $100 \%$ of the excess for industrial branch with-profits contracts and all non-profit contracts.
- For non-premium paying with profits deferred annuites, $1 \%$ of the mathematical reserves.
- A margin between the risk-adjusted yield on assets in the WPSF and DCPSF ( $0.13 \%$ ) and NPSF $(0.1 \%)$ and that required to support the valuation interest rates to cover fund management expenses.
- A margin in property yield to cover maintenance costs and leases.
6.(3) Total maintenance expenses, other expenses and other commisssion on Form 43 are $£ 680$ million. $£ 118$ million of this is the one-off cost of establishing a current liability for pension scheme deficit funding that will not recur in future.
6.(4) A new business expense overrun reserve of $£ 37 \mathrm{~m}$ is held in the NPSF. The reserve is calculated on a prudent basis as the excess, if any, of the present value of expenses and commission expected to arise in respect of business written in the 12 months following the valuation date over the present value of the charges available to cover such expenses.


## 6. Expense reserves (continued)

6.(5) In the first instance, expense reserves are calculated on the assumption that Prudential's UK insurance operations will continue to write new business indefinitely and hence that there will be no loss of economies of scale.

For business valued using a net premium methodology, under which there is no explicit allowance for expenses, the need for a maintenance expense overrun reserve is tested by comparing the present value of the allowances described above in sub-paragraph (2) with the present value of the expenses and commission expected to be incurred over the remaining lifetime of the business. The calculation of the value of future expenses allows for inflation of $3.5 \%$ p.a. An additional reserve is held if the present value of expenses and commission exceeds the present value of the expense allowances. At 31 December 2005 a reserve of $£ 86 \mathrm{~m}$ was held in SAIF.

For all other business, the expense loadings over the remaining lifetime of the contracts in force at the valuation date are included in the reserves reported in Forms 50.

In order to allow for the possibility that the firm will cease to transact new business twelve months after the valuation date, all expense provisions are recalculated on the assumption that, over a two year period, unit costs would be reduced by $25 \%$ (except in SAIF, where no reductions are assumed) and that thereafter the loss of economies of scale would result in overall expenses being cut more slowly than the rate at which policies run off. In addition the costs associated with closing to new business, such as redundancy payments and the costs of terminating management agreements, are estimated. If the sum of the closed fund expense reserves and termination costs exceed the open fund expense reserve, then the excess is held as an additional reserve, to the extent that this excess cannot be offset by projected surplus on prudent assumptions from existing business. At 31 December 2005, additional reserves of $£ 458 \mathrm{~m}$ were held in the WPSF and $£ 70 \mathrm{~m}$ in SAIF.

## 7. Mismatching reserves

7.(1) and 7.(2) No deposits were received from reinsurers in 2005.

An analysis of the mathematical reserves (other than liabilities for property-linked benefits) and backing assets by currency is as follows:-

| Currency of Liability | Mathematical Reserves(excl. property-linked) in $£ \mathrm{~mm}$ | $\%$ of Reserves | Value of backing assets in currency: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | £ | \$US | Total |
| £ | 62,392 | 95.1 | 62,392 | 0 | 62,392 |
| \$US | 1,933 | 2.9 | 0 | 1,933 | 1,933 |
| Other | 1,264 | 2.0 |  |  |  |
| Total | 65,589 | 100.0 |  |  |  |

$99.3 \%$ of the reserves shown as "Other" currencies are backed by assets in the same currency, the exception being those in Maltese currency.
7.(3) No reserve is held for currency mismatching.
7.(4) For the purpose of calculating the resilience capital requirement under PRU 4.2.11R, the most onerous scenario for the firm overall for assets invested in the United Kingdom and in other territories apart from the USA and the euro-zone is a combination of:
(1) a fall in equity vales of $10 \%$ and a fall in real estate values of $20 \%$
(2) a fall in equity earnings of $10 \%$ with no change in dividends, and a fall of $10 \%$ in rental income,
(3) an immediate rise of 83 basis points in the annual yield obtainable on fixed interest securities
(4) a $25 \%$ rise in the real yield on index-linked bonds.

By sub-fund, the above scenario is the most onerous for the WPSF, DCPSF and NPSF. For SAIF the most onerous scenario is as above except that (3) is replaced by an immediate fall of 83 basis points in the annual yield obtainable on fixed interest securities and (4) is replaced by a $25 \%$ fall in the real yield on index-linked bonds.

## 7. Mismatching reserves (continued)

7.(5) For the purpose of calculating the resilience capital requirement under PRU 4.2.11R, the most onerous scenario for assets invested in the USA is a combination of:
(1) a fall in equity vales of $13 \%$ and a fall in real estate values of $20 \%$
(2) a fall in equity earnings of $10 \%$ with no change in dividends, and a fall of $10 \%$ in rental income,
(3) an immediate rise of 83 basis points in the annual yield obtainable on fixed interest securities
(4) a $25 \%$ rise in the real yield on index-linked bonds.

The most onerous scenario for assets invested in the euro-zone is a combination of:
(1) a fall in equity vales of $14 \%$ and a fall in real estate values of $20 \%$
(2) a fall in equity earnings of $10 \%$ with no change in dividends, and a fall of $10 \%$ in rental income,
(3) an immediate rise of 70 basis points in the annual yield obtainable on fixed interest securities
(4) a $25 \%$ rise in the real yield on index-linked bonds.
7.(6) (a) The resulting resilience capital requirement is:

| WPSF | $:$ | $£ 3,900$ million |
| :--- | :--- | :--- | :--- |
| SAIF | $:$ | $£ 320$ million |
| DCPSF | $:$ | $£ 106$ million |
| NPSF | $:$ | $£ 19$ million |

(b) The long-term insurance liabilities fell by $£ 880$ million in SAIF (including a fall of $£ 120$ million in respect of the Form 14 provision for the prospective liability for tax on unrealised capital gains), by $£ 1,682$ million in the WPSF (including $£ 601$ million in respect of tax provision for unrealised gains), by $£ 13.0$ million in the DCPSF and by $£ 86.5$ million in the NPSF.
(c) The assets allocated to the long-term insurance liabilities, excluding those backing the resilience capital requirement, fell by $£ 1,161$ million in SAIF, by $£ 4,998$ million in the WPSF, by $£ 106.1$ million in the DCPSF and by $£ 103.0$ million in the NPSF from the values shown in Form 13.
7.(7) A reserve of $£ 11.5 \mathrm{~m}$ was held in the NPSF in respect of the test for cashflow mismatching under PRU $7.2 .34 \mathrm{R}(2)$.

This reserve was set at a level that was sufficient to ensure that it covered the result of projecting (I) the risk adjusted cashflows of the assets backing the liabilities and (ii) the future liability payments on the valuation assumptions.

In any year where asset income exceeds liability outgo, the excess is assumed to be invested in a cash asset, which is assumed to accumulate at $97.5 \%$ of the maximum reinvestment rate specified in PRU 4.2.45R. In any year when asset income is insufficient to meet liabilities, the cash reserve is used to meet the shortfall. In the event that the cash reserve is reduced to zero, then the shortfall is assumed to be borrowed at a rate $2 \%$ higher than $97.5 \%$ of the maximum reinvestment rate.

## 8. Other special reserves

Other special reserves in excess of $£ 10 \mathrm{~m}$ are as follows:
Reserves totalling $£ 263 \mathrm{~m}$ ( $£ 143 \mathrm{~m}$ in the WPSF, $£ 108 \mathrm{~m}$ in SAIF and $£ 12 \mathrm{~m}$ in the NPSF) are held to cover the potential costs of compensating policyholders, and the associated expenses, in respect of complaints about mortgage endowment policies. The reserves are calculated by making prudent assumptions about the number of future complaints received, the proportion of these where compensation will be paid, the average amount of compensation and recoveries under PI insurance.

## 8. Other special reserves (continued)

Reserves totalling $£ 119 \mathrm{~m}$ ( $£ 99 \mathrm{~m}$ in the WPSF, $£ 9 \mathrm{~m}$ in SAIF and $£ 11 \mathrm{~m}$ in the NPSF) are held to cover potential additional liabilities in respect of systems and administration errors. The methods used to calculate the reserves vary depending on the nature of the error and take into account data sources alternative to policy valuation systems.

Reserves totalling $£ 150 \mathrm{~m}$ ( $£ 113 \mathrm{~m}$ in the WPSF, $£ 16 \mathrm{~m}$ in SAIF and $£ 21 \mathrm{~m}$ in the NPSF) are held in respect of the UK life insurance operation's share of additional contributions expected to be required to fund future defined benefits in the Prudential Staff Pension Scheme and the Scottish Amicable Pension Scheme, taking into account the expected run-off of the scheme's membership.

Reserves totalling $£ 444 \mathrm{~m}$ ( $£ 303 \mathrm{~m}$ in the WPSF, $£ 65 \mathrm{~m}$ in SAIF and $£ 76 \mathrm{~m}$ in the NPSF) are held to cover general contingencies, taking into account internal assessment of operational risk.

Reserves of $£ 22 \mathrm{~m}$ were set up in respect of premium accruals for business written close to the year-end for which policies had yet to be issued.

A reserve of $£ 90 \mathrm{~m}$ is held in respect of Industrial Branch whole life and endowment assurances written in the WPSF, where the maturity date or (for whole life policies) the policy anniversary after age 90 has passed and the policy benefit has not been claimed, taking into account a prudent assumption for the probability that the claim will be made before age 105 .

A reserve of $£ 25 \mathrm{~m}$ is held for the Prudential Personal Retirement Plan (PPRP), a conventional with-profit deferred annuity product written in the WPSF, in respect of any additional cost of policyholders retiring later than age 65 , taking into account current late retirement enhancement factors and a prudent assessment of the distribution of late retirements by age and sex.

## 9. Reinsurance

9.(1) No premiums were paid in 2005 in respect of reinsurance business ceded on a facultative basis to reinsurers not authorised to carry on business in the United Kingdom.
9.(2) The reinsurance treaties shown in the table below meet the FSA criteria for being reported in this section and were in force as at 31 December 2005.

## 9. Reinsurance (continued)

Reinsurance treaties:

| (d) Reinsurer | (e) Nature of cover | $\begin{gathered} \text { (f) Premiums } \\ £^{\prime} 000 \end{gathered}$ | (h) Open / Closed | (j) Reserves Ceded £'000 | (k) Retention |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Barclays Global Investors Pensions Management Ltd | Linked benefits under GPP3, GPP4, MPP3 and stakeholder pensions, where the member has chosen to invest in BGIPM's funds, on a $100 \%$ quota share basis and the Company Pension Transfer Plan (Bulk Section 32 Buy-Out). The assets under this treaty are covered by a pari passu charge. | 50,466 | Open | £43,353 | Nil |
| Deutsche Asset Management <br> Life \& Pensions Limited | Linked benefits under GPP4, MPP3 and stakeholder pensions, where the member has chosen to invest in DAML\&P's funds, on a $100 \%$ quota share basis and the Company Pension Transfer Plan (Bulk Section 32 Buy-Out). The liability reassured is not covered by any charges on assets. | 379 | Open | 11,844 | Nil |
| Munich Reinsurance Company UK Life Branch | Individual UK term insurance issued before 1 January 2000 in surplus form on an original terms basis | 11,241 | Closed | 41,213 | Nil retention, 100\% reinsured |
| Munich Reinsurance Company UK Life Branch | Death and critical illness benefits on certain Loan Protection policies. Reinsurance is on a risk premium basis. | Nil | Closed | 17,272 | $50 \%$ of each policy reinsured |
| Prudential (AN) Limited * | United Kingdom linked benefits under PPA, EPP2/3, EIB, PPP and FSAVC on a $100 \%$ quota share basis. This is to a member of the Prudential Group and is covered by a pari passu charge on assets. | 21,710 | Open | 216,572 | Nil |
| Prudential Annuities Limited* | United Kingdom non-profit pensions annuities in payment on a $100 \%$ quota share basis. This is to a member of the Prudential Group and is covered by a pari passu charge on assets. | -684 (includes $£ 1.2 \mathrm{~m}$ premium rebated) | Closed | 8,795,406 | Nil |
| Prudential Holborn Life Limited * | United Kingdom linked benefits under Prudence Bond, Prudence Managed Bond and Prudence Distribution Bond on a $100 \%$ quota share basis. This business is covered by a pari passu charge on assets. | 649,836 | Open | 946,076 | Nil |
| Prudential Pensions Limited* | United Kingdom linked benefits under Group AVC, MPP2, GPP1/2/3/4, SHP and PTP contracts on a $100 \%$ quota share basis. This is to a member of the Prudential Group and is covered by a pari passu charge on assets. | 123,896 | Open | 693,114 | Nil |

## 9. Reinsurance (continued)

| (d) Reinsurer | (e) Nature of cover | $\begin{aligned} & \text { (f) Premiums } \\ & £^{\prime} 000 \end{aligned}$ | (h) Open / Closed | (j) Reserves Ceded £'000 | (k) Retention |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Prudential Retirement Income Limited * | Two related treaties for annuity liabilities for relevant annuities issued by PAC. One covering annuities business between 1 July 2004 and 25 November 2004. The other covering annuities after 25 November 2004. Under the terms of the agreement Prudential Retirement Income Limited will meet the liability of the Company to pay the benefits due under the reassured policies. This business is covered by a pari passu charge on assets. | 839,894 | Open | 1,236,810 | Nil |
| Prudential Retirement Income Limited * | Annuity liabilities transferred from SAL, in respect of annuity policies in force at 30 September 2000. Under the terms of the agreement Prudential Retirement Income Limited will meet the liability of the Company to pay the benefits due under the reassured policies. The Company retains responsibility for the administration of the reassured policies. This business is covered by a pari passu charge on assets. | Nil | Open | 316,734 | Nil |
| Swiss Re Life \& Health Limited | Unit-linked bond business on a quota share basis. | Nil | Closed | 69,000 | For certain Flexible Bonds linked to the Extra Yield fund, $89 \%$ of all unit-linked liabilities are reinsured <br> For Managed Income Bonds linked to Managed Income (Series A) units, $90 \%$ of all unit-linked liabilities are reinsured <br> For Managed Income Bonds linked to Managed Income (Series B) units, $25 \%$ of all unit-linked liabilities are reinsured |

9. Reinsurance (continued)

| (d) Reinsurer | (e) Nature of cover | $\begin{aligned} & \text { (f) Premiums } \\ & £^{\prime} 000 \end{aligned}$ | (h) Open / Closed | (j) Reserves Ceded £'000 | (k) Retention |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Swiss Re Life \& Health Limited | Three treaties covering Prudential Protection business over consecutive periods on a quota share basis. The financing agreements with SRL\&H detailed below are connected to this business. | 15,436 | Closed | 74,554 | Mortality Benefits only (per life) <br> $10 \%$ up to $£ 50,000$ <br> Nil above $£ 50,000$ <br> Mortality plus CI and stand alone CI Benefits (per life) <br> $10 \%$ up to $£ 50,000$ <br> Nil above $£ 50,000$ <br> Mortgage Payment Benefits (per life per annum) <br> $25 \%$ up to $£ 5,000$ <br> Nil above $£ 5,000$ <br> Waiver of Premium <br> Benefits (per life per annum) <br> $25 \%$ up to $£ 5,000$ <br> Nil above $£ 5,000$ |

9. Reinsurance (continued)

| (d) Reinsurer | (e) Nature of cover | $\begin{gathered} \text { (f) Premiums } \\ £^{\prime} 000 \end{gathered}$ | (h) Open / Closed | (j) Reserves Ceded £'000 | (k) Retention |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Swiss Re Life \& Health Limited | Two financing arrangements in respect of acquisition costs incurred in writing Prudential Protection contracts with a policy proposal date: <br> - Prior to 31 December 2002, an acceptance date in 2002 and a policy issue date prior to 31 March 2003 <br> - in the range 6 May 2002 to 30 June 2003, a policy issue date in the range 1 January 2003 to 31 December 2003 <br> (i) Payments to the reinsurer are a proportion of the difference between the office premium and the reinsurance premium net of an allowance for renewal expenses for the time that the policy remains in force. If a policy lapses within the initial commission period the Company pays the reinsurer the amount of the indemnity commission that can be clawed back at that time. If a policy lapses outside of the initial commission period or becomes a mortality or morbidity claim at any time then payments to the reinsurer cease. The total amount paid to the reinsurer in respect of an individual policy is independent of the amount originally advanced by the reinsurer and depends on how long each policy remains in force. There is therefore no undischarged obligation. <br> (ii) Allowance has been made for the repayment of this financing in calculating the level of the reserves required for these contracts. | 3,894 | Closed | - | N/A |
| European Reinsurance Company of Zurich | Contingent Loan agreement. The repayment of which is contingent on the emerging surplus for the block of business to which it is linked. <br> No allowance has been made in the valuation for the repayment of the contingent loan. | 8,572 (interest and capital repayment) | Open | - | N/A |

## 9. Reinsurance (continued)

(g) There were no deposit back arrangements under the above treaties.
(i) There are no "undischarged obligations of the insurer". Premiums are only payable if the gross business remains in force.
(l) All of the above companies are authorised to carry on insurance business in the United Kingdom with the exception of European Reinsurance Company of Zurich.
(m) An asterisk denotes companies connected to the cedant (*)
(n) In general the treaties are exposed to the credit risk of the Reinsurers, against which a reserve is held.
(o) The net liability includes no allowance for the refund of any reinsurance commission
10. Reversionary (or annual) bonus
10.(1), 10.(2) and 10.(3)

Table 1 SAIF

| Bonus series | Mathematical reserves | Annual bonus rate for |  | UWP unit price increase during the year | Guaranteed bonus rate during the year |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2005 | 2004 |  |  |
|  | £m | \% | \% | \% | \% |
| Principal | 3,466 | 0.8/1.5 | 0.8/1.5 |  |  |
| Flexidowment (Second Series) | 303 | 0.7/1.7 | 0.7/1.7 |  |  |
| Flexisave (Second Series) | - | 0.7/1.3 | 0.7/1.3 |  |  |
| Net With Profits Fund 1 | 866 | 2.0/2.0 | 2.0/2.0 |  |  |
| Flexipension (First Series) | 900 | 0.4/1.0 | 0.4/1.0 |  |  |
| Superannuation (Second Series) | 247 | 0.4/1.0 | 0.4/1.0 |  |  |
| Group | 114 | 1.10 | 1.10 |  |  |
| Exempt With Profits Funds 1 | 173 | 4.00 | 4.00 | 4.00 | 4.00 |
| Exempt With Profits Funds 2 | 1,453 | 4.00 | 4.00 | 4.00 | 4.00 |
| Exempt With Profits Funds 3 | 212 | 2.25 | 2.25 | 2.25 |  |
| Exempt With Profits Funds 3A | 1,557 | 4.00 | n/a | n/a |  |
| Exempt With Profits Funds 3B | 520 | 4.00 | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |  |
| Exempt With Profits Funds 4 | 18 | 4.00 | 4.00 | 4.00 | 4.00 |

## 10. Reversionary bonus (continued)

Table 2 WPSF - UK and, where appropriate, Guernsey, Jersey, and Isle of Man

| Bonus series | Mathematical reserves | Annual bonus rate for |  | UWP unit price increase during the year | Guaranteed bonus rate during the year |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2005 | 2004 |  |  |
|  | £m | \% | \% | \% | \% |
| With-profits industrial branch assurances issued before 1 July 1988 | 1,020 | 0.90/1.80 | 0.90/1.80 |  |  |
| Other conventional with-profits assurances | 4,167 | 1.00/2.00 | 1.00/2.00 |  |  |
| Individual with-profits deferred annuities | 5,574 | 0.25 | 0.25 |  |  |
| Pension Savings Plan | 109 | 2.50/2.50 | 2.50/2.50 |  |  |
|  |  |  |  |  |  |
| UWP life assurance bonds |  |  |  |  |  |
|  |  |  |  |  |  |
| Prudence Bond - optimum return | 10,062 | 3.25 | 3.25 | 3.25 |  |
| Prospects Bond - optimum return | 26 | 2.85 | 2.85 | 2.85 |  |
| Prudence Bond - optimum bonus | 649 | 4.00 | 4.00 | 4.00 |  |
| Prospects Bond - optimum bonus | 19 | 3.60 | 3.60 | 3.60 |  |
| Prudential Investment Bond (accounts over £6,000) | 3,124 | 3.25 | 3.25 | 3.25 |  |
|  |  |  |  |  |  |
| Group cash accumulation (defined benefit) with a 4.75\% guarantee | 136 | - | - | - | 4.75 |
| Group cash accumulation (defined benefit) with a $2.5 \%$ guarantee | 271 | 0.25 | 0.25 | 0.25 | 2.50 |
| Group cash accumulation (defined benefit) with a $0.01 \%$ guarantee | 136 | 2.74 | 2.74 | 2.74 | 0.01 |
|  |  |  |  |  |  |
| Other group cash accumulation with a 4.75\% guarantee | 812 | - | - | - | 4.75 |
| Other group cash accumulation with a 2.5\% guarantee | 1,951 | 0.50 | 0.50 | 0.50 | 2.50 |
| Other group cash accumulation with a $0.01 \%$ guarantee | 985 | 2.99 | 2.99 | 2.99 | 0.01 |

10. Reversionary bonus (continued)

Table 2 WPSF - UK and, where appropriate, Guernsey, Jersey, and Isle of Man (continued)

| Bonus series | Mathematical reserves | Annual bonus rate for |  | UWP unit price increase during the year | Guaranteed bonus rate during the year |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2005 | 2004 |  |  |
|  | £m | \% | \% | \% | \% |
|  |  |  |  |  |  |
| Flexible Retirement Income Account | 38 | 2.75 | 2.75 | 2.75 |  |
| Individual UWP pensions other than FRIA | 12,955 | 3.25 | 3.25 | 3.25 |  |
| Group UWP pensions with GMP guarantee | 189 | 2.50 | 2.50 | 2.50 |  |
| Group UWP pensions | 1,232 | 3.50 | 3.50 | 3.50 |  |
| With-profits pensions annuities in payment | 958 | 2.75 | 2.75 | 2.75 |  |
|  |  |  |  |  |  |
| Former SAL products |  |  |  |  |  |
|  |  |  |  |  |  |
| Net With Profits Fund 2 | 193,897 | 3.0/3.0 | 3.0/3.0 |  |  |
| Exempt With Profits Funds 5 and 6 | 313,017 | 3.375 | 3.375 | 3.375 |  |
| Exempt With Profits Funds 7, 8, 9, 10C and 10C2 | 383,319 | 3.25 | 3.25 | 3.25 |  |

## 10. Reversionary bonus (continued)

Table 3 WPSF - Policies issued in Hong Kong

| Bonus series | Mathematical <br> reserves |  | Annual bonus rate for <br> Guaranteed <br> bonus rate <br> during the year |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | UWP unit price <br> increase during <br> the year |  |  |  |
|  | $£ m$ | 2005 | 2004 |  |  |
|  |  | $\%$ | $\%$ | $\%$ |  |
| Conventional with-profits assurances - First series | 189 |  |  |  |  |
| Conventional with-profits assurances - Better Life | 895 | $3.50 / 3.50$ | $3.50 / 3.50$ |  |  |
| Group cash accumulation | 68 | $3.00 / 4.30$ | $3.00 / 4.30$ |  |  |
| PRUsavings Plan | 13 | 5.00 | 5.00 |  |  |
| Other UWP - US\$ | 150 | 2.00 | 2.00 | 5.00 |  |
| Other UWP - HK\$ | 645 | 1.75 | 1.75 | 2.00 | 1.75 |

The table excludes Better Life series II policies with mathematical reserves of $£ 22$ million and PRUsave Plus policies with mathematical reserves of $£ 103$ million. Annual bonuses are added to these policies only from their third anniversaries which are on 1 February 2007 and 1 April 2006 respectively at the earliest.

Table 4 DCPSF

| Bonus series | Mathematical <br> reserves |  | Annual bonus rate for |  | UWP unit price <br> increase during <br> the year |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Guaranteed <br> bonus rate <br> during the year |  |  |  |  |  |
|  |  | $£ m$ | 2005 | 2004 |  |

10. Reversionary bonus (continued)
(4) Cash bonus ocontracts issued in Hong Kong for which mathematical reserves were $£ 316$ million on the valuation date vary by product, by age at entry and by duration in force. Rates vary from $\$ 0.90$ per $\$ 1,000$ sum assured at duration one year to $\$ 11.30$ per $\$ 1,000$ sum assured at duration 11 years.

## APPENDIX 9.4A

## VALUATION REPORT FOR REALISTIC VALUATION ON THE PRUDENTIAL ASSURANCE COMPANY LIMITED AS AT 31 DECEMBER 2005

## 1. Introduction

1.1 The investigation relates to 31 December 2005.
1.2 The date of the previous valuation related to 31 December 2004.
1.3 A valuation was carried out at 30 June 2005 in accordance with IPRU(INS) rule 9.3A.
2. Assets
2.1 The economic assumptions used to determine the value of future profits on non-profit business written in WPSF and SAIF are:

| Description | 31-Dec-05 |  | 31-Dec-04 |  |
| :--- | ---: | :---: | ---: | ---: |
|  | Gross | Net | Gross | Net |
|  | $\%$ | $\%$ | $\%$ | $\%$ |
| Investment return (10yr gilt rate) | 4.160 | 3.328 | 4.590 | 3.670 |
| Investment expenses | 0.118 | 0.094 | 0.134 | 0.107 |
| Discount rate $=$ Investment return <br> - investment expenses | 4.042 | 3.234 | 4.456 | 3.563 |
| Inflation (except IB business) | 2.9 | 2.9 | 2.9 | 2.9 |
| Inflation (IB business) | 4.9 | 4.9 | 4.9 | 4.9 |

The DCPSF has no non-profit business.
2.2 For the WPSF, the economic assumptions used to determine any additional amount arising from the excess of the present value of future profits (or losses) of Prudential Annuities Limited (PAL) in accordance with PRU 7.4.33R(3)(b)(iii) are:

| Description | 31-Dec-05 | 31-Dec-04 |
| :--- | :---: | :---: |
| Investment return | $\%$ | $\%$ |
|  | 4.374 | 4.910 |
|  | 0.060 | 0.060 |
|  | 4.314 | 4.850 |
| Rate of tax on profits | 30.0 | 30.0 |

The discount rate is equal to the investment return less the cost of investment management expenses.

SAIF and DCPSF have no assets valued under PRU 7.4.33R(3)(b)(iii).

Not applicable.
2.4 Not applicable.

## Not applicable

## 3. With-Profits Benefits Reserves Liabilities

3.1 The methods used to calculate the with-profits benefits reserves are:

| Business class | Method |  | With-profits benefits reserves | Future policy related liabilities |
| :---: | :---: | :---: | :---: | :---: |
| WPSF |  |  | £m | £m |
| L\&P IB | Retrospective* | Grouped | 2,089 | 25 |
| L\&P OB CWP | Retrospective* | Grouped | 5,974 | 15 |
| L\&P PPRP | Retrospective* | Grouped | 5,958 | 413 |
| L\&P UWP Life | Retrospective* | Individual | 3,494 | 73 |
| L\&P UWP Pensions | Retrospective* | Grouped | 16,634 | 838 |
| Ex-ISC pensions | Retrospective* | Individual | 1,793 | 182 |
| Group pensions | Retrospective* | Individual | 6,871 | 243 |
| With profit annuities | Retrospective* | Individual | 1,001 | 80 |
| PruBond | Retrospective | Individual | 12,846 | 115 |
| Ex-SAL UWP | Retrospective | Individual | 1,002 | 39 |
| Hong Kong | Retrospective | Grouped | 2,055 | 65 |
| Additional reserve | Other | n/a | 172 | 110 |
| Sub-total |  |  | 59,888 | 2,198 |
| SAIF |  |  |  |  |
| CWP | Retrospective* | Individual | 6,712 | 554 |
| UWP - pensions | Retrospective* | Individual | 4,628 | 896 |
| UWP - life | Retrospective* | Individual | 1,131 | 107 |
| Additional reserve | Other | n/a | 138 | 1 |
| Sub-total |  |  | 12,609 | 1,558 |
| DCPSF |  |  |  |  |
| PAC France | Retrospective | Individual | 88 |  |
| Canada Life (Germany) | Retrospective | Individual | 66 |  |
| International Prudential Bond | Retrospective | Individual | 1,148 |  |
| Sub-total |  |  | 1,302 |  |
| Total PAC |  |  | 73,799 | 3,756 |

* Adjusted as described in section 5.

The Life and Pensions (L\&P) business comprises individual life and pensions business sold through the former Direct Sales Force. Ex-ISC Pensions business comprises individual pensions business sold through the IFA channel.
99.65\% of SAIF UWP Pensions business has a minimum guarantee attached. Certain Group Pension contracts include minimum rates of guarantee ranging from $2.5 \%$ to $4.75 \%$
3.2 The with-profits benefits reserves and future policy related benefits correspond to the presentation in Form 19.

## 4. With-Profits Benefits Reserves - Retrospective method

4.1(a)\&(b) The proportions of the with-profits benefit reserve (excluding additional reserves) calculated using individual or grouped methodology as shown in 3.1 are:

|  | WPSF | SAIF | DCPSF |
| :--- | :---: | :---: | :---: |
|  | $\%$ | $\%$ | $\%$ |
| Individual basis | 45 | 100 | 100 |
| Grouped basis | 55 | 0 | 0 |
| Other | 0 | 0 | 0 |
| Total | 100 | 100 | 100 |

4.1(c)(i) For WPSF Life and Pensions (L\&P) CWP business sold through the direct sales force (OB \& IB assurances and PPRP deferred annuity contracts), policies are differentiated by benefit type (eg full endowment, low cost endowment, whole life or deferred annuity), sex (but not for IB assurances) and premium status (single, regular, fully paid or partly paid) and then grouped, by age, duration and original policy term. Only policies with the same age, duration and policy term are grouped together (i.e data is not grouped into bands).

For WPSF L\&P UWP pensions business, the approach is the same as for CWP except that policies are not differentiated by sex and paid up policies are grouped only if they had the same curtate duration when they were made paid-up. In addition DWP rebate business is differentiated according to sex, maturity age and curtate duration in force at the valuation date.

For WPSF L\&P UWP life business individual policy data is used in the calculation.
4.1(c)(ii) The number of individual contracts and the number of model points used to represent them at 31 December 2005 are:

| Product | Policies | Valuation <br> file records | Number of <br> model points |
| :--- | ---: | ---: | ---: |
| L\&P IB | $1,346,624$ | $1,346,624$ | 18,098 |
| L\&P CWP OB assurances | 560,192 | 592,361 | 200,406 |
| L\&P CWP PPRP (deferred <br> annuities) | 301,122 | 656,103 | 322,915 |
| L\&P UWP pensions - rebates | 378,431 | 484,769 | 8,091 |
| L\&P UWP pensions - other | 617,402 | $3,363,751$ | 447,569 |

The number of records in the valuation file can exceed the number of policies because:

- new records are set up for increments to existing policies, and
- for unitised with-profits pensions business, separate records are set up for ordinary rights regular premium, ordinary rights single premium, protected rights and life cover.
4.1(c)(iii) The main classes valued on a grouped basis are the WPSF Life \& Pensions (L\&P) products sold through the former Direct Sales Force (Prudential ex-DSF). The business volumes of the grouped classes are large and homogeneous and the grouping basis used has been designed to separate out any significant attributes that affect the retrospective benefit reserve. The model points lead to an accurate retrospective valuation. This has been verified as at 2003 year-end where the asset shares using grouped and ungrouped data were within $0.01 \%$ for each class of business.
4.2.a. A current liability has been recognised in respect of pension scheme deficits on the basis of the with-profit fund share of 5 years' deficit reduction amount. The liability recognised at 31 December 2005 was $£ 118 \mathrm{~m}$ gross for the WPSF, nil for SAIF and nil for DCPSF.

No liability has been recognised in respect of pension deficits to be funded by shareholder (rather than with-profits fund) resources as these costs will be borne outside PAC.

With the recognition of a pension scheme deficit liability, it is appropriate to allow in the realistic liabilities of for the deficit to be charged to asset shares subject to treating customers fairly. For certain pension product classes, charge levels are currently restricted to $1 \%$ pa and it has been assumed that the deficit will be met from free assets. For other products it has been assumed that the deficit will be charged in future to asset shares and accordingly amounts of $£ 67 \mathrm{~m}$, nil and nil, for WPSF, SAIF and DCPSF respectively, have been included in line 36 of Form 19.

In addition, allowance has been made on with-profit fund business for pension scheme contributions to increase to a full current service cost. Apart from those product classes where charges are currently restricted as mentioned above, it has been assumed that the increased level of contributions will be charged to asset shares (for SAIF the increase will be charged from 2008 onwards, prior to that the additional contributions are paid by the service company, PUKSL). For those contracts where charges are currently restricted an additional liability of $£ 35 \mathrm{~m}, £ 10 \mathrm{~m}$ and nil for WPSF, SAIF and DCPSF respectively has been included in the WithProfit Benefit Reserve recognising the present value of the expected increase in expenses attributable to these contracts.
4.2.b. Not applicable.
4.3 Expenses of the long-term business incurred directly for a sub-fund or element of a sub-fund are allocated to that entity. Other expenses are mostly apportioned by reference to such measures as considered appropriate eg business volumes or time spent or mean fund for investment expenses. However, SAIF is charged expenses in accordance with the provisions of the Scheme of Transfer.
4.3.a The previous full expense investigation related to 2004.
4.3.b The company's cost allocation basis is reviewed quarterly to ensure maintenance of an appropriate allocation of expenses to the with-profit and other parts of the long-term fund. Charges deducted from the with-profits benefits reserves are reviewed at the same time, and updated at least annually.
4.3.c(i)\&(ii) Expense allocation for 2005 (January - December )

| Description | WPSF <br> (excl HK) | DCPSF | SAIF |
| :--- | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 5}$ FY | $\mathbf{2 0 0 5} \mathbf{F Y}$ | $\mathbf{2 0 0 5} \mathbf{F Y}$ |
| Acquisition expenses including <br> commission \# | $£ \mathrm{~m}$ | $£ \mathrm{~m}$ | $£ \mathrm{~m}$ |
|  <br> development expenses <br> Investment management expenses | 197 | 8 | 7 |
| Total expenses charged to with <br> profits benefit reserve | $\mathbf{3 4 3}$ | $\mathbf{8}$ | $\mathbf{5 9}$ |
| Total expenses not charged to with <br> profits benefit reserve | 416 | $(10)$ | $(51)$ |
| Total Expenses as shown in Form <br> 40 | 758 | $(2)$ | 8 |

\# Net of any acquisition expenses written off
4.3.c(iii)\&(iv)Expenses are split into acquisition and administration expenses. Those allocated to asset shares are expressed as some or all of an amount per policy, a percentage of premium or sum assured, or a reduction in the investment return, with an allowance for tax relief where appropriate.

Certain expenses are not allocated to asset shares. In particular:

- Although allowance is generally made for actual expenses, the allowance for acquisition expenses has been reduced every year since 1997 so that the deductions for expected expenses and distributions to shareholders are restricted to the policy-specific charges used when illustrating benefits at point of sale.
- Exceptional expenditure such as on one-off developments.
- For the WPSF expenses associated with the personal pensions misselling review are met by the inherited estate rather than asset shares.
- Expenses related to non-profit/unit-linked business

Investment expenses in respect of property maintenance and PPM Ventures are allowed for in the calculation of investment returns credited to asset shares rather than being reflected as an explicit expense charge

In addition for many pension contracts the net impact of the deductions has been limited to $1 \%$ p.a. since April 2001, though this level of charge is not guaranteed to apply in future.

Investment management expenses exclude those property maintenance and PPM ventures expenses, which are already reflected in the reported fund investment return ( $£ 179.0 \mathrm{~m}$ WPSF and $£ 10.7 \mathrm{~m}$ SAIF). They also exclude investment expenses incurred by the assets backing the free estate ( $£ 20 \mathrm{~m}$ WPSF and $£ 4 \mathrm{~m}$ SAIF)

For the DCPSF Prudential International Bond explicit charges are specified in the policy and passed to the PAC NPSF, which bears the expenses. Any difference between the charges deducted and the expenses incurred accrues to the PAC NPSF.
4.4 For WPSF policies, a charge for smoothing and guarantees is expressed as a proportion of asset shares. The with-profits benefits reserves are shown before this charge. During 2005 the charge was typically either $1 \%$ or $2 \%$, but there are some exceptions. From 2006 onwards the charge will be $2 \%$ for all business.

For SAIF three charges were made in 2005:

- an annual charge for smoothing and guarantees expressed as a proportion of asset shares was transferred to the bonus smoothing account. In 2005 a charge of $0.15 \%$ of asset shares was made. It was agreed prior to the year-end that this charge will be reduced to zero from 1 January 2006.
- an annual charge for the cost of guaranteed annuity options of $0.25 \%$ of asset shares of policies with these guarantees. This is the maximum amount which can be charged directly to asset shares for this cost. Any excess of the guaranteed annuity option costs over the charge made reduces the potential surplus available to enhance claim values under the Scheme of Transfer.
- an annual charge for the capital support provided by SACF of $0.15 \%$ of asset shares. This is derived as $1 \%$ of the mean value of SACF, where SACF is equal to $15 \%$ of the average asset share.

For DCPSF policies, a charge for smoothing and guarantees is achieved by targeting claim values on a proportion of asset shares. On claim the difference between the actual claim value and the asset share is passed to the bonus smoothing account. The with-profits benefits reserve is shown before this charge. Currently the charge is $2 \%$. In addition a proportion 20bp p.a. of the investment management charge in 4.3 above is passed to the WPSF which in return provides capital support in extreme circumstances.

For WPSF, SAIF and DCPSF the level of charges deducted during 2005 is as follows.

| Fund | Amount of <br> charge 2005 $\mathbf{~ m}$ | Amount of <br> charge 2004 £m |
| :--- | :--- | :--- |
| WPSF | 95.0 | 74.0 |
| DCPSF | 1.0 | 0.3 |
| SAIF | 68.0 | 62.0 |

The table below shows the ratio of claims (excluding deaths) paid over each of the last three years to the asset shares for those policies (including the contribution from miscellaneous surplus).

| Fund | Average 2003 -2005 | Average 2002 -2004 |
| :--- | :---: | :---: |
|  | $\%$ | $\%$ |
| WPSF | 101 | 107 |
| DCPSF | 102 | 109 |
| SAIF | 98 | 103 |

4.7 The 2005 rate of investment return, before tax, allocated to the with-profits benefits reserves was as follows:

| Fund | $\mathbf{2 0 0 5}$ |
| :--- | :---: |
|  | $\%$ |
| WPSF | 20.0 |
| SAIF | 19.0 |
| DCPSF | Varies - see table below |

The investment returns shown above apply to all with-profit contracts in that sub-fund except that for WPSF;

- for PruBond Optimum Bonus fund ( $£ 0.8 \mathrm{bn}$ with-profits benefits reserves), the rate of return reflects a higher fixed interest content than the main WPSF, in line with the notional investment mix of assets which is appropriate for that product line, and
- for Hong Kong business ( $£ 2.05$ bn with-profits benefits reserves) the investment return allocated reflects the investment mix appropriate for each product line.
For DCPSF business ( $£ 1.30$ bn with-profits benefits reserves) the investment return allocated reflects the investment mix appropriate for each product line. The gross of tax rates of return are as follows:

| Product | $\mathbf{2 0 0 5}$ FY |
| :--- | :---: |
|  | $\%$ |
| Prudential International Bond (£) | $20.00 \%$ |
| Prudential International Bond (\$) | $6.18 \%$ |
| Prudential International Bond (€) | $20.57 \%$ |
| Ex - Canada Life (Germany) | $20.57 \%$ |
| PAC France | $20.57 \%$ |

## 5. With-profits benefits reserves - Prospective method

With-profits benefits reserves are primarily based on the retrospective asset shares. However a number of adjustments are made because:

- WPSF L\&P CWP whole life policies include significant death benefits that are more appropriately valued using expected future bonus rates rather than aggregate asset shares.
- WPSF IB bonus rates are derived from the corresponding OB rates, as opposed to the IB asset shares, in line with the undertaking given in 1988 when the IB and OB assets merged. At that time, the Prudential undertook to declare IB bonuses that were equal to $100 \%$ of OB rates for new business issued from July 1988 and at least $90 \%$ of OB rates for business issued prior to July 1988.
- The company has restricted the future implicit fund charge on many pension contracts to reflect our intention to restrict charges on personal pensions to stakeholder consistent levels, so restricting our ability to target claim values on the underlying asset shares.
- For some product lines the only asset shares available are charges asset shares (where asset shares have been built up using the charges associated with that product line) rather than expenses asset share (where the actual expenses have been charged). The prospective method is used to value the future liabilities (based on bonus rates derived from the charges asset shares) and determine the equivalent (expenses) asset shares required to meet such bonus rates.
- The SAIF asset share liability is increased by the value of the Scottish Amicable Account (SAA) UWP life business, calculated on a charges less expenses basis, that is passed to the WPSF.

These adjustments to the underlying asset share liability are determined using a bonus reserve valuation approach. This is a prospective approach which determines the present value of liabilities allowing for expected rates of future annual terminal bonus.

A prospective valuation is not performed for DCPSF, nor SAIF with the exception of the SAA business mentioned above.

The non-economic assumptions largely reflect the realistic component of the Regulatory basis excluding the margins for adverse deviation (MADs). The elements of the resulting reserves that represent the bonus glidepath costs and prospective miscellaneous surpluses are identified and deducted from the prospective liability to determine the adjusted with-profits benefits reserves.

Prospective reserves are also determined for all major WPSF product lines as an additional check that with-profits benefit reserves fully reflect the provision for policyholders' benefits.
5.1.a.b\&c The economic assumptions for WPSF and SAA UWP business are:

|  | $\begin{aligned} & 31 \text { December } \\ & 2005 \end{aligned}$ |  | $\begin{aligned} & 31 \text { December } \\ & 2004 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Gross | Net | Gross | Net |
|  | \% | \% | \% | \% |
| Investment return | 7.07 | 6.27 | 6.53 | 5.73 |
| Investment expenses | 0.12 | 0.09 | 0.13 | 0.11 |
| Discount rate $=$ Investment return - investment expense | 6.95 | 6.18 | 6.40 | 5.62 |
| Expense Inflation (except IB business) | 2.9 | 2.9 | 2.9 | 2.9 |
| Expense Inflation (IB business) | 4.9 | 4.9 | 4.9 | 4.9 |
| Annuity interest rate (PPRP risk free rate of interest) | 4.63 | N/A | 5.30 | N/A |

The economic assumptions used to value the prospective benefits are the same as those used for European Embedded Value reporting, which represent our best estimate assumptions allowing for prevailing market conditions at the valuation date.

A prospective valuation is not performed for DCPSF, nor SAIF with the exception of SAA UWP business.
5.1.d Future annual and final bonus rates for WPSF significant product lines are shown in Appendix 3.

A prospective valuation is not performed for DCPSF, nor SAIF with the exception of SAA UWP business.
5.1.e Future expense assumptions for significant product lines are shown below

| PER POLICY EXPENSES |  |  |
| :--- | :---: | :---: |
| Product | Premium Paying (£) | PUP |
| (\% of premium paying) |  |  |
| IB | 20.15 | 16.7 |
| OB Life | 34.44 | 85.0 |
| PPRP | 38.79 | 85.0 |
| Personal Pensions | 38.79 | 85.0 |
| Teachers' AVC | 111.50 | 20.0 |
| Cash Accumulation | 435.46 | 20.0 |
| Defined Benefit |  |  |

The expense assumptions are the realistic component of the peak 1 basis i.e. before the application of the margin for adverse deviation (MAD).

A prospective valuation is not performed for DCPSF nor SAIF with the exception of SAA UWP business.
5.1.f Future persistency assumptions for significant product lines are shown in 6.6.

For persistency, where there is no explicit realistic basis component of the statutory basis, assumptions are determined with reference to the EEV assumptions, which reflect our best estimate assumptions. A $10 \%$ reduction was applied to EEV lapse rates, in order to make allowance for the potential decrease in lapse rates in scenarios where guarantees, become deeply in the money.

A prospective valuation is not performed for DCPSF, nor SAIF with the exception of SAA UWP business.

### 5.2 Not applicable.

## 6. Cost of guarantees, options and smoothing

6.1 Not applicable.
6.2.a For the WPSF and SAIF, the value of guarantees, options and smoothing costs, net of the charge for such guarantees, other than for Personal Pension mis-selling guarantees and for GMPs, is determined by using market consistent stochastic models as follows:

- For WPSF business issued in the UK, the Prudential Stochastic Asset Liability Model (PSALM), our in-house model, is used to value product-related guarantees, except that the realistic reserve for the small volume of guaranteed annuity options is set equal to the regulatory reserve.
- For WPSF business issued in Hong Kong, the HK stochastic asset liability model (HKSALM) is used.
- For SAIF business, PSALM is used.

For the DCPSF, a bonus smoothing account is maintained and credited or debited as appropriate with any difference between claim payments made from the DCPSF and the relevant policies' underlying asset shares. It is intended that these smoothing transfers should generate no net gain over the long term. Claim payouts as a targeted percentage of asset share can be adjusted to cover the cost of guarantees and smoothing. If, however, in extreme circumstances, there is ultimately a shortfall in the DCPSF, additional capital support is provided by the WPSF. The WPSF receives an annual charge from the NPSF to provide this support. Within the WPSF a further reserve is therefore held in line with the cost on similar contracts. Our presentation of this is that for the DCPSF, the value of guarantee and smoothing costs are set equal to the current charge for such costs. In addition, the reserves and charges for guarantees and smoothing costs in the WPSF are increased in proportion to the relative asset shares of DCPSF and similar WPSF contracts.

For WPSF business, the reserves for:

- guarantees resulting from personal pension mis-selling, and
- the guaranteed minimum pensions on section 32 and bond 32 business,
are determined by averaging the results from a number of deterministic scenario tests. The probability of each scenario has regard to projections from PSALM, using market consistent assumptions. For this calculation individual policy data is used.

For SAIF business, guarantees for pensions mis-selling and GMPs are not significant.
For DCPSF, there are no guarantees for pension mis-selling, GMPs or GAOs.

For Personal Pension mis-selling and GMP costs, individual policies are valued.
For Guaranteed Annuity Options, the approach used is:

| Sub-fund | Valuation <br> Method | Model point grouping | No of <br> contracts | Number of <br> Model <br> Points |
| :--- | :--- | :--- | :---: | :---: |
| WPSF | Regulatory | Not applicable | 5,159 | N/A |
| SAIF | PSALM | Grouped | 94,534 | 879 |

For other product related guarantees the model points used in the valuation are all grouped data sets generated using one of the following:

- individual policy details
- grouped data from other similar contracts
- a representative set of policies

The business grouped by each method is:

| Type of <br> product | Valuation <br> method | Model point grouping | Contracts | Model <br> points |
| :--- | :--- | :--- | ---: | ---: |
| WPSF-UK | PSALM | Grouped | $4,609,865$ | 8,199 |
| WPSF-HK | HKSALM | Representative model points | 430,442 | 275 |
| SAIF | PSALM | Grouped | 986,811 | 1,542 |

Model points used to determine the cost of guarantees options and smoothing in the 31 December 2004 FSA return were generated from in-force data extracted at 31 December 2003 and rolled forward to 31 December 2004.

New model points based on data as at 31 December 2004 have been produced for product classes covering $26 \%$ (WPSF) and $100 \%$ (SAIF) of total asset shares and $14 \%$ (WPSF) and $100 \%$ (SAIF) of the total net cost of guarantees and smoothing. New model points based on data as at 30 September 2005 have been produced for product classes covering $72 \%$ (WPSF) and $0 \%$ (SAIF) of total asset shares and $82 \%$ (WPSF) and $0 \%$ (SAIF) of the total net cost of guarantees and smoothing. These new model points have been rolled forward to 31 December 2005.

Model points for single premium group pensions business and bond 32 have been rolled forward from 2003YE. These model points account for less than $2 \%$ of the total asset share.

The Prudential Sourcebook guidance requires that the grouping of policies for valuing the cost of guarantees, options and smoothing should not materially misrepresent the underlying
exposure. In particular policies with guarantees "in the money" should not be grouped with policies with guarantees well "out of the money". (The "moneyness" of guarantees describes the extent to which guarantees are biting for a policy.)

To meet this requirement WPSF (excluding Hong Kong) policies have been grouped together where they are subject to the same rate of bonus. This has been done by grouping policies separately for:

- Major product categories
- Single premium policies, regular premium policies, and paid-up policies
- Year of inception
- Year of maturity

For with-profits annuities, age and sex have been used as the grouping variables
The grouping basis of the new model points in respect of rebate pensions business in WPSF and SAIF business was changed to put it on the same basis as other business. Previously rebate pensions were grouped solely by year of maturity and SAIF business by age of policyholder at inception and year of maturity. The change, although an improvement, did not have significant impact.

Checks were performed to ensure that the model policies suitably reflected the underlying data. The ungrouped policy data and grouped model points were separately projected through the valuation models used for European Embedded Value reporting. Comparisons of revenue and balance sheet items over the projection period were produced to demonstrate the model points represent the policy data adequately. The key check was to ensure the run-off of asset share and fund value over the projection period was very similar.

HKSALM model points are generated from a representative set of policies and scaled up to allow for non-modelled business.
6.2.c. Approximations are necessary for WPSF IB business because IB bonus rates are derived from the corresponding OB bonus rates as a result of the bonus harmonisation undertakings given in 1988 when the assets of the two funds were merged i.e. IB bonuses are $100 \%$ of the OB ones for new business issued from July 1988 and at least $90 \%$ for prior business. The total liability is determined prospectively allowing for the expected OB-related bonuses, but the amount of this liability ascribed to guarantees and smoothing is approximate.
6.3 There are no significant changes to the valuation methods for valuing the costs of guarantees, options or smoothing since the previous valuation.
6.4.a The following information is in respect of the business using the PSALM model. A similar approach has been taken for HKSALM but is not shown because the resulting costs are not significant.
6.4.a(i) For WPSF and SAIF, the guarantees valued using the full stochastic model include sums assured and projected reversionary bonuses (including any minimum guaranteed rates of reversionary bonus) payable on death, maturity or vesting. For SAIF, guaranteed annuity options are also valued.

The extent to which guarantees are in or out of the money varies greatly across product lines and in particular by duration inforce within each product line. The ratio of reversionary bonus funds to asset shares for separate AWP product lines ranged between $66 \%$ to $85 \%$, averaging $78 \%$ overall for WPSF and $76 \%$ overall for SAIF business.

Economic scenarios are generated by the GeneSIS model. This is a risk neutral stochastic asset model. The models used for each asset class are

- Nominal interest rate model

The interest rate model is a Hull and White two-factor model. Current forward rates (the UK gilts instantaneous nominal forward curve) are used to define an initial yield curve. The short rate in the model is assumed to fluctuate around this initial curve. A second random process disturbs the initial curve to which the short rate reverts.

- Equity model

The equity return is generated using a risk-neutral log-normal model. It consists of a drift term and a random process. The drift term is the short rate taken from the nominal interest rate model described above. Equity returns fluctuate about this rate by means of a random process based on an annual volatility and a random number. The volatility assumption is time dependent. The process for dividends is designed to be consistent with the current dividend yield and tends to a defined long-term yield level, whilst being constrained by a total return on equities that is consistent with the risk-neutral framework.

- Corporate bond model

Corporate bond returns are modelled as a gilt return plus additional volatility. This is an approximation to the Merton model which suggests that the return on a corporate bond can be decomposed into the return on a risk-free bond and the return on a put option on the value of a firm.

- Property model

Property returns are modelled as a corporate bond (the lease) and an equity component (the residual price). The weighting between the bond and equity components is estimated and is currently set at $40 \%$ and $60 \%$ respectively.

- Real interest rate and inflation model

Real interest rates are modelled using a one-factor Hull and White model. This model takes current forward rates (the UK gilts instantaneous real forward curve) to define an initial yield curve. The modelled interest rate is assumed to fluctuate around this initial curve. This fluctuation is correlated to the random variables used to derive nominal interest rates. The inflation rate is defined as the difference between the nominal and the real interest rate.

## Calibration of asset model

The GeneSIS model has been calibrated to the market prices of traded derivative instruments as at 31 December 2005. The assumptions used in the calibration are:

- Risk free interest rate

The yield curve used to calibrate the nominal interest rate model is shown below:


The 2005 FY risk-free rate has been determined as 10 bp over the gilt rate, reflecting the decrease in yield on gilts arising from their repo abilities and other factors.

It has been assumed the parameters defining the fluctuation in modelled interest rates around this yield curve are obtained by calibrating the model to replicate observed swaption rates.

- Equity volatility

For UK equities, total return option prices were obtained with exercise dates from 1 to 10 years, and for (forward) strikes $K=\{0.8,0.9,1.0\}$. The resulting volatility surface (based on moneyness and term) was converted into a structure dependent only on term through determining the moneyness of the policy guarantees. The average strike was 0.80 for the first ten years.

The resulting volatilities are as follows for UK equities.


Due to the geographical diversification, the returns on our overseas equities do not resemble any single overseas index on which market option prices can be obtained. Hence we have assumed that the internal experts' (Prudential Portfolio Management Group - PMG) long-term assumption (16\%) holds at all durations. The lower volatility assumption than on the UK equity portfolio reflects the geographic diversification.

For periods over 15 years, market observation is not possible and we have assumed $20 \%$ volatility for UK equities and $16 \%$ for overseas.

The final volatility term structure can be shown in the graph below.


- Corporate bonds

The annualised additional volatility over the gilt return for corporate bonds was 2.58 (1.704 at 31 December 2004). This volatility was determined from a historical index of corporate bond returns.

## - Property

Property returns were decomposed into a corporate bond return plus the value of upward only rent increases. Due to scarcity of market data and the serial correlation of published indices, the property parameters were based on expert opinion.

- Real interest rates

The model was calibrated using 5 years of real forward rates data, instantaneous nominal forward rates for 25 years and the RPI inflation rate as at December 2005.

- Correlations

Correlations between asset classes have been determined based on internal expert opinion and analysis of historical values. The correlations implied by the economic scenarios generated for the valuation are as follows.

|  | Cash | Corporate <br> Bonds | UK Equities | Overseas <br> Equities | Property |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Cash | $100 \%$ | $11 \%$ | $3 \%$ | $4 \%$ | $4 \%$ |
| Corporate Bonds | $11 \%$ | $100 \%$ | $35 \%$ | $33 \%$ | $29 \%$ |
| UK Equities | $3 \%$ | $35 \%$ | $100 \%$ | $58 \%$ | $32 \%$ |
| OS Equities | $4 \%$ | $33 \%$ | $58 \%$ | $100 \%$ | $24 \%$ |
| Property | $4 \%$ | $29 \%$ | $32 \%$ | $24 \%$ | $100 \%$ |

6.4.a (iii) The asset model was used to value the required example options. The same table applies to WPSF UK liabilities and SAIF. The results are set out in Appendix 1.
6.4.a (iv) The initial and long-term yields assumed for assets backing WPSF and SAIF liabilities in the UK are:

|  | 31 December 2005 |  | 31 December 2004 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | UK | OS | UK | OS |
|  | $\%$ | $\%$ | $\%$ | $\%$ |
| Equity dividend <br> yield |  |  |  |  |
| Current | 3.09 | 2.03 | 3.05 | 2.58 |
| Long term <br> Property rental <br> yield | 3.25 | 2.50 | 3.25 | 2.25 |
| Current |  |  |  |  |
| Long term | 5.25 | N/A | 5.75 | N/A |

All overseas territories for the UK business are treated together, so we do not isolate significant territories within these. Hong Kong is not a significant territory for the WPSF.
6.4.a (v) All overseas territories are treated together, so we do not isolate significant territories within these.
6.4.a (vi) A table of the outstanding mean durations of reversionary bonus claims for material products is:

|  | 31 December 2005 |  |
| :--- | :---: | :---: |
| Product | Proportion of total <br> RB gtee | Duration |
| WPSF Pru Bond | $\%$ | Years |
| and PSA | 16 | 13 |
| WPSF OB/IB | 2 | 18 |
| WPSF Personal | 18 | 19 |
| Pensions | 33 | 12 |
| WPSF PPRP | 12 | 16 |
| WPSF Group | 5 | 19 |
| Pensions |  |  |
| With Profit | 11 | 14 |
| Annuities | $\mathbf{9 2}$ | N/A |
| SAIF |  |  |
| Total |  |  |

A check of the model was carried out to calculate the (Monte Carlo) prices of the equity put options, after calibrating to a moneyness of 0.8 in order to be consistent with the market prices for Strike $=80 \%$ ATM forward. The results are shown below and demonstrate that the GeneSIS model is capable of reproducing market prices.

| Term (yrs) | Strike (ATM <br> forward) | Market Price <br> $(\%)$ | GeneSIS Price (\%) <br> $\mathbf{k}=\mathbf{0 . 8 0}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Strike $=80 \%$ of ATM forward |  |  |  |
| 1 | 4784.62 | $0.89 \%$ | $0.91 \%$ |
| 2 | 5000.92 | $2.44 \%$ | $2.44 \%$ |
| 3 | 5230.36 | $3.95 \%$ | $3.92 \%$ |
| 4 | 5466.10 | $5.39 \%$ | $5.35 \%$ |
| 5 | 5710.25 | $6.79 \%$ | $6.74 \%$ |
| 6 | 5963.09 | $7.98 \%$ | $7.91 \%$ |
| 7 | 6224.29 | $9.13 \%$ | $9.05 \%$ |
| 8 | 6493.33 | $10.02 \%$ | $9.99 \%$ |
| 9 | 6771.16 | $10.75 \%$ | $10.69 \%$ |
| 10 | 7058.00 | $11.35 \%$ | $11.29 \%$ |

6.4.a(vii) The model has further been tested by demonstrating that it reproduces asset values for a wide range of securities, equity options and swaptions by projecting them and discounting back.
6.4.a(viii) The PSALM model projects 5000 scenarios over 40 years. We have demonstrated that this produces statistically credible results, both using statistical theory and empirically by running the model several times on randomly different sets of economic scenarios and demonstrating that the results are materially close.
6.4.b Guarantee, option and smoothing costs have not been valued using the market cost of hedging.
6.4.c For WPSF, the reserve for guarantees resulting from personal pension misselling, and the guaranteed minimum pensions on section 32 and bond 32 business, are determined by averaging the results from a number of deterministic scenario tests.

The probability of each scenario has regard to PSALM projections using market consistent assumptions.
(i) 72 scenarios are modelled. Each scenario is applied to individual policies.
(ii) A spread of scenarios is chosen taking into account the extent to which a guarantee could become valuable. The attributed probabilities were chosen by reference to the probabilities of obtaining a given rate of return from the PSALM stochastic model using the market consistent calibration described in 6(4)(a).
(iii) A table of swaption values is included in Appendix 1. As the scenarios chosen were based on portfolio returns rather than individual asset classes we have shown the values based on the portfolio used only.
(iv) A table of the outstanding durations of material guarantees is

| Guarantee | Duration (in years) |
| :--- | :---: |
| Pension mis-selling | 9.48 |
| GMPs | 8.00 |

For SAIF, guarantees in respect of pensions misselling and guaranteed minimum pensions are not significant. The statutory basis is assumed for this business.

### 6.5 Management actions:

6.5.a For the WPSF UK business and SAIF, modelled management decisions are consistent with the Principles and Practices of Financial Management (PPFM) available to the public, and with the Financial Condition Reports submitted annually to the Board. Details are given for UK business; a similar approach applies to the Hong Kong business.

In practice, a range of management actions would be considered at any time of stress. The actions taken would depend on the economic outlook and the financial position of the fund at that time. The stochastic model cannot reflect all possible actions and so it includes assumptions to broadly reflect the likely decisions. The assumptions made, as described below, are therefore indicative of the actions that might be taken in practice.

The results are sensitive to the bonus, MVR and investment policy the company employs. The annual bonuses and investment mix are dynamically modelled in PSALM stochastic projections. Dynamic management actions are assumed to depend on the PAC solvency position during the projection. For this purpose a PAC solvency ratio is calculated as (Assets/Regulatory liability -1) for the combined with profits sub funds. Two ratios are calculated either including or excluding the cost of personal pension mis-selling costs (accumulated past and potential future costs) as an additional asset. In particular the following actions are assumed in PSALM.
6.5.a(i) Reversionary bonuses (RB)

Rules applying to all UK WPSF business:

- The RB rates shown in Appendix 2 are assumed to apply when the PAC (including SACF) solvency ratio (excluding the cost of personal pension mis-selling) is at or above $8 \%$.
- If (on the RB declaration month) the PAC solvency level is below $8 \%$, then RB rates are reduced by $50 \%$. If solvency recovers back above $8 \%$ then RB rates are assumed to revert back to their original level.

Rules applying for SAIF business:

- The RB rates shown in Appendix 2 are assumed to apply when the PAC (including SACF) solvency ratio (including the cost of personal pension mis-selling) is at or above $16.6 \%$.
- If (on the RB declaration month) PAC solvency is below $8.3 \%$, SAIF RB rates are assumed to reduce by $90 \%$. Between $16.6 \%$ and $8.3 \%$ PAC solvency, the SAIF RB rate is reduced linearly. When PAC solvency rises above $16.6 \%$, RB rates return to their previous levels.
- If the WPSF RB rates have been cut by $50 \%$, SAIF bonuses derived above are also assumed to reduce by $50 \%$ in addition to the adjustments described above.


## 6.5.a(ii) Smoothing rules

Smoothing costs are determined in line with expected company practice to the extent that this can be modelled (given the practical constraints of stochastic modelling).

The stochastic asset liability model does not hold specific final bonus rates; instead the approach used is to determine:

- the opening claim values by applying a ratio of claim value to asset share (derived from the most recent bonus declaration) to each model point asset share, and
- all future claim values as equal to asset shares, subject to the smoothing of claim values and the reversionary bonus underpin (where applicable).

The smoothed claim value between year ends is determined by accumulating the previous year end claim value at a long term rate of return of $6 \%$ (subject to tax and charges). The yearly reviews adjust the claim value to the asset share, subject to the revised claim value:

- being limited to a range of values around the current claim value (e.g. $\pm 5 \%$ ),
- for the UK WPSF business moving at least one third up or down to asset share, where this leads to a larger adjustment. For SAIF the corresponding limits are $25 \%$ up or one third down to asset share, and
- being at least equal to the RB fund (where the RB underpin is applicable).

In the RCM scenario, it is assumed that less generous smoothing limits would be applied, and that the long-term investment return reduces in line with the interest rate event. Claim values would then generally change by up to $5 \%$ each year around a reduced long-term growth rate of $5 \%$. It is also assumed that the WPSF and SAIF smoothing limits would be widened to allow claim values to move $50 \%$ of the way down to asset share in any one year.
6.5.a(iii) Market value reductions (MVRs)

Projections have been produced using two alternative bases for determining MVRs. No reversionary bonus underpin applies to surrenders and early retirements under either basis.

In the base case, it is assumed that a $£ 15,000 \mathrm{MVR}$-free limit will be applied to all business from 5 years’ time, this being a proxy for the assumption that we will apply a $£ 25,000$ MVRfree limit in normal investment conditions, but that we will reduce the MVR-free limit to a $£ 10,000$ (or lower) level in adverse conditions. The resulting MVR deductions do not exceed the smoothing costs arising on surrender claims on products for which we impose an MVR.

In the RCM scenario, it is assumed that we would apply active MVRs in order to pay out bare asset shares on all surrenders and early retirements on AWP contracts before age 60.
6.5.a(iv) Asset rebalancing and switching

The asset allocations are assumed to be rebalanced on an annual basis towards the long-term benchmark asset allocation. There is no assumed limit on the maximum amount that can be rebalanced in any month.

In addition to rebalancing, asset switching (pro rata from UK and overseas equities into corporate bonds) is triggered when the PAC (incl SACF) Peak 1 solvency ratio [defined as the Peak 1 free assets (including shareholder assets allocated to long term business) divided by total Peak 1 liabilities (including the RCR)] falls below $6 \%$. The amounts to be switched are determined as follows:

- At $6 \%$ solvency or above, UK and overseas equities are assumed to remain at their long-term benchmark proportions (if switching has not yet taken place). If switching has already taken place in the model, switching from corporate bonds back into equities (in order to return to the long-term benchmark) can only occur when solvency rises above $8 \%$.
- At $2.5 \%$ solvency, UK and overseas equities are assumed to be fully switched into corporate bonds.
- Between $6 \%$ and $2.5 \%$ solvency, the required switch amount is determined by linear interpolation between the limits specified above.

The maximum amount that can be switched in any month is $2 \%$ of total assets.
The SAIF asset allocation is assumed to be the same as PAC but with $6 \%$ more corporate bonds (and 6\% less in other assets).

The property portfolio is assumed to be illiquid over the short term, so no switching of property assets occurs in the model.
6.5.a(v) Tax on shareholders' transfers

If the PAC solvency level (excluding the cost of personal pension mis-selling) is above $8 \%$, tax on shareholders' transfers is assumed to be paid from the WPSF's free assets.
6.5.a(vi) Operation of SAIF

PSALM contains rules to model the SAIF Principles of Financial Management. As well as the rules set out above, this includes:
recalculating the enhancement factor applied to SAIF asset shares, with the intention of distributing all SAIF assets (including future profits arising in SAIF) to SAIF policies, and
merging SAIF into the other PAC long-term funds when SAIF assets (including the bonus smoothing account but excluding SACF) fall below $£ 1$ bn, increased in line with RPI from the date of the agreement (1997).
6.5.b The proportion of equities and level of reversionary bonus rates after 5 and 10 years are shown below, projected by the PSALM model assuming various specific constant rates of return.
(i) Based on forward rates derived from the risk free interest rate curve

| Year | Rate of <br> return |  | Equity proportion |  | Proportion of initial <br> annual bonus rate |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | PAC | SAIF | PAC | SAIF |  |
| LIFE | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ |  |
| Current | $\mathrm{n} / \mathrm{a}$ | 60.7 | 56.7 | 100 | 100 |  |
| 5 years | 4.20 | 58.1 | 54.3 | 100 | 100 |  |
| 10 years | 4.16 | 58.1 | 54.3 | 100 | 100 |  |
| PENSIONS | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ |  |
| Current | $\mathrm{n} / \mathrm{a}$ | 60.7 | 56.7 | 100 | 100 |  |
| 5 years | 4.20 | 58.1 | 54.3 | 100 | 100 |  |
| 10 years | 4.16 | 58.1 | 54.3 | 100 | 100 |  |

(ii) Based on forward rates plus $17.5 \%$ of the long-term gilt yield

| Year | Rate of <br> return | Equity proportion |  | Proportion of initial RB <br> rate |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | PAC | SAIF | PAC | SAIF |
| LIFE | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ |
| Current | $\mathrm{n} / \mathrm{a}$ | 60.7 | 56.7 | 100 | 100 |
| 5 years | 4.95 | 58.1 | 54.3 | 100 | 100 |
| 10 years | 4.91 | 58.1 | 54.3 | 100 | 100 |
| PENSIONS | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ |
| Current | $\mathrm{n} / \mathrm{a}$ | 60.7 | 56.7 | 100 | 100 |
| 5 years | 4.95 | 58.1 | 54.3 | 100 | 100 |
| 10 years | 4.91 | 58.1 | 54.3 | 100 | 100 |

(iii) Based on forward rates less $17.5 \%$ of the long-term gilt yield

| Year | Rate of return | Equity proportion |  | Proportion of initial RB rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | PAC | SAIF | PAC | SAIF |
| LIFE | \% | \% | \% | \% | \% |
| Current | n/a | 60.7 | 56.7 | 100 | 100 |
| 5 years | 3.45 | 58.1 | 54.3 | 100 | 100 |
| 10 years | 3.43 | 58.1 | 54.3 | 100 | 100 |
| PENSIONS | \% | \% | \% | \% | \% |
| Current | n/a | 60.7 | 56.7 | 100 | 100 |
| 5 years | 3.45 | 58.1 | 54.3 | 100 | 100 |
| 10 years | 3.43 | 58.1 | 54.3 | 100 | 100 |

The initial reversionary bonus rates are shown in Appendix 2.
For SAIF guaranteed annuity options, modelled in PSALM, no decrements are assumed in deferment and $10 \%$ of the annuity is assumed to be taken as cash (i.e. the guarantee cost applies only to the remaining $90 \%$ ). Due to constrained information on age at vesting and nature of the annuity, GAR costs are calculated using an annuity certain for 23 years.

For persistency, where there is no explicit realistic basis component of the statutory basis, assumptions are determined with reference to the EEV assumptions, which reflect our best estimate assumptions. A $10 \%$ reduction was applied to EEV lapse rates, in order to make allowance for the potential decrease in lapse rates in scenarios where guarantees, become
deeply in the money. For IB and OB assurances, AWP personal pensions, deferred annuities and PruBond, the decrement assumptions (including surrender and premium cessation) are set below:

| Future decrement rates (per <br> annum) | Curtate duration (years) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{5}$ | $\mathbf{1 0}$ | $\mathbf{1 5}$ | $\mathbf{2 0}$ | $\mathbf{3 0 +}$ |
| IB |  |  |  |  |  |
| With profit endowments | 3.00 | 2.50 | 2.50 | 1.50 | 1.50 |
| With profit whole life |  |  |  |  |  |
| OB CWP | 6.50 | 4.50 | 4.00 | 1.50 | 1.50 |
| With profit endowments | 3.00 | 2.00 | 2.00 | 1.50 | 1.50 |
| With profit whole life | 4.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| With profit deferred annuities (PPRP)* |  |  |  |  |  |
| OB UWP | 18.00 | 8.10 | 8.10 | 8.10 | 8.10 |
| PruBond | 7.50 | 5.00 | 5.00 | 5.00 | 5.00 |
| Unitised with profit pensions (PP)* |  |  |  |  |  |

6.7 The decrement assumptions are as those shown in 6.6 above. No variation in rates is assumed in the RCM stress tests.

## 7. Financing costs

No financing arrangements are recognised for realistic balance sheet purposes.

## 8. Other long-term insurance liabilities

Other liabilities include pensions mis-selling liabilities and:

- for WPSF, the tax payable in future from the estate in respect of shareholders' transfers from the fund for in-force business subject to it remaining prudent for the estate to meet such amounts, of $£ 739 \mathrm{~m}$.
- for SAIF, the value of the total SACF capital support fee, net of the expected capital support ultimately received, of $£ 134 \mathrm{~m}$.
- for DCPSF, the value of the Capital Support content of the annual fund charge, of $£ 27.2 \mathrm{~m}$.


## 9.

## Realistic current liabilities

The current liabilities are those shown in the FSA returns except that the reserve for unrealised capital gains is determined assuming a discounted capital gains tax rate of $18.7 \%$ rather than the undiscounted rate of $20 \%$. Credit is taken in SAIF for any negative SAIF CGT reserve, subject to it not exceeding the realistic CGT liability held in the PAC WPSF.

The reconciliation of realistic to regulatory current liabilities is :

|  | Regulatory reserve <br> (A) | Realistic <br> reserve <br> (B) |
| :--- | :---: | :---: |
| WPSF | $£ \mathrm{~m}$ | $£ \mathrm{~m}$ |
| CGT reserve | 1,782 | 1,666 |
| Other Current Liabilities | 1,466 | 1,466 |
| Total Current Liabiities | $\mathbf{3 , 2 4 8}$ | $\mathbf{3 , 1 3 2}$ |$|$| DCPSF | 0 |
| :--- | :---: |
| CGT reserve | 5 |
| Other Current Liabilities | $\mathbf{5}$ |
| Total Current Liabiities | $£ m$ |
| SAIF | 218 |
| CGT reserve | 434 |
| Other Current Liabilities | $\mathbf{6 5 2}$ |

* $(\mathrm{B})=(0.187 / 0.20) \times(\mathrm{A})$ to allow for the different CGT rate assumed


## 10. Risk capital margin

10.a The risk capital margin is $£ 1,795 \mathrm{~m}$ for WPSF plus DCPSF and $£ 645 \mathrm{~m}$ for SAIF

This has been calculated assuming:
(i) a percentage change in market values, in accordance with PRU7.4.68R, of $20.0 \%$ for equity and $12.5 \%$ for property. A fall in market value is most onerous.
(ii) a change in fixed interest yield, in accordance with PRU 7.4.68R for the purpose of the market risk scenario for UK assets in PRU 7.4.62R (1) (a) of 73bps (17.5\% of gilt yield). A fall in the yield is most onerous.
(iii) in respect of credit risk, average changes in spreads and consequent changes in asset values as follows:
(a) for bonds issued or guaranteed by an organisation which is a credit risk scenario exempt organisation in accordance with PRU 7.4.87R, no credit stress is applied. For other bonds, spreads are assumed to increase on average by 79 basis points (WPSF and DCPSF) and by 66 basis points (SAIF). Asset values (including those in respect of credit risk scenario exempt organisations) fall overall by $5.3 \%$ (WPSF and DCPSF) and by $4.5 \%$ (SAIF).
(b) for debts, it is assumed that spreads increase on average by 146 basis points and asset values fall overall by $13.3 \%$.
(c) reinsurance credit risk is covered by the inclusion of a liability of $£ 2.5 \mathrm{~m}$.
(d) no change is assumed for non-reinsurance financing agreements. These are not considered to present a significant credit risk.
(e) for other debtors reported in lines 78 and 79 of Form 13, it is assumed that asset values fall overall by $1 \%$.
(iv) a change in policy termination rates, in accordance with PRU7.4.100R, of $32.5 \%$ of those rates. A fall in the policy termination rate is most onerous. Policy termination rates include paid up rates, but exclude take-up rates for MVR-free regular withdrawals, MVR free spot guarantees, conventional policy guarantees or GAR benefits.
(v) that any change in bond values as a result of credit risk events is considered to have negligible impact on termination rates.
(i) The following management actions are assumed in addition to those stated in 6(5)(a) above for WPSF and SAIF.

- Asset shares, after charges for guarantees, are always paid on surrender and early retirement before age 60 . In these circumstances the model is cost neutral. This active approach is assumed in the RCM scenario whereas a passive approach, under which the MVR policy is explicitly modelled, is currently used in the unstressed scenario. (see 6.5.a(iii) above).
- Initial reversionary bonuses are reduced to $40 \%$ of the long term supportable rates at the next declaration. See bonus table in Appendix 2.
- It is also assumed that we would widen the WPSF's smoothing limits to allow claim values to move $50 \%$ of the way down to asset share in any one year.

Similar assumptions are made for the HKSALM. For DCPSF it is assumed that claim payouts are reduced to a level so that over the outstanding term of the in force business that aggregate asset shares are sufficient to meet claims and expenses.
(ii) The table below shows the impact of management actions and assumption changes on the risk capital margin

|  | RCM with standard <br> management actions | RCM with additional <br> management actions | RCM with additional <br> assumptions |
| :--- | :---: | :---: | :---: |
| WPSF + DCPSF | 4,408 | 1,795 | 1,795 |
| SAIF | 900 | 645 | 645 |

(iii) If the actions and assumptions listed above in section (i) were included with those disclosed in $6(5)(a)$ the effect on the tables in $6(5)(b)$ would be as follows:

- the equity proportions would be unchanged, and
- the proportions of the initial annual bonus rates would be $40 \%$.
(iv) The Company does not accumulate past experience in respect of guarantees or options or smoothing and therefore PRU 7.4.188R does not apply.
(i) For PAC, the assets allocated to support the WPBR, FPRL and the reserve for unrealised capital gains reflect the actual asset mix of the with-profits fund, while current assets are used to support current liabilities. The RCM is backed by surplus fixed interest, property and other assets.
(ii) For WPSF and SAIF none of the assets held to cover the risk capital margin are outside the respective fund. For DCPSF the assets backing the RCM are held in the WPSF.


## Tax

The treatment of tax is set out below.
(i) The with-profits benefits reserves include an allowance for tax deducted during 2005 from the asset shares at the rates shown below, which reflects the tax rates that applied. The rate of CGT is reduced to reflect the lower effective rate of tax that results from deferral of realisations within the fund. Further adjustments may be made from time to time to bring the tax charged to asset shares into line with the aggregate tax paid and outstanding. Tax on shareholders transfers is not currently deducted from asset shares.
(ii) The future policy related liabilities include allowance for tax on future investment returns and tax relief on expenses at current rates of tax allowing for any likely deferral of tax on capital gains, as shown below:

| TAX RATES (2005YE PPB) | WPSF and SAIF \# |
| :--- | :---: |
| Source | Tax Rate |
| Franked Investment Income | $0.0 \%$ |
| Unfranked Investment Income (FI and cash) | $20.0 \%$ |
| Unfranked Investment Income (property) | $20.0 \%$ |
| Capital Gains | $18.7 \%$ |
| Initial Expense Relief | $15.0 \%$ |
| Renewal Expense Relief | $20.0 \%$ |
| Shareholder Transfers (gross business) | $43.0 \%$ |
| Shareholder Transfers (net business) | $10.0 \%$ |

\# Tax is not applied to pensions or DCPSF business other than in respect of tax on shareholders' transfers from the WPSF.
(iii) The realistic current liabilities include a reserve for unrealised capital gains which is the regulatory reserve except that a discounted rate of $18.7 \%$ rather than $20 \%$ is applied.

## Derivatives

The WPSF and SAIF hold:

- exchange traded equity index futures in the following markets: UK, US, Canada, Europe and Japan. They also hold exchange traded fixed income futures in the UK, Europe and US markets. All positions except Canada are used to reflect tactical asset allocation (short term) views around the strategic (long term) benchmark. The small futures position in Canada helps the Scottish Amicable Capital Funds (SACF) achieve its strategic weighting in Canadian equities.
- forward currency contracts primarily to hedge currency risk arising from US and European bond exposures, but also to implement tactical asset allocation positions
- over-the-counter (OTC) equity single stock options to increase the equity exposure of the convertible bond sub-fund.
- OTC fixed income derivatives positions to convert floating rate assets into fixed rate assets.
- OTC total return swaps based on the IPD Annual All Property index to adjust tactically the fund's exposure to property.
- SAIF holds OTC receiver swaptions to partially hedge its guaranteed annuity liabilities

|  | All in £m's | WPSF | SAIF |
| ---: | :--- | ---: | ---: |
|  | Estate at 01/01/05 | 5,364 | 677 |
|  |  |  |  |
|  | Assets |  |  |
| 1 | Net return on opening free assets (excluding PAL) | 1,034 | 131 |
| 2 | Return on PAL | 98 | 0 |
| 3 | Release of inadmissible assets |  | 59 |
|  |  |  |  |
|  | Cost of guarantees, options, smoothing \& other liabilities: | 874 | 74 |
| 4 | Economic Experience | 137 | $(115)$ |
| 5 | Non Economic Experience |  |  |
|  |  |  |  |
|  | Non profit business: | 89 | $(55)$ |
| 6 | Contribution |  |  |
|  |  | 309 | 1 |
|  | Other impacts: | $(127)$ | 0 |
| 7 | Opening adjustments | $(31)$ | 0 |
| 8 | Tax on Shareholder transfers | $(70)$ | 0 |
| 9 | Expense write off on new business | $(8)$ | $(75)$ |
| 10 | Allowance for pension scheme deficits |  |  |
| 11 | Other |  | $(697)$ |
|  |  |  |  |
| 12 | Clarification of the treatment of mutual funds | 7,979 | 0 |
|  |  |  |  |
|  | Estate at 31/12/05 |  |  |

## Appendix 1

|  | Asset type | $\mathrm{k}=0.75$ |  |  |  | $\mathrm{k}=1$ |  |  |  | $\mathrm{k}=1.5$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N |  | 5.00 | 15.00 | 25.00 | 35.00 | 5.00 | 15.00 | 25.00 | 35.00 | 5.00 | 15.00 | 25.00 | 35.00 |
| r | Annualised compound equivalent of the risk free rate assumed for the period. | 4.29\% | 4.20\% | 4.09\% | 4.00\% | x | x | x | x | x | x | x | x |
| 1 | Risk-free zero coupon bond | 810,410 | 539,244 | 367,538 | 252,648 | x | x | x | x | x | x | x | x |
| 2 | FTSE All Share Index ( $p=1$ ) | 55,367 | 142,198 | 217,146 | 286,331 | 170,007 | 283,611 | 376,745 | 457,102 | 546,465 | 652,789 | 758,398 | 847,240 |
| 3 | FTSE All Share Index ( $\mathrm{p}=0.8$ ) | 45,924 | 102,777 | 144,637 | 179,468 | 147,207 | 214,403 | 259,710 | 294,718 | 493,739 | 516,109 | 546,379 | 564,464 |
| 4 | Property ( $\mathrm{p}=1$ ) | 32,287 | 101,286 | 167,507 | 235,027 | 134,888 | 233,657 | 316,615 | 396,869 | 522,464 | 606,841 | 693,223 | 773,917 |
| 5 | Property ( $\mathrm{p}=0.8$ ) | 25,195 | 67,867 | 103,923 | 137,943 | 112,968 | 167,344 | 206,250 | 242,842 | 467,654 | 466,979 | 480,903 | 499,858 |
| 6 | 15 year risk free zero coupon bonds ( $\mathrm{p}=1$ ) | 1,900 | 4,090 | 6,393 | 21,828 | 63,226 | 73,801 | 81,035 | 115,086 | 500,623 | 501,070 | 502,596 | 511,345 |
| 7 | 15 year risk free zero coupon bonds $(\mathrm{p}=0.8)$ | 966 | 651 | 477 | 3,101 | 43,762 | 26,614 | 16,518 | 24,471 | 440,251 | 334,356 | 250,185 | 208,286 |
| 8 | 15 year corporate bonds ( $\mathrm{p}=1$ ) | 3,064 | 8,365 | 13,208 | 32,064 | 67,863 | 87,195 | 98,429 | 132,526 | 500,712 | 501,824 | 505,377 | 517,990 |
| 9 | 15 year corporate bonds ( $\mathrm{p}=0.8$ ) | 1,659 | 2,037 | 1,800 | 5,369 | 48,145 | 37,385 | 27,271 | 35,350 | 440,574 | 338,420 | 262,204 | 224,923 |
| 10 | Portfolio of 65\% FTSE All Share and 35\% property ( $\mathrm{p}=1$ ) | 31,969 | 97,424 | 160,681 | 227,318 | 133,871 | 227,679 | 308,982 | 387,519 | 521,936 | 597,349 | 683,695 | 767,349 |
| 11 | Portfolio of 65\% FTSE All Share and $35 \%$ property ( $\mathrm{p}=0.8$ ) | 25,008 | 64,534 | 98,883 | 131,854 | 111,966 | 162,205 | 199,007 | 235,057 | 467,157 | 458,177 | 472,983 | 490,507 |
| 12 | Portfolio of 65\% FTSE All Share and 35\% 15 risk free zero coupon bonds ( $\mathrm{p}=1$ ) | 20,729 | 67,538 | 117,646 | 173,730 | 114,938 | 187,825 | 253,831 | 321,613 | 511,893 | 561,331 | 625,220 | 692,592 |
| 13 | Portfolio of 65\% FTSE All Share and 35\% 15 risk free zero coupon bonds ( $\mathrm{p}=0.8$ ) | 15,354 | 40,446 | 64,438 | 91,717 | 93,561 | 125,393 | 152,025 | 180,617 | 455,613 | 418,711 | 413,878 | 420,388 |
| 14 | Portfolio of $40 \%$ equity, $15 \%$ property, 22.5\% 15 risk free zero coupon bonds and $22.5 \% 15$ year corporte bonds ( $\mathrm{p}=1$ ) | 8,078 | 33,620 | 69,438 | 118,458 | 86,329 | 137,963 | 190,132 | 252,703 | 502,815 | 523,943 | 564,956 | 620,451 |
| 15 | Portfolio of 40\% equity, $15 \%$ property, 22.5\% 15 risk free zero coupon bonds and 22.5\% 15 year corporte bonds ( $\mathrm{p}=0.8$ ) | 5,148 | 16,115 | 30,633 | 52,652 | 65,813 | 80,632 | 97,734 | 124,268 | 443,829 | 373,674 | 347,125 | 348,075 |
|  |  | $\mathrm{L}=15$ |  |  |  | L=20 |  |  |  | L=25 |  |  |  |
| 16 | Receiver <br> Swaptions with a strike of $5 \%$, excercisable n years after the valuation date, swap duration $=\mathrm{L}$ years | 9.50\% | 8.86\% | 6.84\% | 4.96\% | 11.85\% | 10.78\% | 8.23\% | 5.97\% | 13.83\% | 12.34\% | 9.34\% | 6.76\% |

The table below shows the option prices calculated from the model used to value GMP guarantees from a series of deterministic projections using attributed probabilities:


## Appendix 2

Initial reversionary bonus assumptions in stochastic valuation.

|  | 2006(Feb 2006decln) | Assumed 2007 and thereafter |  |
| :---: | :---: | :---: | :---: |
|  |  | Base case | RCM Scenarios |
| Life \& Pensions |  |  |  |
| 1. PSA/PIB | 3.25 | 3.25 | 1.00 |
| 2. Personal Pensions | 3.25 | 3.25 | 1.25 |
| 3. OB assurances | 1.0/2.0 | 1.0/2.0 | 0.5/1.0 |
| 4. IB assurances | 0.9/1.8 | 0.9/1.8 | 0.5/0.9 |
| 5. PPRP | 0.25/0.50 | 0.25/0.50 | Nil/Nil |
| Annuities |  |  |  |
| 6. Annuities | 2.75 | 2.75 | 1.25 |
| 7. Flexible Retirement Income Account | 2.75 | 2.75 | 1.25 |
| Corporate |  |  |  |
| 8. Unitised | 3.50 | 3.50 | 1.25 |
| 9a. DC Cash Accumulation | 3.00 ** | 3.00 ** | 1.00** |
| 9b. DB Cash Accumulation | $2.75 * *$ | $2.75 * *$ | 1.00 ** |
| 10. AVC Cash Accumulation | 3.00 ** | 3.00 ** | 1.25** |
| 12. Pension Savings Plan | 3.50 | 3.50 | 1.25 |
| IFA | 2.50 | 2.50 | 1.00 |
| 13. Prudence Bond - Standard |  |  |  |
| - High RB | 3.25 | 3.25 | 1.00 |
| - Prospect - Standard | 4.00 | 4.00 | 1.25 |
| - Prospect -High RB | 2.85 | 2.85 | 1.00 |
| 14. Prudential Pensions | 3.60 | 3.60 | 1.25 |
| 15. SAL Life | 3.25 | 3.25 | 1.25 |
| 16. SAL ISA | 3.00 | 3.00 | 1.00 |
| 17. $\begin{array}{ll}\text { SAL Pensions } \\ \text { - Funds 5, } 6 \\ - \text { Funds } 7,8\end{array}$ | N/a | N/a | N/a |
|  |  |  |  |
|  | 3.375 | 3.375 | 1.25 |
|  | 3.25 | 3.25 | 1.25 |
|  |  | Before Solvency | Before Solvency |
| SAIF |  | Adjustment* | Adjustment* |
| 18. Principal Endowment 19. Flexidowment (series 2) |  | 1.30/2.30 | 0.40/0.70 |
| 19. Flexidowment (series 2) 20. Flexisave (series 2) | 0.80/1.50 | 1.00/2.60 | 0.30/0.80 |
| 21. Flexipension (series 1) | 0.70/1.70 | 1.00/2.10 | 0.30/0.60 |
| 22. Superannuation | 0.70/1.30 | 0.70/1.60 | 0.30/0.60 |
| 23. Group | 0.40/1.00 | 0.70/1.60 | 0.30/0.60 |
| 24. Life | 0.40/1.00 | 1.70 | 0.70 |
| 25. Pensions - Fund 2 | 1.10 | 3.25 | 1.00 |
| 26. Pensions - Funds 1,3,4 | 2.00 | 3.25 | 1.25 |
|  | 2.00 | 3.50 | 1.25 |
|  | 2.25 |  |  |

* SAIF projected rates need to be reduced by applying PAC Solvency adjustment factor.
** Subject to a guarantee of 4.75\% for certain earlier business


## Appendix 3

The tables below show the Reversionary Bonus rates and the Terminal Bonus as a proportion of the Sum Assured (£1000).

OB Assurances

| Reversionary Bonus Rates |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2005 Actual | 2006 | 2007 | Ultimate |
| RB on SA | $1.0 \%$ | $1.0 \%$ | $0.9 \%$ | $0.9 \%$ |
| RB on RB | $2.0 \%$ | $2.0 \%$ | $1.7 \%$ | $1.7 \%$ |


| TB as a proportion of Sum Assured (£1000) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Term | 2005 | 2006 | 2007 | 2008 | 2009 |
| 10 | $13 \%$ | $20 \%$ | $22 \%$ | $32 \%$ | $33 \%$ |
| 15 | $36 \%$ | $41 \%$ | $42 \%$ | $41 \%$ | $43 \%$ |
| 20 | $52 \%$ | $71 \%$ | $80 \%$ | $80 \%$ | $79 \%$ |
| 25 | $106 \%$ | $110 \%$ | $104 \%$ | $101 \%$ | $96 \%$ |
| 30 | $286 \%$ | $280 \%$ | $239 \%$ | $193 \%$ | $160 \%$ |

PPRP Regular Premium

| Reversionary Bonus Rates |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 2005 | 2006 | 2007 | Ultimate |
| RB on SA | $0.25 \%$ | $0.25 \%$ | $0.25 \%$ | $0.25 \%$ |
| RB on RB | $0.50 \%$ | $0.50 \%$ | $0.50 \%$ | $0.50 \%$ |


| TB as a proportion of Sum Assured (£1000) |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Term | 2005 | 2006 | 2007 | 2008 | 2009 |
| 10 | $9 \%$ | $6 \%$ | $3 \%$ | $5 \%$ | $9 \%$ |
| 15 | $23 \%$ | $15 \%$ | $17 \%$ | $11 \%$ | $12 \%$ |
| 20 | $18 \%$ | $20 \%$ | $23 \%$ | $31 \%$ | $32 \%$ |
| 25 | $52 \%$ | $18 \%$ | $9 \%$ | $15 \%$ | $14 \%$ |
| 30 | $192 \%$ | $149 \%$ | $106 \%$ | $78 \%$ | $55 \%$ |

PPRP Single Premium

| Reversionary Bonus Rates |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 2005 Actual | 2006 | 2007 | Ultimate |
| RB on SA | $0.25 \%$ | $0.25 \%$ | $0.25 \%$ | $0.25 \%$ |
| RB on RB | $0.50 \%$ | $0.50 \%$ | $0.50 \%$ | $0.50 \%$ |


| TB as a proportion of Sum Assured (£1000) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Term | 2005 | 2006 | 2007 | 2008 | 2009 |
| 10 | $14 \%$ | $5 \%$ | $3 \%$ | $0 \%$ | $0 \%$ |
| 15 | $13 \%$ | $14 \%$ | $17 \%$ | $40 \%$ | $35 \%$ |
| 20 | $67 \%$ | $47 \%$ | $30 \%$ | $22 \%$ | $19 \%$ |
| 25 | $196 \%$ | $166 \%$ | $172 \%$ | $150 \%$ | $94 \%$ |
| 30 | $334 \%$ | $276 \%$ | $272 \%$ | $258 \%$ | $246 \%$ |

## PP Regular Premium

| Reversionary Bonus Rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2005 actual | 2006 | 2007 | 2008 | Ultimate |
| RB rate | $3.25 \%$ | $3.25 \%$ | $3.00 \%$ | $3.00 \%$ | $3.00 \%$ |


| TB as a proportion of Sum Assured (£1000) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Term | 2005 | 2006 | 2007 | 2008 | 2009 |
| 10 | $7 \%$ | $12 \%$ | $14 \%$ | $16 \%$ | $18 \%$ |
| 15 | $16 \%$ | $21 \%$ | $23 \%$ | $23 \%$ | $25 \%$ |

